



# ANNUAL REPORT 2017-18

INDRAPRASTHA INSTITUTE OF  
INFORMATION TECHNOLOGY DELHI



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# EXECUTIVE SUMMARY



Indraprastha Institute of Information Technology Delhi is a premier institute of the country. Since its establishment in 2008, the Institute maintains the highest standards of education and research and has propagated the best practices across verticals.

With every passing year, the Institute has been able to create an unmatched reputation for itself in academia. This year has been remarkable in terms of attracting some exceptionally talented faculty members and officers. This year, we have **hired 26 faculty** members at various positions of tenure, visiting and part-time. With this, **the Institute has 60+ full-time faculty members**, all holding Ph.D.s from prestigious institutions across the world and globally acknowledged for their respective research contributions. The Institute also has furthered links with international and national peer universities, enabling enhancement of research and educational programs at the Institute.

The **QS BRICS University rankings** have ranked IIIT-Delhi in top 200 in their 2018 edition, in which they evaluated 9000 institutions in BRICS countries – putting IIIT-Delhi in the top 2%. There are only two other Universities from Delhi in top 200 – namely, IIT Delhi and Delhi University. The Institute already has NBA accreditation for the B.Tech. (CSE) program and the UGC 12B and **NAAC ‘A’ Level** accreditation. This year, DQ ranked IIIT-Delhi at 6<sup>th</sup> position on the list of Government Technology schools in India.

The Institute has added seats with two new programs. The Institute has started a new, B.Tech. program in **‘Computer Science and Biosciences’** this year adding 50 seats. This program, imparting knowledge of foundations of Biology and Computer Science as well as training in modeling and analysis of biomedical data, is the key to create personnel who can provide solutions to problems on the interface of Computation and Biology. A new **M.Tech. program in Computer Science with the specialization in AI** has also been added, adding 20 seats. Not only this, the Institute has also added around 50, non - GATE M.Tech. seats. With this year’s admission, IIIT-Delhi student population has grown to **1848 students**, including 1283 B.Tech., 404 M.Tech., and 161 Ph.D. students. In an increasingly competitive environment, these additions and innovative approach have positioned the Institute to launch exciting new projects and initiatives, which will enable it to deliver on its mission and excel in its core activities of teaching and research. Further details are provided in various sections of this report which follow.

The Institute has played a significant role in pushing the frontiers of knowledge. Our faculty, students, and staff have created a niche for the Institute in the world of Science and Technology. This has been duly recognized in the form of various awards and honors to the faculty including fellowships of professional societies, editorships of international journals, and best paper awards. Faculty and research scholars are engaged in innovative research on forefront technologies; the faculty and students deployed more than **nine new technologies** during the last one year. **197 research papers were published by faculty and students, including 86 journal papers, 101 conference papers, and eleven books/book chapters.**

The faculty members have been **invited to more than 140 National and International seminars** as speaker or guest and continue to receive several best paper and poster awards. The faculty members also won several best paper and best poster awards, highest impact awards. One of the faculty member was also felicitated by the UP government for his contributions to Science.

While the faculty members of the Institute are collaborating with academicians and industries across the world, the Institute has also initiated some formal international collaborations, the most recent being the **MOU between Univ at Buffalo and IIIT-Delhi for a dual/joint Doctoral Degree program.**

The Institute is establishing advanced infrastructure for conducting focused research in key areas with a critical mass of faculty and researchers. IIIT-Delhi is delighted to state that we recently inaugurated the **Center for Design and New Media** supported by TCS – the first of its kind in the country. This center will have research areas like HCI, interaction design, design thinking, gaming, animation, special effects,

digital music, etc. We hope in the years to come more corporations will sponsor our centers and other activities. With this, we have two industry-funded research centres in the Institute.

IIIT-Delhi graduated its **7th batch** of around **226 students** this August. IIIT-Delhi has a strong focus on teaching and has been a national advocate for the importance of working with industry to ensure graduates having necessary skill sets to be competitive and productive in an era of fast-paced change and unpredictability. In a complex and crowded market, the Institute has continued to enjoy strong placement stats. The Placement of Class of 2018 has been exceptionally great, receiving a total of **467 offers**, out of which 156 were from A+ companies offering an average compensation of more than 10 Lakh. **The average salary this year was around 15.24 lakh with the highest being 40 Lakh in Indian recruitments and 71 Lakh in overseas recruitments.**

More than 14% students of the Class of 2017 are going for higher studies. Our graduating students have received **offers from more than 22 foreign universities** including Carnegie Mellon University (CMU), University of Cambridge, Georgia Tech, University of Southern California, University of California San Diego, University of Waterloo, Purdue University and many more.

Phase II of the campus construction is complete – Most of our buildings are fully functional thereby adding more space for classes, labs, faculty offices, and residential areas. The Honorable Chief Minister and Deputy Chief Minister of Delhi, inaugurated the phase II of the campus.

The Institute now has more space for classes, labs, hostels, offices, and other facilities as well. After the completion of Phase II, the campus will be able to accommodate a total **student strength of 2,500**. The hostel capacity will also rise to **around 1,800 students**.

Support for the Institute remains strong and has been demonstrated by the continued generous contributions. Padma-Shri Sh. TV Mohandas Pai has agreed to be the philanthropic force by funding to provide travel support to Ph.D. students of IIIT-Delhi, providing opportunities to present and defend their work in International Conferences of repute. The Mohandas and Kusum Pai Research Acceleration Fellowship (MKP-RAF) will thus empower the Ph.D. scholars with more knowledge, mental rigor, and confidence to be the globally influential researchers of tomorrow.

The Sarojini Damodaran Foundation, founded by Mrs. and Mr. Shibulal has granted Overseas Research Fellowships (ORF) to 60 Ph.D. Scholars in IIIT-Delhi over the next three years. The fellowship will enable the recipient Ph.D. Scholar to spend six months overseas while collaborating with academia or industry researchers. The ORF scheme, by extending six months' financial support to a Ph.D. scholar, provides them an opportunity to work with international researchers and thus offers an exposure to future trends in technology.

IGL also proposed the corpus of Rs 65 Lakh to IIIT-Delhi this year, the earned interest amount of this corpus (Rs 60,000 approximately) would pay 7 Merit-cum-Means scholarships for the meritorious B.Tech. students every year. Only the ingenious B.Tech. students who come from a financially disadvantaged family are eligible to apply for the scholarships. This is additional to the already existing scheme of IIIT-Delhi and Delhi Government providing 100% to 25% fee waivers to B.Tech. students.

The Institute is moving forward as a community and is firmly on the path to, sustainability and transformation, and thus becoming a globally respected and recognized institution. It is a continuous endeavor to work towards attaining higher standards of excellence in all spheres of activities. The management is committed to achieving certain goals to create an environment wherein intellectually capable, innovative and entrepreneurial professionals are nurtured and trained to work unceasingly to serve the nation and society. Though many challenges remain, the Institute is sure to address them in the coming years with the support of students, faculty, administration, and well-wishers.





# ABOUT US



## Establishment and History

Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) was created as a State University by an Act of Delhi Government (The IIIT Delhi Act, 2007) empowering it to do research and development and grant degrees. IIIT-Delhi was officially established in June 2008 and started its academic programs in the same year with its first batch of 60 B.Tech. Students.

Since then, it has come a long way, with 70+ faculty members specializing in diverse areas of Computer Science, Electronics, Mathematics, Computational Biology, Design, Social Science & Communications Engineering. It has earned an excellent reputation in India and abroad for being a center of quality education and research in IT and allied areas.

IIIT-Delhi is an autonomous Institute, with the Board (Current Chairman: Mr. Kiran Karnik) fully authorized to take all important decisions, including student intake and fee structure. The Board is supported by the Academic Senate of the Institute, which is empowered to make all academic policies, and which advises the Board on starting new academic programs.

## Our Mission and Vision

The Institute's stated mission is to be a global center of excellence in Information Technology education, training, and research. Its twin aims are:

- To carry out advanced research and development in information and software technologies, and in leveraging IT in specific domain areas.
- To train and educate, at both undergraduate and postgraduate levels, engineers of outstanding ability who can become innovators and new product creators.

It aims to encourage innovation and entrepreneurship in specified domain areas of IT. Towards this end, it plans to organize itself as a conglomerate or R&D centers, some of which would be a partnership with different companies and global organization. All centers will also be engaged in teaching and thesis guidance. These centers, with various labs, will be the hub of activity, with active contribution from faculty and students.

The vision of the Institute is to be a world-class R&D-led institute of higher education in IT and allied areas which:

- Is globally respected for research and education
- Has thriving UG and PG education programs
- Is socially relevant, industry-facing, globally linked

## Infrastructure

### Building Resources

The Institute's full-fledged campus is operational from August 2012 in Okhla, New Delhi. The campus is spread in sprawling 25 acres of land which is located in the phase III Okhla Industrial Estate. The Institute under Phase I provided a built-up area of 33000 sqm. Including lecture halls, classrooms, research labs, instruction labs, boys' hostel, girls' hostel, dining and student center, space for student clubs, etc. It also has a general purpose playing field, tennis courts, basketball court, volleyball court, etc.

Construction of Phase II of the campus with around 70000 sqm of the built-up area is almost complete and was inaugurated by Mr. Arvind Kejriwal, Hon'ble Chief Minister of Delhi and Mr. Manish Sisodia, Deputy Chief Minister of Delhi, on 21st of August 2018. The details of the new buildings are as under:

New Academic Block - eight storied building having four 100-seater lecture halls, 58 labs, 116 faculty rooms. The building block is functional and in operational use since Aug 2017.

Lecture Hall Block - six storied building having one 500-seater and two 300-seaters stepped lecture theatres, 9 class rooms of various capacities, and 13 instruction labs. The building block is complete and resources are being put to use. An Incubation Centre is being developed at the Vth floor of the block.

Residential Block (Faculty residences) - 12 storied building having 44 flats. The resources are in use since Mar 2018 onwards ;

The Hostel Block (H1) - 11 storied building having 21 married accommodation and 197 double seater rooms, the building has been occupied since Feb 2018.

The Hostel Block (H2) - 11 storied building having 227 double seater rooms.

Hostel Extensions, blocks G1, G2, B1, 6-7 storied having 188 double seater rooms are in advance stages of completion.

Sports Block - a four storied building, is in advance stage of completion with works on specialized flooring walling in two squash courts, badminton court is in progress. The swimming pool, gymnasium, multipurpose hall, yoga room areas are complete. The guest rooms are in advance stage with furnishing to be taken up.

The works of the solar power plant on terraces of all new buildings with a capacity of around 160 KWp have been commissioned. The horticulture landscape works, furniture works, AV works, STP works, BMS works have been awarded and are in advance stages. The works of heat pump in H1 and G1 have been awarded.

### IT Resources

The Institute has a campus-wide computer network with a redundant 10-gigabit fiber backbone, 1 Gbps NKN link with 100Mbps backup ISP link, and a Data Centre with 67 servers and 85TB storage, LAN and Wi-Fi access throughout the campus including hostels, classrooms, and residence. All classrooms are equipped with multimedia capability, including projectors and audio systems. There is also virtualize environment of server using VMware technology.

### Library Resources


The Library and Information Centre of the Institute is housed in a separate building in its Campus. It is a user-focused centre of learning resources that meet all the current and future requirements academic and research fraternity of IIIT-Delhi regarding learning, teaching, research, and training programs. The Library is fully automated using RFID technology with EM security system. The Library is enriched with a vast collection of print and electronic resources in all areas of interest.

## Our Management

(as on 21<sup>st</sup> August 2018)

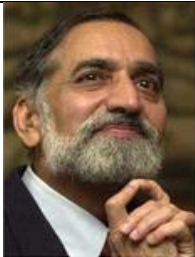
### General Council

The General Council is the apex body of the Institute, chaired by Hon'ble Lt. Governor of Delhi. The current members of the General Council are:

 <p><b>Mr. Anil Baijal</b> Hon'ble Chancellor of the Institute</p>	<p><b>Other Members:</b></p> <ul style="list-style-type: none"><li>• Mr. Kiran Karnik, Chairman BOG-IIIT-Delhi</li><li>• Ms. Neeta Verma, DG NIC</li><li>• Prof. Ashutosh Sharma, Secretary(DST)</li><li>• Prof. Pankaj Jalote, Director, IIIT-Delhi</li><li>• Mr. Devinder Singh, Pr. Secretary (TTE)</li><li>• Ms. Debjani Ghosh, President, NASSCOM</li><li>• Mr. Ajay Prakash Sawhney, Secretary, DeiT</li><li>• Dr. S Christopher, Head DRDO</li><li>• Ms. Renu Sharma, Principal Secretary (Finance)</li></ul>
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### Board of Governors

The Board is the main policy and decision-making body of the Institute. The current members of the Board are:

 <p><b>Mr. Kiran Karnik,</b> Chairman of the institute, Ex-President NASSCOM</p>	<p><b>Other Members:</b></p> <ul style="list-style-type: none"><li>• Dr. Anand Deshpande, Founder, Chairman &amp; MD, Persistent Systems</li><li>• Mr. Arvind Singhal, Founder Technopak</li><li>• Mr. S D Shibulal, Co-Founder, Infosys and Axilor Ventures</li><li>• Mr. Praveer Sinha, Chief Executive Officer &amp; Executive Director, Tata Power Delhi Distribution Limited</li><li>• Prof. Dinesh Singh, Former Vice Chancellor of University of Delhi</li><li>• Prof. Pankaj Jalote, Director, IIIT-Delhi</li><li>• Ms. Indira J Parikh, Former Founder President of FLAME</li><li>• Mr. Devinder Singh, Pr. Secretary (TTE)</li><li>• Ms. Renu Sharma, Principal Secretary (Finance)</li></ul>
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**EDUCATION**



## Current Academic Programs

The Institute offers six undergraduate programs leading to B.Tech. degrees in CSE(Computer Science and Engineering), ECE (Electronics and Communications Engineering), CSAM(Computer Science and Applied Mathematics), CSD(Computer Science and Design), CSSS (Computer Science and Social Sciences) and CSB(Computer Science and Biosciences); M.Tech. in CSE(Computer Science and Engineering)/ECE(Electronics and Communications Engineering)/CB(Computational Biology), and specialized M.Tech. degrees under CSE and ECE; in Artificial Intelligence, Mobile Computing, Information Security, Data Engineering, VLSI & Embedded Systems and Communication & Signal Processing; as well as Doctoral programs in Computer Science, Electronics & Communications, Computational Biology, Mathematics and Social Sciences. The primary objective is to impart specialized training on the latest technological advancements in Computer Science and allied areas.

### Total student strength:

Total Student Strength as on 31st July 2018			
Level	Course	Batch	Student Strength
B.Tech.	CSE	2011	1
	CSE	2012	2
	CSE	2013	4
	ECE	2013	1
	CSE	2014	26
	ECE	2014	11
	CSE	2015	126
	ECE	2015	56
	CSE	2016	121
	ECE	2016	69
	CSAM	2016	57
	CSE	2017	132
	ECE	2017	75
	CSAM	2017	62
	CSD	2017	45
	CSSS	2017	42
	CSE	2018	121
	ECE	2018	85
	CSAM	2018	64
	CSD	2018	51
CSSS	2018	51	
CSB	2018	46	
<b>Total No of B.Tech. Students on Roll:</b>			<b>1248</b>
M.Tech.	CSE	2015	8
	CB	2015	1
	CSE	2016	23
	ECE	2016	19

Dual Degree	CB	2016	8
	CSE	2017	69
	ECE	2017	44
	CB	2017	9
	CSE	2018	130
	ECE	2018	72
	CB	2018	19
	CSE	2016	1
	ECE	2017	1
<b>Total No of M.Tech. Students on Roll:</b>			<b>404</b>
Ph.D.	CSE	2011	4
	CSE	2012	10
	CSE	2013	11
	ECE	2013	3
	CSE	2014	8
	ECE	2014	8
	CB	2014	1
	CSE	2015	14
	ECE	2015	6
	CB	2015	3
	CSE	2016	9
	ECE	2016	15
	CB	2016	1
	Mathematics	2016	2
	CSE	2017	13
	ECE	2017	13
	CB	2017	8
	Mathematics	2017	2
	Social Sciences	2017	1
	CSE	2018	15
	ECE	2018	8
CB	2018	3	
Mathematics	2018	3	
<b>Total No of Ph.D. Students on Roll:</b>			<b>161</b>
<b>Total No of Students on Roll:</b>			<b>1813</b>

## Sixth Convocation :

The Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) hosted its 6<sup>th</sup> Convocation Ceremony at Institute's campus in Okhla Phase – III in the presence of **Padma Shri Sh. T.V. Mohandas Pai, Chairperson of the Board of Manipal Global Education Services as Chief Guest, Mr. Kiran Karnik, Chairman, Board of Governors, IIIT-Delhi and Prof. Pankaj Jalote, Director at IIIT-Delhi.** During the convocation ceremony, 139 B.Tech, 101 M.Tech and 12 Ph.D. degrees were awarded from various branches. This was the first year IIIT-Delhi crossed double digits in conferring the Ph.D. degrees in an year which is quite an achievement for an institute that is just 9 years old.

### Medals winners

The Chancellor's Gold Medal to B.Tech. Students	Shivam Thukral
	Saurabh De
Best Academic performance in B.Tech. ECE	Puneet Jain
All Round Performance Medal	Puneet Jain
	Juhi Bhatnagar
Best B.Tech. Project award (Research Track)	Kartik Maji
	Shubham Sinha
	Taruvar Aggarwal
Best B.Tech. Project award (Entrepreneurship Track)	Ankur Singh
	Herrman Swami
	Prikankshit Mor
Gold Medal for Excellent Academic Performance-M.Tech. Best M.Tech. Thesis Award in CSE	Anurag Goel
	Sangeeth.K
Best M.Tech. Thesis Award in ECE Best M.Tech. Thesis Award in CB	Sasha Garg
	Prateek Singh

## Student Graduation

The students graduated since its inception are as under:

Programs	Students Graduated till August 2018	Students Graduated till December 2017
B.Tech.(CSE)	101	536
B.Tech.(ECE)	21	69
M.Tech.(CSE)	57	281
M.Tech.(ECE)	34	126
M.Tech.(CB)	6	9
Ph.D.	6	21
Dual Degree	1	9
<b>Total Graduated Students</b>	<b>226</b>	<b>1051</b>

## Scholarship and Assistantship to B.Tech. Students

The Institute provides following fee waivers.

- Income-based Fee Waiver** by IIIT-Delhi : 100 % fee is waived for the students who are below the poverty line; if their family income is up to Rs.6.0 Lakh p.a. (Rs 3.60 Lakh p.a. for those having business income) and last school fee paid is less than Rs.0.45 Lakh p.a. they get 50 % of the total tuition fee waived off; and if a student's family income is between between Rs.6.0 Lakh and Rs.8.0 lakh p.a. (Rs.4.80 Lakh p.a. for those having business income)and last school fee paid is less than Rs.0.60 Lakh p.a., 25% fee is waived off. More information about this is provided on our website.
- Merit-Based Scholarship:** IGL proposed the corpus of Rs 65 Lakh to IIIT-Delhi from which the earned interest amount (Rs 60,000 approximately) would pay 7 Merit-cum-Means scholarships for the meritorious B.Tech students every year. Only the ingenious B.Tech students who come from a financially disadvantaged family are eligible to apply for the scholarships.
- Financial assistance to the meritorious and needy students pursuing higher education in NCT of Delhi:** Delhi Higher Education Trust through Directorate of Higher Education (DHE) GNCTD will fully or partially reimburse the tuition fee paid by the students. The extent of reimbursement will be in 03 categories **Category 1:** 100% tuition fee of the meritorious students belonging to economically weaker section i.e. wards of parent/s who are beneficiaries and possess relevant card issued under the National Food Security Scheme. **Category 2:** 50% of the tuition fee to meritorious students having annual family income up to Rs. 2.50 Lakh and not covered under the National Food Security Scheme. **Category 3:** 25% reimbursement of tuition fee to meritorious students having annual income above Rs. 2.50 Lakh but below Rs. 6 Lakh.

Scholarships given to the students

Batch	No. of students who got 25% waiver		No. of students who got 50% waiver			BPL (100% Waiver)			Merit based	Total
	DG	IIITD	DG & IIITD	DG	IIITD	DG & IIITD	DG	IIITD	IIITD	
B.Tech. 2013	1	2		1						4
B.Tech. 2014	1	4	3*	6	3		3	2		22
B.Tech. 2015	4	3	2*	6	1		2			18
B.Tech. 2016	5	8	4*	8	9		3	2		39
B.Tech. 2017	15	8	6*	18		1**	12		8	68
<b>Total</b>	<b>26</b>	<b>25</b>	<b>15</b>	<b>39</b>	<b>13</b>	<b>1</b>	<b>20</b>	<b>4</b>	<b>8</b>	<b>151</b>

\*Students who got 25% fee waiver from Delhi Govt & 25% from IIIT-Delhi

\*\*Students who got 50% fee waiver from Delhi Govt & 50% from IIIT-Delhi



## GATE Scholarship to M.Tech. Students

Financial Assistantship/Studentship is available for some students in the form of Teaching Assistantship. The same is paid through AICTE to the M.Tech.(CSE & ECE) students directly and for M.Tech.(CB) students, it is paid from the grant received from Department of Biotechnology(DBT), Ministry of Science & Technology. Only full-time regular students are eligible for an assistantship. This is viewed as remuneration for the academic work (teaching/research) being performed for the Institute. Last year a total 231 Scholarships were granted to the M.Tech. students (85 to ECE students, 128 to CSE students, and 18 to CB students).

## Ph.D. Students

The financial assistantship is available for some Ph.D. students in the form of *research assistantship or teaching assistantship*

**Research assistantship.** The students under this plan are expected to help the faculty members in various research projects. They may be assigned limited academic duties.

**Teaching assistantship.** The students under this plan are expected to help the instructors in various courses for the smooth running of the course.

Other than these, our scholars get research grants and scholarships from Government funding agencies such as Visvesvaraya, UGC, DST and DBT as well as Industry funding agencies such as TCS, IBM, and Intel.

Details about fellowship availed by our current Ph.D. scholars are as below:

Fellowship Head	Total
PM Fellowship	2
Visvesvaraya	25
CSIR	3
UGC	13
DBT	1
DST (INSPIRE)	2
TCS	17
INTEL	1
COGNIZANT	1
Institute	52
Research Projects	19
Sponsored	14
Joined Job	11
<b>Total No. of students</b>	<b>161</b>



**INNOVATION,  
RESEARCH AND  
DEVELOPMENT**



## Research Centres

### Center for Design and New Media supported by Tata Consultancy Services

The Institute inaugurated the Center for Design and New Media supported by Tata Consultancy Services (a TCS Foundation initiative) on 22nd August 2018. The multi-million dollar grant will be spread over seven years and will provide support for faculty, projects, equipment, labs to IIIT-Delhi. The MoU was signed by Prof. Pankaj Jalote (IIIT-Delhi) and Mr. Ajoy Mukherjee (TCS). Mr. Ajoy Mukherjee, EVP, and Head of HR, and Member of the Board, TCS Foundation and Mr. K Ananth Krishnan, EVP, and Chief Technology Officer of TCS met the faculty and students and discussed future plans of the Center.

The inauguration was done in the august presence of Prof. Sanjiva Prasad (IIT-Delhi), Prof. PVM Rao (IIT-Delhi), Prof. Ranjan Bose (IIT-Delhi), Mr. Vivek Balaraman (Chief Scientist, TCS), Ms. Nirajan Pedanekar (Principal Scientist, TCS), and Mr. Sandeep Athavale (Principal Scientist, TCS).

This unique center in India will focus on advancing the research and development activities in the areas of Human-Computer Interaction (HCI), Interaction design, Multimedia, Graphics, Gaming, Animation, Virtual and Augmented Reality among others. The center will work closely with industrial and academic partners to achieve its aim. The Center is headed by Dr. Pushpendra Singh.

### Infosys Centre for Artificial Intelligence

Infosys Centre for Artificial Intelligence celebrated its second anniversary this year. The centre currently has 12 core faculty members, 20 Ph.D. students, and many B.Tech. and M.Tech. students. Infosys Centre for Artificial Intelligence also launched M.Tech. in Computer Science with specialization in Artificial Intelligence recently. Last year, Delhi Chapter of Women in Machine Learning and Data Science (WiMLDS) and Infosys Center for Artificial Intelligence (CAI) jointly organized "Machine Learning Unplugged" on 18 March 2018 at IIIT-Delhi. Infosys Center for Artificial Intelligence (CAI) and Times Hub jointly hosted Artificial Intelligence Conclave on February 23, 2018, in IIIT Delhi campus.

### Centre for Computational Biology

The Centre for Computational Biology (CCB) has turned three this year. In the last three years, the centre has grown regarding faculty strength, with nine core faculty and seven adjuncts/visiting faculty. The centre currently has 12 Ph.D. students and 29 M.Tech. Students. Last year the Centre hosted four symposiums "Emerging Trends in Bioinformatics & Health Informatics"; "Network Biology"; "Functional Genomics"; "Computational Gastronomy: The emerging data science of food flavors and health." Center for Computational Biology also conducted "Winter School" on various aspects of "Large Scale Biological Data Analysis" in December 2017.

Department of Biotechnology has also approved Rs. 269.20 Lakhs to support our M.Tech. in Computational Biology program at Department of Computational Biology, IIIT-Delhi. This includes support for our M.Tech. Fellowships, infrastructure, faculty support, travel and contingency for M.Tech. Students.

## Academic Research and Publications

We continue to encourage our faculty and students to publish their work in top quality international avenues. The number of papers/books published last year until April 2017 are; 86 in National and International Journals, 101 in National and International refereed conferences, and 11 as Books/Book chapters. The detailed list of publications is given in **Appendix A**.

## Technologies and tools developed and deployed

The Institute remains committed to developing technologies that can be transferred for commercial and societal use by other organizations. This year, out of many technologies developed at the Institute, nine new technologies reached the next level. One of them is Online Routing Portal for Employee Transportation (ETS) for Corporates that can help improve the traffic condition on the road in rush office hour. Another one is Design of Multimedia Forgery Detection System which will be adopted by national police academies of few states very soon. The detailed list of technologies & tools developed & deployed is given in **Appendix B**.

## Patents

This year our faculty and students filed for 5 patents. The patents include inventions like “wearable device and method of slaying insects”, “A Method and System for Multi-Frequency DC-Feed Network Design”, and many more inventions of public use, which are mentioned in **Appendix C** in detail.

## Sponsored Research Projects

IIIT-Delhi lays strong emphasis on the sponsored research, collaborative research funded by the national and international agencies and strong industrial interaction. The Institute has set up modern laboratories and the supporting infrastructure.

The sponsored research has also emerged as a crucial factor in the creation of the infrastructure while strengthening the facilities in some of the emerging areas of technology. The list of projects that were sanctioned last year and ongoing projects is given in **Appendix D**, and a summary is provided below.

### New Sponsored Research Projects acquired in last year

Funding Agencies	Number of Projects	Total Sanction Amount (In Lakh Rs.)
DST-Inspire	3	83.32
DST	1	24.09
DST-SERB	4	136.79
CSIR	1	0.30
DRDO	1	34.01
DST-CEFIPRA/CAI	1	35.48
DRDO-CARS	1	9.78
Irisys Co. Ltd.	1	15.61
Exter University	1	149.90
NIHR	1	43.20
<b>TOTAL</b>	<b>15</b>	<b>532.48</b>



### New Consultancy Projects

Funding Agencies	Number of Projects	Total Sanction Amount (In Lakh Rs.)
Robert Bosch	1	7.75
Samsung	1	2.54
Transach	1	5.51
My col	1	10.2
Anyang Creative Industry	1	5.96
TCS	1	7.00
Plato	1	1.5
<b>Total</b>	<b>7</b>	<b>40.46</b>

### External Collaborations

The Institute has an exceptional reputation for its external collaborations. Strong working relationships with a wide range of professionals, universities, research councils, and policy makers ensure that we have up-to-date and relevant course structure.

We run a wide range of highly successful initiatives, including contract research, in-house training, consultancy, and conferences. Sharing this expertise, we have formed strong working relationships with academic and non-academic organizations.

#### MOU between Univ at Buffalo and IIIT-Delhi for a dual/joint Doctoral Degree program

Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) has joined hands with University at Buffalo, the State University of New York, for a collaborative Ph.D. program. The program will allow Ph.D. students at IIIT-Delhi to spend a year or more at UB, under the joint supervision of advisors from both the institutes. At the completion of the program, the graduates will be awarded two separate degrees (specifying the degree is conferred under dual/joint supervision).

A ceremony marking the partnership program was organized on July 17, 2018. Prof. Satish K Tripathi, President, University at Buffalo, SUNY and Prof. Pankaj Jalote, Director IIIT-Delhi, signed the MOU.



This is an exciting model for research collaboration between academic institutions from two different countries. It offers students the advantages of both universities' excellent research resources in various disciplines – including eminent scholars, state-of-the-art research facilities, and vigorous research cultures; and they can benefit from the synergistic collaboration between the two institutions. It also allows faculty

members from the two institutions/countries to collaborate with the joint supervision of a Ph.D. student, for a minimum of four years.

This is the second such MOU, IIIT-Delhi has signed - our very first collaboration with another university for the Ph.D. program was with QUT, Australia - first Ph.D. student from joint/dual Ph.D. Program with QUT recently completed his doctorate.

#### **MOU with National Institute of Informatics (NII)**

Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi) has signed an MOU with the National Institute of Informatics (NII), Japan, to increase the research collaboration between two institutes. As the part of the MOU, NII will sponsor internships for our 5-6 M.Tech./Ph.D. students at NII, Japan every year. Moreover, the MOU will facilitate the exchange of academic staffs, supporting joint research projects, and exchanging technologies. This MOU kick-started with the joint project between Prof. Shin'ichi Satoh from NII and Dr. Rajiv Ratn Shah from IIIT-Delhi.

#### **MOU with Yonsei Enterprise Support Foundation**

Innovation and Incubation Centre at IIIT-Delhi has signed an MOU with Yonsei Enterprise Support Foundation, the Incubation Center of Yonsei University, Korea. The MOU aims to increase co-operation in business incubation, sharing technical advice, doing organizational research and exchanging information to enhance international technology transfer.





# Innovate Delhi Startup Bootcamp

10 Startups - 6 weeks - Pitch Day



**PITCH DAY**  
9th July 2016

- Week 1  
Stages of Startup
- Week 2  
Customer Discovery
- Week 3  
Drive Traffic and Measure
- Week 4  
Repeat Conversion
- Week 5  
Overcome Challenges
- Week 6  
Art of Pitching

To Know more, visit:  
[www.innovatedelhi.iitd.edu.in](http://www.innovatedelhi.iitd.edu.in)



As initiative of



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TECHNOLOGY DELHI

Associate Partner



Executive Partner



# INCUBATION

Our faculty has been collaborating with colleagues in other institutions in the country, as well as institutions across the world. Last year, more than 40 faculty members were involved in external collaboration with scientists, industries, research labs, etc. Overall, the faculty was engaged in **184 external collaborations**, Out of these collaborations, **39 are with industry labs, and corporate collaborations and 145 are collaborations with Academia**

Dr. Abhijit Mitra (PI) and Prof. Anand Srivastava (Co-PI) have collaborated with British Telecom to work in the area of Elastic Optical Networks and Quantum Communication Technologies. IIIT-Delhi is now a part of an esteemed group of universities under the flag of BT Global Research and Innovation along with MIT-USA, Tsinghua University-China, and IIT Delhi-India. Dr. Bijoy Chand Chatterjee will also collaborate while contributing towards efficiently utilizing EON network spectrum resources. Dr. Sanat Biswas is collaborating on the satellite constellation design aspect of Quantum Technology. The research work will aid Digital India, National Optical Fiber Network for sustaining the rise of 4G and 5G Telecom growth under an unconditionally secured environment.

In academia, Dr. Anubha Gupta has collaborated with Dr. Ananya Sen Gupta (University of Iowa) to work on Signal Processing for Underwater Communication. Dr. Debarka Sengupta has collaborated with Dr. Shyam Prabhakar, Assoc. Director, Genome Institute of Singapore, to work on a research work involves tracking transcriptomic changes at single-cell resolution due to aging. Detail of the faculty collaborations is given in **Appendix E**.

With the vision of creating a vibrant ecosystem of Innovation and Entrepreneurship, IIIT- Delhi has setup an entity IIIT-Delhi Innovation and Incubation Center (aka ICube). It is a non-profit Section-8 company, created for fostering innovation by supporting start-ups in the Institute. ICube is recognized by Delhi Government and the Department of Science and Technology, Government of India.

ICube is actively involved in developing the paradigm of an entrepreneurial mindset at the institute. It is focused towards fostering the entrepreneurial spirit, abilities and promotes ideas, research activities into entrepreneurial ventures. It provides a common working platform regarding guidance, mentoring, value-based collaboration, incubation, physical co-working spaces. It aims at driving the students towards innovation excellence to convert path-breaking business ideas into self-sustaining business ventures. ICube being a part of a research-based technical institution, has technology focussed theme areas to support the Startups viz. Artificial Intelligence and Machine Learning, Health Technologies and Computational Biology, Data Science and Mobile Computing, Cyber Security and Online Networking, ICT, Robotics and HCI and technology for social good.

ICube has been established as a separate company with its Board and highly experienced Advisory Committee to steer its operations. The Company promotes entrepreneurship activities and encourages innovation. The mission of ICube is to cultivate and catalyse innovative thinking and to pursue ideas into products and to accelerate the creation of sustainable, scalable, innovative solutions into successful start-ups that have significant social and economic impact.

Within one year of formal operations, the Incubation Center has Eleven start-ups namely iNICU Medical, Circle of Life, Brandov, JustCling, Ediome, RealVol, Zaillet, Blazing Studio, Mywanderlust, swapeco, studentgiri. These eleven start-ups are combined of IIIT-Delhi Students venture, Alumni and external startups. Several students have been offered internship and placement to these startups. Institute's Faculty is mentoring these startups, and lots of researches are getting a wider perspective and business values. To encourage and support IIIT-Delhi students for their ventures and initiatives, a dedicated infrastructure facility has been arranged, and fellowships for Alumni and graduating students are offered.

Being a technology-focused Incubator supporting startups and innovators from different technology domains, ICube provides all kinds of support and advisory, mentorship and other facilities with emphasis



on cross-pollination of ideas, thoughts and knowledge thereby making a healthy ecosystem for Entrepreneurs.

IIIT-Delhi Innovation and Incubation Center has recently collaborated with Yonsei University's Enterprise Foundation, Korea for supporting startups, ventures and other activities to promote Entrepreneurship. ICube has also partnered with Indian Angel Network and National Entrepreneurs Network.

Some of the facilities and offerings are:

- Co-working space and office space.
- High Speed Wired and Wireless Internet.
- Round the clock operational ecosystem, with all amenities and facilities including safety, power backup facilities, etc.
- Meeting rooms and Conference rooms with video conferencing and similar other facilities.
- Technical Guidance, Mentorship & Advisory.
- Professional Shared services, e.g., IPR, Legal, Accounting, etc.
- Financial Support – Fellowships, etc.
- Additional Support & Services.
  - Accessibility to Hi-Tech Labs
  - Interns for Incubatee companies
  - Library Services
  - Hostel ; Guest House Facilities
  - Recreational Activities & Eatery
  - Access to Educational Resources
  - Industry Compatible IT Infrastructure
  - Access to facilities for organizing workshops/seminars etc.

## Start-ups being incubated this year



REALVOL  
REALTIME VOLUME EXPLORER IN VIRTUAL REALITY



ZAILET  
ONLINE ENTERTAINMENT BLOG



BRANDOVE  
INVITE-ONLY, SOCIAL MOBILE APP FOR BRAND LOVERS



MY WANDERLUST  
DISCOVER. TRAVEL. INSPIRE.



EDIOME  
IOT INITIATIVE



JUST CLING  
DATING APP FOR LGBT



BLAZING STUDIOS  
GAMING STUDIO



CIRCLE OF LIFE  
HEALTHCARE ANALYTICS



## Alumni of incubation centre at IIIT-Delhi



ZENATIX



FESTAVESTA  
ONLINE TICKETING



BACKPACK  
LMS



CUSTTAP  
ANALYTICS SOLUTION



FINDAWAY  
SOCIAL ENTREPRENEURSHIP



MERI AWAAZ

## Partners





# OUTREACH AND PROFESSIONAL SERVICES

## Conference/Short Courses/ Seminars /Workshops organized at IIIT-Delhi



IIIT-Delhi has organized many conferences, seminars, workshops, short courses in the past academic year. Some of these are highlighted below:

### Seminars

TOPIC	DATE	GUEST
An Overview of Domain Decomposition Method in Modeling and Simulation of Fluid Flows and Heat Transfer	19 <sup>th</sup> April 2018	Dr. B.V. Rathish Kumar
A double-auction mechanism for mobile data-offloading markets with strategic agents	12 <sup>th</sup> April 2018	Dr. K.P. Naveen
Group Size and Political Representation under Alternate Electoral Systems	9 <sup>th</sup> April 2018.	Dr. Sabyasachi Das, Assistant Professor, Department of Economics, Ashoka University
Novel, Formalised Architectures for Next-Generation Cyber-Physical Systems	9 <sup>th</sup> April 2018	Dr. Roopak Sinha, Senior Lecturer and Programme Leader for Software Engineering at Auckland University of Technology
Modeling Timing of Cellular Events at Single-Cell Level	4 <sup>th</sup> April 2018	Dr. Khem Raj Ghusinga, University of Delaware, USA
High Performance Computing and BigData Science for Large Scale Spatiotemporal Applications	30 <sup>th</sup> March 2018	Prof. Sanjay Ranka, Professor at University of Florida, Fellow IEEE, Fellow AAAS
Influence Maximization on Social Network: The state of the art and the gaps that remain	15 <sup>th</sup> March 2018	Prof Syan Ranu
Facebook AI Research	13 <sup>th</sup> March 2018	Dr. Manohar Paluri
Quantum Cryptography: A journey into the world of unconditionally secure communication	7 <sup>th</sup> March 2018	Dr Anirban Pathak, IIIT Noida
TrustBase : Certificate-based Authentication as an Operating System Service	6 <sup>th</sup> March 2018	Dr. Kent Seamons, Associate Professor, Brigham Young

		University, USA.
Randomized numerical linear algebra in machine learning and data sciences"	8 <sup>th</sup> February 2018	Anirban Dasgupta
Integration of transcriptomics and epigenetics data to study immune cell functions	7 <sup>th</sup> March 2018	Dr. Aridaman Pandit, Laboratory of Translational Immunology, University Medical Center Utrecht (UMCU)
Petascale Computing Challenges in Astronomy	1 <sup>st</sup> February 2018	Dr. Yogesh Wadadekar
Preserving and forgetting in human and digital memory	29 <sup>th</sup> January 2018	Professor Robert H Logie from University of Edinburgh
Genomics of Translational Applications	19 <sup>th</sup> December 2017	Dr. Abhishek Kumar, German Cancer Research Center (DKFZ), Heidelberg, Germany
Minimum Distance Inference in High-dimensional Data: Past, Present and Future	10 <sup>th</sup> December 2017	Dr. Abhik Ghosh
Personality Cults in Indian Democracy	9 <sup>th</sup> November 2017	Ms. Sagarika Ghose
Optimization at Scale	8 <sup>th</sup> November 2017	Dr. Emilie Chouzenoux
Clocks, Rhythms and Calendar in Songbirds	7 <sup>th</sup> November 2017	Dr. Vinod Kumar, DU
NLP + Computational Social Science - The Emerging Trend	2 <sup>nd</sup> November 2017	Dr. Amitava Das, Department of Computer Sc. at IIIT, Sri City
Postgres: Past and Future	1 <sup>st</sup> November 2017	Mr Greg, Kemnitz, Former Director of Data Management, Guardian Analytics., USA
Skilling India: Anthropology of IT Tutoring in times of Work Automation	26 <sup>th</sup> October 2017	Dr Nimmi Rangaswamy, IIIT, Hyderabad
Minimum Distance Inference in High-dimensional Data: Past, Present and Future	12 <sup>th</sup> October 2017	Dr. Abhik Ghosh (ISI Kolkata)
SDN-managed Network Architectures for Classifying and Securing Data-intensive Science Traffic	10 <sup>th</sup> October 2017	Prof. Byrav Ramamurthy, University of Nebraska-Lincoln, USA
Another look on traditional geometric art: pattern morphogenesis, link with the quasicrystals, contribution to a revival	6 <sup>th</sup> October 2017	Dr. Jean-Marc Castera
Role of Sparsity in 5G Communications	14 <sup>th</sup> September 2017	Prof. Chandra R. Murthy from Indian Institute of Science, Bangalore
Wisdom Talk on Leadership	9 <sup>th</sup> September 2017	Jennifer Iannolo
DNA Polymerase IV, reactive oxygen species and antibiotics: A lethal combination	5 <sup>th</sup> September 2017	Dr. Deepak Nair, RCB
IEEE Standards: Driving Global Innovation on IoT & Smart Cities through Consensus Building	24 <sup>th</sup> August 2017	Srikanth Chandrasekaran, Director, IEEE Standards & Technology, IEEE India
"Identifying fusion transcripts using Next Generation Sequencing (NGS)"	22 <sup>nd</sup> August 2017	Dr. Shailesh Kumar, NIPGR
Analysis of Downsampling on Bipartite graphs	17 <sup>th</sup> August 2017	Dr. Aditya Tatu, from DAIICT, Gandhinagar
Data Compression for Multi-Core Memory System	14 <sup>th</sup> August 2017	Prof. Madhu Mutyam from IIT

		Madras
Computational Intelligence for IoT	10 <sup>th</sup> August 2017	Dr. Vijaya Kumar, Professor, M S Ramaiah Institute of Tech., Bangalore
Attitudes and Anxieties of India's Youth: Results from a recent Study	3 <sup>rd</sup> August 2017	Mr. Shreyas Sardesai , Research Associate at Lokniti, Centre for the Study of Developing Societies (CSDS)

### Workshops, Courses and Special Talks

TITLE	DATE	GUEST
SDR Workshop	30th- 31st July 2018	Dr. Sumit Darak (Assistant Professor, IIIT-D)
Talk on Circuits and Systems for 5G, Bioengineering, and AI	13th July, 2018	Yen-Cheng Kuan (Assistant Professor with the International College of Semiconductor Technology, National Chiao Tung University, Hsinchu, Taiwan.)
Computational Social Sciences Workshop	20th -21st June 2018	James Evans (Professor of Sociology, Professor Patrick Jagoda) and Kristen Schilt (University of Chicago) Siddharth Gupta and Sagar Verma (Granular, CO., USA) Razvan Nicolescu (Imperial College London) Dr. Shriram Venkatraman, Dr. Manohar Kumar, Dr. Rakesh Chaturvedi, Dr. Gaurav Arora, Dr. Ratan Suri, Saif Ali, Dr. Aasim Khan(IIIT-D)
Guest Lecture on High Level Synthesis	6th June 2018	Dr Kazutoshi Wakabayashi (Chief Scientist and product owner CWB tool
Workshop on Disaster Management Mobile App	29th -31st May 2018	Dr. P.B. Sujit (Assistant Professor, IIIT-D)
“Symposium on Computational Gastronomy: The emerging data science of food flavors and health”	17th March 2018	Chef Manjit S. Gill (President, Indian Federation of Culinary Associations) Chef Anil Grover Dr. Ganesh Bagler (IIIT-Delhi) Ritesh Kumar (CSIR- Central Scientific Instruments Organisation) Anupam Jain (Tata Consultancy Services and IIT Jodphur)Dr. Bhavana Prasher (CSIR-Institute of Genomics and Integrative Biology)



		Dr. Mitali Mukerji (CSIR-Institute of Genomics and Integrative Biology) Rudraksh Tuwani (IIIT-Delhi) Navjot Singh (DTU and IIIT-Delhi) Rakhi NK (IIT Jodhpur) Dr. Gurmeet Singh (R&D Director, Unilever)
“Model Based Design for Software Defined Radio”	17th March 2018	Hitu Sharma from MathWorks.
International Symposium – Digital Politics in Millennial India	15th -17th March 2018	Dr. Shriram Venkatraman, Prof. Sahana Udupa, Prof. Mark Allan Peterson, Sofia Ashraf, Aasim Khan
Talk on Differential Pricing of Traffic in the Internet	9th March 2018.	Dr. Manjesh Hanawal, Assistant Professor, IIT Bombay
"Winter School" on various aspects of "Large Scale Biological Data Analysis"	December 2017	Dr. Sriram K, CCB, IIIT-Delhi., Prof. Raghava, CCB, IIIT-Delhi, Dr. Vibhor, CCB, IIIT-Delhi
Software Defined Radio based Receivers and SDR Based Amplifiers Transmitters Architectures	20th December 2017	Prof. Fadhel .M. Ghannouchi
Two days Hands-on Workshop on Altium Designer (PCB Designing Tool):	6th December 2017	
AIS/IST GRÖBNER BASES AND THEIR APPLICATIONS	11th-23rd December 2017	
GIAN Course on Principal components Analysis (PCA) and Robust PCA for modern data sets	18th -22nd December 2017	Dr. Anubha Gupta (Associate Professor, IIIT-D) and Dr. Namrata Vaswani (Professor of Electrical and Computer Engineering and a courtesy Professor of Mathematics, Iowa State University, Ames Iowa)
Digital Microfluidic Biochips	14th December 2017	Dr. Krishnendu
Programming: Training Competent Coders	14th December 2017	Dr. Drew Hilton
Symposium on "Functional Genomics"	2nd December 2017	Dr S Mathavan (Sankara Nethralaya, Dept. of Genetics & Molecular Biology) Dr G P S Ragahava (CCB, IIIT-Delhi) Dr Shantanu Chowdhary (CSIR-IGIB) Dr Rohit Gupta (MedGenome, Bangalore) Dr G R Chandak (Centre for Cellular and Molecular Biology) Dr S Ramalingam (CSIR- IGIB) Dr Debarka Sengupta (CCB, IIIT-Delhi) Dr Vibhor Kumar (CCB, IIIT-Delhi)
Workshop on Quantitative Research Methods	28th November 2017	

Symposium on "Network Biology"	28th October 17	Milind Watve (IISER-Pune) Sanjay Jain (Physics Department, Delhi University) N Sukumar (Director, Center for Informatics; Department of Chemistry, Shiv Nadar University) Brojen Singh (School of Computational and Integrative Sciences, JNU) Vinod Scaria (CSIR-Institute of Genomics and Integrative Biology) Geetanjali Yadav (National Institute of Plant Genome Research) Anshu Bharadwaj (CSIR-Institute of Microbial Technology) Dipanjan Roy (National Brain Research Centre) Soumen Roy (Bose Institute) Ganesh Bagler (Center for Computational Biology, IIIT-Delhi).
Emerging Trends in Bioinformatics & Health Informatics	16th May 2017	Prof. Samir K. Brahmachari (Former DG,CSIR) Prof. G. P. S. Raghava(IIIT-Delh) Dr. Vinod Scaria (CSIR- IGIB) Dr. Manish Kumar, South Campus (DU) Dr. Dinesh Gupta (ICGEB) Dr. Dinesh Kumar, IASRI (ICAR) Dr. Ganesh Bagler (IIIT-Delhi) Dr. Vibhor Kumar (IIIT-Delhi)

## Research Showcase

The Research Showcase was organised in collaboration with IBM this year. The event was aimed at providing the industry professionals and academic fraternity with an opportunity to build a common platform for research and development activities of mutual interest.

This year, at IIIT-Delhi's Research Showcase 2018, there were many competitive events like Student Breakthroughs, Tech Quiz, Innovation Challenge, and discussion programs like Startup Interaction and IBM challenge revolving around the theme 'Imagine – Innovate – Inspire' that kept the event engaging as well as entertaining from beginning to conclusion. Prof. Niloy Ganguly from IIT Kharagpur was the keynote speaker at Research Showcase who spoke on various potential opportunities that need to be tapped through the collective efforts of academia and corporate houses.

From all around the prime educational institutions in Delhi and NCR, the event was able to attract a crowd of more than 500 students. As compared to the previous year's Research Showcase, this year the event came up with an added provision of goodies and cash prizes in the range of Rs. 20,000 - 40,000 for the winners of all the competitions.

## Summer Camp

Indraprastha Institute of Information Technology Delhi (IIIT-D) is marching successfully towards the motto with its progressive approaches. One such approach is Summer Camp 2018 that IIIT-Delhi has organized from 14th May to 15th June this year. Having started this initiative from the year 2016, the Institute hosts specialized training camp every year for the students of VIII & IX grade from government schools located near its campus. Reportedly, 180 students from six government schools attended the Summer Camp'18. These include Govt Boys Senior Secondary School in Harkesh Nagar, Govt Boys Senior Secondary School in Kalkaji, RPVV in Lajpat Nagar, Govt Boys Senior Secondary School, Kalkaji Govt Girls Senior Secondary School No. 3 and School of Excellence in Kalkaji.

Due to limited resources and infrastructure, the government schools often miss providing their students the opportunities for overall personality development. Therefore, the curriculum of IIIT-Delhi Summer Camp is designed in a way that it caters to the requirements for a healthy physical and intellectual growth of students.

The camp involves the classes of Mathematics, Science, General Knowledge, Communication and Personality Development. Every week, students are exclusively trained in Fine Arts, Theatre, Dance, Music, Art and Craft etc. The IIIT-Delhi Summer Camp 2018 team comprised of six coordinators and thirty volunteers from B.Tech. batches who were responsible for the smooth run of the camp. As per the experiences shared by participating school students, and cheerful volunteers, the time being spent at Summer Camp happens to be a great learning experience.



## Students Teach at Government Schools

Students from IIIT-Delhi continued to volunteer teaching in government schools on weekends. This year, our students prepared students of RPVV, Lajpat Nagar for NMMS exam which is for a scholarship scheme of MHRD. With our students preparing the school kids for the exam, the number of students who got scholarship in the year 2017 has increased. The Principal of the School appreciated our efforts and thanked us in their Annual Day event conducted on 12 December 2017.



## Startup Fair

The Start-Up Fair 2018 once again, was a great success, some of the best Start Ups from Delhi /NCR showcased themselves. The fair was open to all students from 1st to 3rd year. Close to 300 students registered for the even. After looking at the presentations by representatives from start-ups, the participants were allowed to interact with the representatives. The start-ups were impressed, satisfied & showed keen interest to engage in upcoming events at IIIT-Delhi.

This was a great opportunity for junior undergrad, and grad students to bag paid internships in some amazing start-ups offering exciting projects. Both technical and non-technical profiles were on offer during the fair.



### Events/Workshop organized by Library and Information Centre:

#### Two Days Book exhibition:

The Library organized a Book Exhibition on 8th & 9th February 2018. Around 30 reputed and well-known publishers and distributors participated in this event. Most of the faculty visited the exhibition and about 800 titles got recommended for the Institute's Library.



#### IEEE Xplore Digital Library:

IEEE and IIIT-Delhi jointly organized this session on 6th September 2017. The primary objective to hold this session was to make the students aware of the new features and resources added on IEEE, also, how to access IEEE resources more effectively.

#### Creative Writing Workshop:

This workshop was organized on 28th March 2018, Ms. Apala Chaturvedi from department of SSH was the resource person for this workshop. Around 25 participants participated in the workshop.



**Author Workshop:**

Elsevier and IIIT-Delhi jointly organized author workshop on 4th May 2018. This event was more relevant for such students who were interested in writing and publishing papers in journals and conferences of international repute. Dr. Sangeeta Mehta from Elsevier South Asia was the resource person. Around 30 students participated in this workshop.







# INDIA INNOVATION GROWTH PROGRAMME AWARDS CEREMONY



INDIA  
INNOVATION  
GROWTH PROGRAMME 2.0  
SOLUTIONS FOR TOMORROW

Department of  
Science and Technology  
Government of India

LOCKHEED MARTIN

TATA TRUSTS

## India Innovation Growth Programme (IIGP) 2.0

Pay *Indraprastha Institute of Information Technology* or bearer

Rupees *Ten Lac only*

₹10,00,000

IIGP 2.0 University Challenge 2018 Winner

IIGP 2.0 Joint Steering Committee

# AWARDS AND RECOGNITIONS

## Faculty Awards and Recognitions



Our faculty members have received several coveted awards for their papers and posters. Many have also been granted prestigious research grants and fellowships. Prof. GPS Raghava was awarded by UP Government for his contributions in the area of science.

The detailed list is given in **Appendix F**

Felicitated by government for contributions to science	1
Teaching excellence award by IIIT-Delhi students	8
Outstanding Educator award by Graduating students	3
Best paper/ poster awards at conferences	8
Fellowships and Grants	9
Invites as chief guest and guest of honor in tech fests and conferences	3
Appointed editor of a magazine	1
Winners at tech fests	2
Highest Impact Award	2



## Faculty Invited in National and International Seminars and as Speaker



Our faculty members attended various national and international conferences and presented their research results and gave lectures and presentations to enhance and share their academic and professional expertise. Prof. Anand Shrivastav, who is also our Dean of IRD was invited to be a member of UPSC Selection Committee.

The detailed list is given in **Appendix G**, and a summary is given below:

Invited Talk/Lecture at an Indian Institute/ industry	72
Workshop/Showcase/Presentation/competitions at Indian Institute	23
Lecture/Talk in Indian Conferences	17
Lecture/Talk in International Conferences	6
Invited Talk/Lecture at Foreign Institutes	12
Organized/Invited for Short Courses	10

## Professional Services by Faculty

Our faculty members chaired and were members of several committees in national & international conferences. Many of the faculty members are part of Editorial Boards and regularly serve as reviewers of national & international journals. The list is given in **Appendix H**, and a summary is given below:

VP/Chair/Co-Chair/ Editor/Associate Editor/ Area Chair of Journals	28
Chair/Co-Chair/Task-Force/Committee Member of national and international conferences	141
Reviewer of Conferences / Journals / Papers / Books	205
Advisory for Government	13
Organised special session/lecture/workshop/symposium	30
External Examiner/ Curriculum Development Committee Member	23

## Impact on Government and Industry

One of the significant roles of being a research institute is also to lead research which is useful for the society in a broader way. Research at IIIT-Delhi has a huge impact on society since many of the works by faculty have been acknowledged by the Indian Government and International community and industry.

Work by one of the faculty analyzes multimedia data on social media and other online platforms to address several fundamental problems such as suicidal ideation detection, hate speech detection, sentiment analysis, objectionable content detection, and other healthcare applications on social media. Currently, the research has been acknowledged through several citations and will be accessible to other research community through an open source shortly.

Another work on automatic kidney assessment will help society by preventing the kidney disease from getting to the End Stage Renal Disease (ESRD) patients who are put on dialysis treatments due to the lack of a well-structured kidney donor registry.

Another project for Wildlife Institute of India (WII): WII's tiger population census system incorporated IIIT-Delhi's visual species identification module. The tool, named Camera Trap Analysis Tool (CaTrAT), is to be sent to state forests of India for automatically analyzing camera trap images during the 2018 tiger population census. A quantitative measure of the impact will only be available in the next AY, once the tool has been deployed and run.

One of the faculty designed a web portal "Portal for Health Informatics (PHI)" to compile contributions of Indian Researchers/Academicians in the field of health informatics (See <http://webs.iiitd.edu.in/>). This web portal maintained a wide range of servers, databases, and software developed in the field of bioinformatics, cheminformatics, immunoinformatics, clinical bioinformatics, health informatics, genomics, etc. The primary purpose of this web portal is to provide help to biologists working in the field of vaccine development, drug designing, etc.

The faculty members are working in various areas of social cause for example analytics platform for National Bomb Data Centre, National Security Guard (NSG) Delhi, and Healthcare. The details of this are given in **Appendix I**.





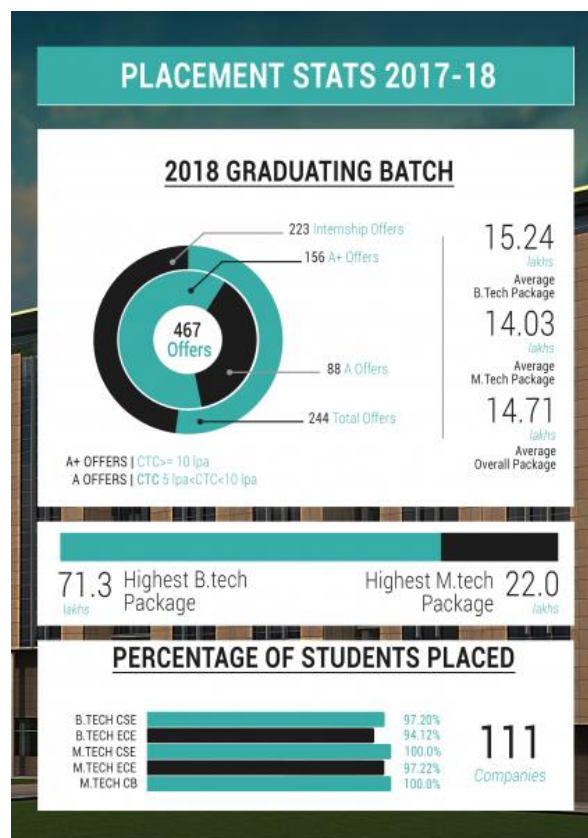
# PLACEMENT AND INTERNSHIPS

## Placements

IIIT-Delhi can guarantee effective employability of the students. Most of the courses involve projects; to ensures a hands-on knowledge of the area/technology. This makes them highly employable as compared to any other institute. IIIT-Delhi students enjoy the best combination of strong technical background and excellent soft skills. We do take a comprehensive examination of our students at the very beginning of the 6<sup>th</sup> semester which includes courses from all five semesters, to fill the gaps in what they have studied so far.

The placement cell organizes CV writing workshops, mock interviews, Group Discussions to prepare every student for the actual interview. Then, we also have mentorship programs where our alumini mentor 3<sup>rd</sup> and 4<sup>th</sup> year students. The Placement Office is run and managed by an efficient team of office staff & students that handle all aspects of placements at IIIT-Delhi, right from contacting companies to managing all the logistics and arranging for the tests, pre-placement talks and conduct of final interviews.

The students are encouraged to do multiple projects which give them a hands-on to apply the skill they have learned. Because of all this, the percentage of students going for higher studies is higher also the fraction of students going for technical career over students going for non-technical career or service industry is also high. Placement statistics of 2018 graduating batch is given below:



IIIT-Delhi is known for its Computer and Electronics disciplines, and the Institution registered an impressive placement percentage in its varied B.Tech. and M.Tech. courses. M.Tech. (CB) and M.Tech. (CSE) registered a 100 percent placement record while B.Tech. (CSE), B.Tech. (ECE), and M.Tech. (ECE) registered 94 percent, 89 percent, and 84 percent, respectively. One B.Tech. student bagged an overseas package of Rs 71 Lakh. The

campus hosted a total of 106 companies offering full time and internship roles. Continuing the Institute trend of competent packages, an average salary package Rs. 14.78 Lakh, the report added.

The highest package for an Indian placement was Rs 40 Lakhs for B.Tech. and Rs 22 Lakh for M.Tech. This placement season, a total of 446 offers were made, which comprised of 235 full-time job offers and 211 intern offers.

Amongst the full-time job offers, 150 A+ offer with CTC=> Rs 10 Lakh and 85 A offers with CTC ranging from Rs 6 Lakh to Rs 10 Lakh. The companies which emerged as the biggest recruiter for 2018 season were Qualcomm and Goldman Sachs. Some other companies who emerged as the biggest recruiters were Tower Research, Teradata, Dynamic Technology, Scry Analytics, and Telstra.

Also, companies like Amazon, IBM Research, Adobe, Microsoft, Myntra, Direct I, Qualcomm, Goldman Sachs Mathworks, SanDisk, ST Micro Electronics and NXP Semiconductors, etc. continues to be the top recruiters at IIIT-Delhi.

## Internships

The summer internship program at IIIT-Delhi continues to grow every year. In addition to having our students continue working on a project/research topic, through this program we also give opportunities to students from other Institutions to work in IIIT-Delhi.

Students at IIIT-Delhi can opt for following kinds of internships:

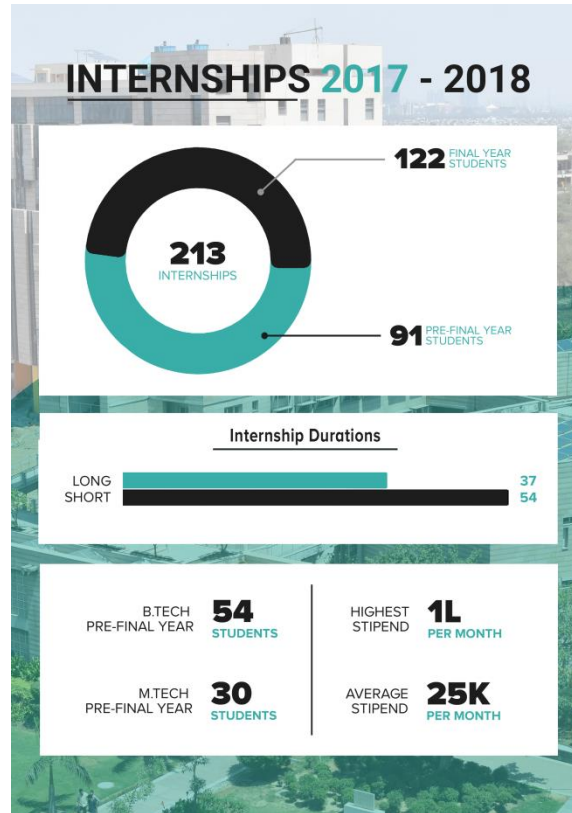
1. Summer Internship (May-July)
2. Semester Internship (4-6 months); this is not a mandatory part of the curriculum. If any B.Tech. Student proceeds for the same, it will be deemed as a semester break and M.Tech. Students need to take prior permission from their mentors for the same.

Interestingly, the internship offers at IIIT-Delhi also had an unexpected rise both in average stipend and in number of companies participating. With the highest stipend ranked at Rs. 1 Lakh per month, the average stipend offered was at Rs. 25K per month.

Out of the total 211 internships offered at the campus, 122 were offered to the final year students while 89 were offered to the pre-final year students.

## Internship Stats

### Internship Offered to IIIT-Delhi students in 2017-18



Number of companies visited	40+
Total Offers	221
Long Summer Internship	130
Summer Internship	78
Winter Internship	03
Roles	Research, Software, ECE, Fin-Tech
Highest Stipend	1 Lakh per month
Overall Average Stipend	25K per month
Pre-final Offer	89
Final Offer	122
Recruiters	Amazon,Adobe,Directl,GS,Mathworks,Google ,Microsoft,IBM Research,Qualcomm,SanDisk,ST Micro,Synopsis,NXP etc



## Core CSE Recruiters

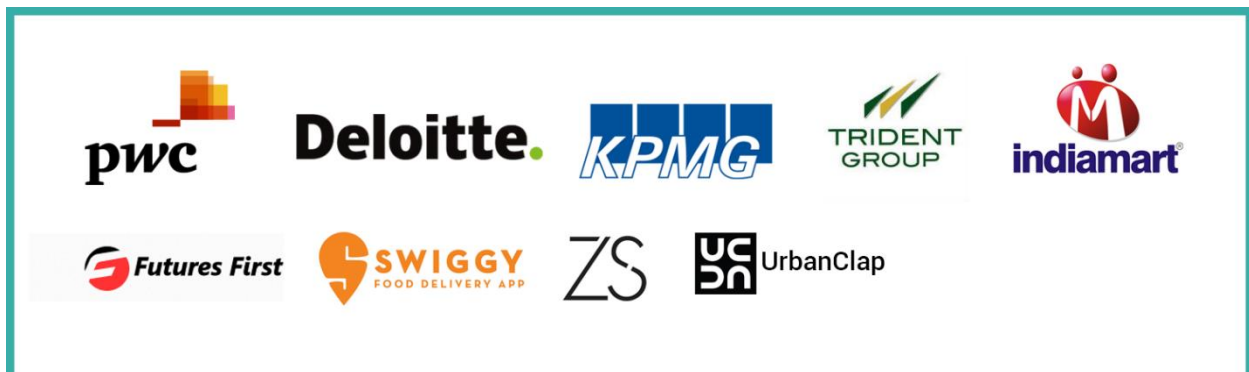




## Core ECE Recruiters



## Non Tech Recruiters





# STUDENT ACTIVITIES

IIIT-Delhi students make a major contribution to the objectives of creating, synthesizing, and disseminating knowledge. There are lots of great opportunities for students to participate in leading-edge research. Participating in research is a great way for students to learn about technology, solving problems and develop new technologies.

We encourage people from all backgrounds and perspectives to join in our studies as research participants, to help us develop a rich and complete understanding of technology. Not only this but we encourage our students to be all rounder personalities and inspire them to take on hobbies play sports. Detail of student achievement is given in **Appendix J**.

## Student Governance

IIIT-Delhi has an active *Student Council* where elected Student Representatives are given a chance to articulate their views and ideas in all student-related matters in the Institute along with academic and extra-curricular activities within the context of the Institute.

An elected body called as *Student Senate*, which serves as a representative for undergraduate and postgraduate students and whose primary objective is to deal with academic affairs. Apart from serving as a medium between the Undergraduate Council/Postgraduate Council and the students, it's constantly working towards making access to academic resources easier for students.

## Sports & Recreational Facilities

IIIT-Delhi has been regularly organizing various sporting events like the Intra- IIIT-Delhi football tournament Joga Bonito, Table Tennis and Pool tournaments, etc. Every year IIIT-Delhi students participate in tournaments in Delhi and outside Delhi. They were participants in the LSR Invitational tournament, also took part in Spardha-IIT BHU Sports Fest, Twaran Sports Fest at Gwalior, RANBHOO MI-17, LSR, IIM Indore Sports Fest and Sangram 18 at IIT Roorkee. Also, a group of students from IIIT Delhi takes part in Delhi Half Marathon running for a cause. We also organize summer camps for various sports activities at IIIT Delhi campus. A mega sports event, Triquetra, an event jointly held by IIITD, NSIT and DTU every year. Our sports complex equipped with swimming pool, Badminton & Squash court will be ready soon. It will also be consisting with Football ground and newly established Gym.



On various occasions, IIIT-Delhi invited other college teams for friendly/ practice matches, including those from G.B.Pant Engineering College, College of Vocational Studies, Kirorimal College, Jamia Millia Islamia etc.

## IIIT-Delhi Fests

There are three main student festivals - the technical festival **Esya** in August, which has now become one of the most vibrant tech-fests in Delhi, and the cultural festival **Odyssey** in January, A mega sports event, **Triquetra**, an event jointly held by IIITD, NSIT and DTU every year since 2016.

Both these festivals have large external participation and have various contests. Students are organizing the TEDxIIITD event for the last four years, which was hugely successful with excellent young inspirational



speakers. It is expected to become a regular event in the coming years. Also, there are cultural events like Cadence. Technical showcase: Research Showcase and other Tech events.



The cultural activities (arts and literary) for the year are planned together by the Student Council and the Cultural Secretary. In all, a good number of extra-curricular activities take place on the campus throughout the year.

‘ESYA’ which means a journey, an adventure - exploring Infinity and beyond, is the IIIT-Delhi’s TechFest, and is one of the largest events organized annually on the campus. Esya as the platform to not only showcase technical expertise but also integrate technology with social causes. After four successful years that saw promising talents and immense reception, Esya’17 saw an even larger participation. The two day festival included a series of unique and challenging events such as Data Hackathon, Hardware Hackathon, HuntIT, RoboWars, Chess, and Circuitrix.

## Student Clubs

At IIIT-Delhi, a major chunk of students’ time goes in academics as it requires hard work and focused effort. Nonetheless, there are many facilities and clubs to grow in various ways. Students take part in a number of social and cultural activities. If they want to pursue a hobby, they just need to find some like-minded people to start their club (if not already in existence) in the Institute.

**CLUBS**

- FooBar() Competitive Programming
- BYLD Software Development
- GAME CRAFT Gaming & development
- INK Design
- TRIVIALIS Quizzing
- Electronics
- DIVYAN DELI LITERARYS Literature
- THE 65th SQUARE Chess
- PRODIGES LAINERS Painting and arts
- MATH TOES Dance
- AUDIO BYTES Music
- and many more...

These clubs not only hone their leadership skills but also help instill team spirit in them. Last year; student bodies organized as many as 85 events. Several student clubs in the institute enable them to enhance their talent in areas beyond academics. Clubs already in existence at IIT Delhi are Quiz Club - Trivialis, Astronauts, Design Club - Ink, Dance Club - MadToes, Byld, Women in Tech(WiT), Music Club - Audio Bytes, Photography Club - Tasveer, the Literary Club, Eco Club and Computer Security club, FooBar, E-cell, Math club and many more.

These clubs enable students to come together, share knowledge and mentor those looking to enter into the field. Students can also suggest books for the library organize a blood donation campaign, an adventure trip during summer holidays or purchase a new instrument for the music room. 400 students participated in sports activities, 100 in cultural activities, 50 in quiz contests, and 350 in technical events.

Students are also encouraged to help the society in some way or the other. Almost every student is involved with various NGOs all over the country. The institute also has its own home-grown NGO of students called 'FindAWay,' which helps the children in need.

## Community Work & Self Growth

Students are encouraged to help the society in some way or the other. Almost every student is involved with NGOs all over the country.

S.No	Activity Type	No. of Students
1	Teaching	64
2	Promote rights of education	15
3	Data Collection, Entry and Case Study	6
4	Women Welfare	14
5	Old age home	16
6	Child rights	13
7	Help Underprivileged Section of Society	17
8	Welfare of rural community	19
9	Community literacy program	8
10	Blind Education & Training	11
11	Energy Consumption behavior	9
12	Handicapped Children	7
13	Fund collection for Orphanage	5
14	Spreading awareness about offence activities	8
15	Rehabilitation and counselling	3
16	Website Development of NGO	4
17	Patient's look after and Welfare	3
18	Swachh Bharat Summer Internship	12
19	Others	9
	<b>Total</b>	<b>243</b>

Community work provides students a chance to build and strengthen broader connection with the society and the self. At IIT Delhi, students are required to do about 80-90 hours of community work. This activity teaches students about their rights, duties and responsibilities as citizens, and their ability to bring about meaningful change through advocacy and service. It enables students in applying skills and content knowledge to real needs in their local community. Students are encouraged to give back to society through compulsory community work credits.





**ALUMNI  
UPDATE**



With another year passing by, the Alumni of IIIT-Delhi have set benchmarks yet again for coming batch. Sharing some of the accomplishments of IIIT-Delhi alumni, who are defined by their academic excellence, remarkable leadership, and commitment to public service. Particularly impressive is their acceptance into top graduate programs worldwide.

The Alumni are the face of this institute, and they have in the past contributed a lot to the institute. From endowments for a scholarship to funds for hostel improvements to funding research labs, the institute owes a lot to our past students.

Not only in the monetary terms but the alumni of IIIT-Delhi have been contributing a lot to mentoring their juniors. This is something only alumni of the institute can do; no other professional can take up the task of understanding the problems of young students and mentoring them in the right way.

We encourage our alums to stay connected, and we are glad that they also take pride in sharing their whereabouts and achievements. Following are some achievements of our alumni in this year:

- Shiv kandikuppa joined Masters in Computer Science at Ohio State University. .
- Vibhas Kumar from the class of 2012 is going to University Of Washington to pursue MBA.
- Priyanshi Mittal from class of 2013 is going for MS in Software Management at Carnegie Mellon University Silicon Valley Campus
- Sahil Jain class of 2014 B.Tech. joined University of British Columbia to study Masters in Business Analytics
- Mansi Panwar joined Master of Science in Information Systems and Operations Management at University of Florida
- Shantanu Goel Class of 2016 finished his MS in Management from Singapore Management University in July 2017

- Bhavna Nagpal, from the class of 2017, took part in OzCHI 24 hour Student Design Challenge this year with few batch mates and was selected as top 3 finalists.
- Jayasi B.Tech. Class of 2015 received the Siebel Scholarship for 2018.
- Romil Bhardwaj, of B.Tech batch of 2015 received a Computer Science Ph.D. admit from University of California, Berkeley (UC Berkeley)!
- Sukrit Kalra, from the class of 2016, joined University of California, Berkeley
- Ayush Goel, from the class of 2016, joined the Ph.D. program of the University of Michigan with full fellowship.
- Sakshi Saini from class of 2014 graduated from IIM Lucknow.
- Swetank Kumar Saha, B.Tech. Class of 2013, and Ph.D. Candidate at University at Buffalo bags three networking awards
  - 1st prize at the SEAS lightning talks competition at the SEAS Career Perspectives Networking Conference
  - 3rd prize in the ACM Student Research Competition at MobiCom 2017
  - Runner-up for Best Paper Award at ACM WiNTECH 2017
- Akshay Punhani, class of 2016, Joined UC Berkeley(School of Information
- Nipun Batra, Ph.D. Alumnus joined IIT Gandhinagar as Assistant Professor in CS department.
- Anisha Agrawal from Class of 2016, is selected for Post Graduate Program in Management at ISB through Young Leaders Program.
- Hemanta Mondal, Ph.D. Alumnus joined Indian Institute of Information Technology Guwahati as faculty position.
- Pankhuri Shrivastava, B.Tech (CSE) from class of 2016 received admit to XLRI Jamshedpur - Xavier's School of Management in the Business Management Program 2018-2020.
- Shubham Kaul, B.Tech (ECE), from class of 2016 and have received an admit to XLRI Jamshedpur - Xavier's School of Management in the Business Management Program 2018-2020.







# IIIT-DELHI IN NEWS SPOTLIGHT



Our Institute's key events and developments were covered by the media extensively. Specifically, articles related to events like Research Showcase, Summer Camp, Start-up Fair, various awards and recognition of our faculty and students. Interviews with our Dean and Director were covered by top newspapers including The Times of India, The Hindustan Times, Financial Express, Press Trust of India (PTI), Indo-Asian News Service (IANS) and Business Standard. Dataquest magazine's survey on top T school in the country also ranked us 6<sup>th</sup>.

A lot of research work by the faculty got featured in the newspapers, on online news channels. The faculty specifically wrote reports and articles for the newspapers. Publications showed a lot of interest in the research specific to the upright of the society at large

## ■ IIIT HOSTS WORKSHOP ON COMPUTATIONAL SCIENCE

A two-day workshop on 'Computational Methods in Social Sciences' was organised by the Centre for IT and Society at IIIT Delhi, recently. The workshop explored how advances in computational and statistical methods along with increased access to extensive data are transforming research avenues in the fields of Economics, Sociology, Anthropology, Political Science and Psychology. The event, which covered topics like 'Algorithmic Game Theory' and 'Big Data Methods', was attended by academics from top global institutes such as University of Chicago and Kings College, London.



## भारत में 40 लाख, विदेश में 71 लाख का पैकेज

बीटेक और एमटेक छात्रों को रिकॉर्ड 100 फीसदी प्लेसमेंट का तोहफा

अमर उजाला यूट्यू

नई दिल्ली: आईआईआईटी दिल्ली (इंद्रप्रस्थ इंस्टीट्यूट ऑफ टेक्नोलॉजी) में बीटेक प्रोग्राम के छात्रों को भारत में 40 लाख रुपये और विदेशों के लिए 71 लाख रुपये

आईआईआईटी दिल्ली में 2017-18 सत्र में छात्रों को मिला शानदार ऑफर

मुंबई, वह आईआईआईटी दिल्ली के लिए महत्वपूर्ण उपलब्धि है। कैम्पस कंप्यूटर विज्ञान और इंफॉर्मेशन टेक्नोलॉजी के लिए प्रसिद्ध है। बीटेक के इन प्रोग्राम में 100 फीसदी प्लेसमेंट दर्ज किया गया है। कैम्पस प्लेसमेंट के दौरान 3 सेक 25 भी ऑफर मिले। इसमें 235 फुलटाइम और 211 इंटरनल के सॉफ्टवेयर और डिजाइन के क्षेत्रों में 100 फीसदी प्लेसमेंट के दौरान बीटेक प्रोग्राम में सबसे कम

पैकेज 14.78 लाख रुपये रहा। वहीं, एमटेक प्रोग्राम के छात्रों को 22 लाख रुपये प्लेसमेंट ऑफर हुआ। करीब 150 छात्रों को 10 लाख सेटीमी और 85 छात्रों को छत्र में 10 लाख रुपये सेटीमी मिले हैं। बीटेक प्रोग्राम में बकालकॉम और पोस्टग्रेजुएट में वर्ष 2018 में सबसे अधिक भर्तियां कीं। प्लेसमेंट में टॉपर रिसर्च, टैगाराटा, डायनेमिक टेक्नोलॉजी, एनएलटीएस, टेल्ड्रा, अमेजन, एडोब, आईबीएम रिसर्च, माइक्रोसॉफ्ट, माइक्रो, डायरेक्ट आई, मैथ वर्क्स, सेनडिडक, एएक्सएस सेलैब्रिटी, एमटी इत्यादि कंपनियों के ऑफर मिले।



## There is a Huge Shortage of HR in Creative Space, Says Dr. GPS Raghava, HOD, IIIT-Delhi

Dr. GPS Raghava, HOD, Department of Computational Biology, IIIT-Delhi expresses the need of coming up with more computer and biology related programmes as a means to gauge the Biomedical field.

By Pankaj June 2018



## B.Tech in computer science and bioscience on offer

HT Correspondent  
j.ketters@hindustanimes.com

**NEW DELHI:** Students can now pursue B.Tech in Computer Science and Biosciences (CSB) at Indraprastha Institute of Information Technology Delhi (IIIT-D). The institute has recently announced the launch of this exciting new program from the coming academic year and students around the country can enroll through Joint Admission Counseling (JAC) following the regular procedure for B.Tech admissions. The program will have an intake of 50 seats and the admission will be done on the basis of applicant's JEE Mains score.

Presently offering B.Tech in five mainstream engineering branches, IIIT-D is focusing on a major fusion of CS and other areas to teach students the implications and usage of computer science technology. "Our institute is becoming the popular choice amongst all B.Tech aspirants. Until now, we have been producing the best of engineers in the field of CSE, ECE, CSAM, CSD, and CSSS. These disciplines are already established and scientifically upgraded. It's time that we must produce robust bio-scientists and computer science engineers with expertise in biology and medicine. With this new program, we are looking for high-spirited students who will, in future, make magnificent development in biosciences. This also favors the research disciplines in biology as new innovations can be engineered using CS," said Pankaj Jalote, Director at IIIT-Delhi.

B.Tech (CSB) program at IIIT-D is divided into eight semesters in which the integral units will be covered in first four semesters.

The later four semesters will include primarily elective courses allowing the students to choose subjects based on their interests.

The JAC registration is likely to be opened in the first week of June followed by admission counseling.

## ट्रिपल आइटी में हुआ सातवें दीक्षा समारोह का आयोजन



ट्रिपल आइटी दिल्ली के 7वें दीक्षा समारोह में छात्र को डिग्री देते उपराज्यपाल अमित बैजल व साथ में मृगल इंडिया और साइथ-ईस्ट एशिया के वाइस प्रेसिडेंट राजन आनंदन व संस्थान के निदेशक प्रो. प्रकज जलोटे • जागरण

**जागरण संवाददाता, दक्षिणी दिल्ली :** इंद्रप्रस्थ इंस्टीट्यूट ऑफ़ इनफ़ॉर्मेशन टेक्नोलॉजी (ट्रिपल आइ टी) में शनिवार को सातवें दीक्षा समारोह का आयोजन किया गया। इसमें इंजीनियरिंग के 200 से अधिक छात्रों को डिग्री व मेडल दिए गए। कार्यक्रम में मुख्य अतिथि के रूप में दिल्ली के उपराज्यपाल अनिल बैजल, मृगल इंडिया और साइथ-ईस्ट एशिया के वाइस प्रेसिडेंट राजन आनंदन और किरण कार्निक शामिल हुए। छह छात्रों को पीएचडी, 122 को बीटेक और 97 को एमटेक की डिग्रियां दी गईं। प्रोफेसर प्रकज जलोटे ने डिग्री पाने वाले सभी छात्रों को बधाई दी।

## Delhi colleges should strive to be among top 10 in world, says Delhi CM Kejriwal

Delhi Chief Minister Arvind Kejriwal on Tuesday said higher educational institutions in the city should strive to be among the top 10 institutes in the world and that his government would provide them the funds required to achieve the goal. "We will do it soon," he said at the inauguration function of Phase II of IIIT-Delhi campus here. "No Indian institute figures among the top 10 institutions in the world. It is our dream that at least one college or university from Delhi make it to the top 30 list," he said. "I can assure you there will be no shortage of money," Kejriwal added. The chief minister raved that only 1,251 colleges of the total around 2.5 lakh students clearing the Class 12 exams every year get admissions to colleges and universities in the national capital. "Even those scoring up to 97 per cent marks do not get admission. This is not acceptable. Our government is working to remove this shortage," he said. —PTI



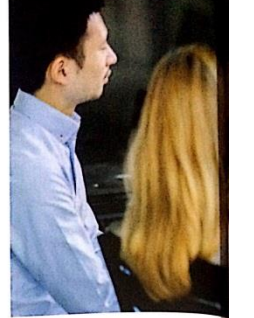
## Overcome the barrier, scale up your career

Invest in your communication skills, both oral and written. A wrong word or a wrong answer could cut short otherwise a wonderful career...

By Saakshi Varsha Lama

In the present-day scenario, the engineering field is reigned by the quest for technological knowledge. Confined to the information provided by study materials, students fail to look at exactly how much success factor the scholarly expertise actually provides them with. Students often feel lost and are in a state of confusion when they graduate and come face to face with reality i.e., the industry. According to industry experts, one of the major reasons for the large number of unemployed engineers is 'lack of communication skills'. India holds a pride of place among nations for being home to various languages. However, English continues to be widely used in educational institutes and industry to make an even platform for people speaking different languages. This may bring about equality in medium of communication but has a negative impact on students who come from schools or institutes where the medium of teaching and learning is a local language.

**Communication skills act as an employability factor**  
Communication skills are often overlooked as part of the curriculum in engineering institutes. Once the students are admitted to the top-notch engineering institutes, the focus usually shifts to building technical ability and enhancing knowledge of the students so that they excel in their career. However, the institutes fail to recognise



the importance of communication skills, key to increase the employability factor. In the wake of globalization, communication skills are the need of the hour.

**What about those students who are from non-English backgrounds?**  
According to JEE Advanced statistics, 55 percent of the IITians are from CSBE board (which is taught primarily in English) while 20 percent come from rural areas where the medium of teaching and learning is in their local language. This naturally creates a gap between the two categories of students. Since the medium of teaching in IITs and other major engineering institutes is English, the bright students from non-English background face difficulties and may have adjustment problems. Students belonging to vernacular background are usually found to have a hard time during placements and job hunting. So, is there any support system or programme available for such students?

**Dr. Pankaj Jalote, Director, IIIT Delhi**  
Now more and more universities are learning to accommodate people and their challenges of being from different backgrounds in terms of language. I think many universities are trying to do something or the other





# FACULTY AND OFFICERS

As on 21<sup>st</sup> August

## **Regular Faculty**

### **Aasim Khan**

Ph.D., King's College London is on the sociology and politics of communications rights in India and the impact of the Internet

Research Interest: Themes related to internet and citizenship, civic media and digital journalism in South Asia.

Write to Aasim: [aasim@iiitd.ac.in](mailto:aasim@iiitd.ac.in)

Read More: <http://iiitd.ac.in/aasim>

### **Alexander Fell (Presently on Leave)**

Ph.D. (2012), Indian Institute of Science, Bangalore, India

Research Interests: Coarse Grain Reconfigurable Architecture (CGRA), Network on Chip (NoC), Power optimizations for embedded systems.

Write to Alex: [alex@iiitd.ac.in](mailto:alex@iiitd.ac.in)

Read more: <http://www.iiitd.edu.in/~alex/>

### **Aman Parnami**

Ph.D. (2017) Human-Computer Interaction with a minor in Industrial Design, Georgia Institute of Technology.

Research Interests: Wearable Computing, Design Research, Education Technology

Write to Aman: [aman@iiitd.ac.in](mailto:aman@iiitd.ac.in)

Read More: <http://amanparnami.com/>

### **Amarjeet Singh (Presently on Leave)**

Ph.D. (2009), Electrical Engineering, University of California, Los Angeles, USA

Research Interests: Sensor Networks, Data Analytics, Energy Efficiency, Health Informatics, Internet of Things.

Write to Amarjeet: [amarjeet@iiitd.ac.in](mailto:amarjeet@iiitd.ac.in)

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### **Angshul Majumdar**

Ph.D. (2012), Electrical & Computer Engineering, University of British Columbia, Canada

Research Interests: Sparse Recovery, Low-rank matrix completion, Medical Imaging, Biomedical Signal Processing, Hyper-spectral Imaging, Collaborative Filtering.

Write to Angshul: [angshul@iiitd.ac.in](mailto:angshul@iiitd.ac.in)

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### **Anand Srivastava**

Ph.D. (2003), Indian Institute of Technology, Delhi

Research Interests: OFDM based Optical Core and Access Networks, Long Reach PONs, Optical Wireless Communication Systems, Fi-Wi Architectures, Optical Signal Processing,

Write to Anand: [anand@iiitd.ac.in](mailto:anand@iiitd.ac.in)

Read more: <https://www.iiitd.ac.in/anand>

### **Anuradha Sharma**

Ph.D. (2006), Mathematics, Panjab University, Chandigarh, India

Research Interests: Algebraic Coding Theory, Number Theory, and Algebra

Write to Anuradha: [anuradha@iiitd.ac.in](mailto:anuradha@iiitd.ac.in)

Read more: <https://www.iiitd.ac.in/anuradha>

### **Anubha Gupta**

Ph.D. (2006), Electrical Engineering, Indian Institute of Technology, Delhi, India

Research Interests: In Engineering: Signal modeling, multi resolution/ multiscale signal processing, and applications, Wavelet Transform: Design and Applications, Biomedical Signal Processing: Computational neuroscience, ECG, and EEG signal processing, Biomedical Image processing: microscopic image analysis, fMRI signal processing, MRI image processing, Statistical Signal Processing

Write to Anubha: [anubha@iiitd.ac.in](mailto:anubha@iiitd.ac.in)

Read more: <https://www.iiitd.edu.in/~anubha/>

### **Arun Balaji Buduru**

Ph.D. (2016), in Computer Science, specializing in Information Assurance at Arizona State University

Research Interest: Cyber security, reinforcement learning, and stochastic planning.

Write to Arun: [arunb@iiitd.ac.in](mailto:arunb@iiitd.ac.in)

Read More: <http://iiitd.ac.in/arunb>

### **A V Subramanyam**

Ph.D. (2012), Computer Engineering, Nanyang Technological University, Singapore

Research Interests: Multimedia Security, Information Hiding, Forensics

Write to Subramanyam: [subramanyam@iiitd.ac.in](mailto:subramanyam@iiitd.ac.in)

Read more: <http://www.iiitd.edu.in/~subramanyam/>

### **Ashish Kumar Pandey**

Ph.D. 2018, Mathematics from the University of Illinois at Urbana-Champaign, USA

Research Interests: Partial Differential Equations (PDEs)

Write to Ashish: [ashish.pandey@iiitd.ac.in](mailto:ashish.pandey@iiitd.ac.in)

Read more: <http://iiitd.ac.in/ashishk>

### **Chetan Arora**

Ph.D. (2012), Computer Science, Indian Institute of Technology, Delhi, India

Research Interests: Computer Vision, Machine Learning.

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### **Debajyoti Bera**

Ph.D. (2009), Computer Science, Boston University, USA

Research Interests: Algorithms, Complexity Theory, Quantum Computing.

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### **Debarka Sengupta**

Ph.D. (2014), in Computer Science and Engineering from Jadavpur University

Research Interest: Applied machine learning and genomics

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### **Dong Hoon Chang**

Ph.D. (2008), Information Management and Security, Korea University, Korea

Research Interests: Cryptography, Cryptanalysis, Cyber Security, Information Theory.

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**Ganesh Bagler**

Ph.D. (2007), in Computational Biology

Research Interests: Complex Systems, Computational Biology, Complex Networks, Bioinformatics, Modeling and analysis of biological data

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**Gaurav Arora**

Ph.D. (2017), Economics at Iowa State University

Research Interest: Natural Resource & Agricultural Economics, Ecological Economics, Applied Econometrics, Industrial Organization, Applied Game Theory, Spatial Analyses, Remote Sensing.

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Read More: <http://iiitd.ac.in/gaurava>

**G.P.S. Raghava**

Ph.D. (1996), Institute of Microbial Technology, Chandigarh

Research Interest: Bioinformatics Application on Protein Modelling/ Engineering, Genomics and Informatics Solutions for integrating Biology (GENESIS), Integrative approach for designing biomolecules for cancer therapy, Application of bioinformatics in System Biology

Write to Raghava: raghava@iiitd.ac.in

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**Kaushik Kalyanaraman**

Ph.D. (2015), University of Illinois at Urbana-Champaign

Research Interests: Discretizations of exterior calculus, discrete differential geometry, computational electromagnetics, applied and computational topology.

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Read More: <http://iiitd.ac.in/kaushik>

**Kiriti Kanjilal**

Ph.D. (2018), Economics at Washington State University

Research Interests: Microeconomics, game theory, industrial organization, environmental economics and behavioral economics

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Read More: <http://iiitd.ac.in/kanjilal>

**Manohar Kumar**

Ph.D. (2013) in Political Theory from LUISS University, Rome

Research Interests: Moral and Political Philosophy, Digital dissent, digital citizenship, whistleblowing, civil disobedience, democratic secrecy, and epistemic injustice.

Write to Manohar: manohar.kumar@iiitd.ac.in

Read More: <http://iiitd.ac.in/manohark>

**Mayank Vatsa**

Ph.D. (2008), Computer Science, West Virginia University, USA

Research Interests: Biometrics, Image Processing, Information Fusion, Forensics

Write to Mayank: mayank@iiitd.ac.in

Read more: <http://www.iiitd.edu.in/~mayank/>



**Mohammad Hashmi**

Ph.D. (2009), Electronics Engineering, Cardiff University, UK

Research Interests: Advanced RF Technology, Passive and Active RF Circuits, Green Communication, Highly Linear and Efficient Transmitter Design

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Read more: <http://www.iiitd.edu.in/~mshashmi>

**Monika Arora**

Ph.D. (2018), Old Dominion University, Virginia, USA

Research Interests: Count data and statistical modeling

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Read More: <http://iiitd.ac.in/monika>

**Mukulika Maity**

Ph.D. (2016), in Computer Science from IIT Bombay

Research interests: Wireless Networks, Mobile Computing, and Systems.

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Read More: <https://iiitd.ac.in/mukulika>

**Naqueeb Ahmad Warsi (Presently on leave)**

Ph.D. (2015), Information Theory from the Tata Institute of Fundamental Research, Mumbai

Research Interests: Classical and quantum information theory, particularly information theoretic problems in the non-asymptotic regime.

Write to Naqueeb: naqueeb@iiitd.ac.in

Read more: <https://www.iiitd.ac.in/Naqueeb>

**Ojaswa Sharma**

Ph.D. (2010), Mathematics and Computer Science, Technical University of Denmark, Denmark

Research Interests: computer graphics, and computational geometry.

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Read more: <http://www.iiitd.edu.in/~ojaswa/>

**P B Sujit**

Ph.D. (2006), Aerospace Engineering, Indian Institute of Science, Bangalore, India

Research Interests: Unmanned aerial vehicles, underwater vehicles, multi-robot systems, guidance and control, and human-robot interaction.

Write to Sujit: sujit@iiitd.ac.in

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**Pankaj Jalote**

Ph.D. (1985), Computer Science, the University of Illinois at Urbana Champaign, USA

Research Interests: Software Engineering, Software quality, process improvement, service oriented computing, software architecture, Fault-tolerant computing.

Write to Pankaj: jalote@iiitd.ac.in

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**Piyus Kedia**

Ph.D., IIT Delhi

Research Interests: system security, safe languages, virtualization and dynamic/static techniques to build systems

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**Ponnurangam Kumaraguru (Presently on Sabbatical)**

Ph.D. (2009), Computer Science, Carnegie Mellon University, USA

Research Interests: Privacy, e-Crime, Online Social Media, and Usable Security

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**Pushpendra Singh**

Ph.D. (2004), Inria-Rennes, Université de Rennes 1, France

Research Interests: Mobile Systems and Applications, Middleware, ICT for Development.

Write to Pushpendra: psingh@iiitd.ac.in

Read more: <http://www.iiitd.edu.in/~pushpendra>

**Pravesh Biyani**

Ph.D. (2012), Electrical Communication Engineering, Indian Institute of Technology Delhi, India

Research Interests: Optimisation for signal processing and communications, machine learning, and transportation.

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**Pydi Ganga M. Bahubalindrani**

Ph.D. (2014), Electrical and Computer Engineering,

Research Interests: Analog/Mixed signal design with emerging and submicron CMOS technologies, Large-area electronics, Transparent and Flexible circuits, device modeling and characterization.

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**Rahul Purandare**

Ph.D. (2011), Computer Science, University of Nebraska - Lincoln, USA

Research Interests: Program Analysis, Software Security, Automatic Program Repair, Program Comprehension, Specification Mining, Wireless Sensor Networks.

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**Rajiv Raman**

Ph.D. (2007), Computer Science, University of Iowa, USA

Research Interests: Algorithms, Combinatorial Optimization, Graph Theory, discrete and computational geometry

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**Rajiv Ratn Shah**

Ph.D. (2017), National University of Singapore

Research Area: His main research interests focus on the multimodal analysis of user-generated content in the support of social media applications. Since his past research closely related to social media data, he started exploring characteristics of social networks in his current research. Currently, he is doing cross-platform social media analytics for event recommendation.

Write to Rajiv: rajivrtn@iiitd.ac.in

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### **Rakesh Chaturvedi**

Ph.D. (2015), Economics from Pennsylvania State University

Research Interests:

Communication and Cooperation in Games, Political Economy and Market Design

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### **Richa Singh**

Ph.D. (2008), Computer Science, West Virginia University, USA

Research Interests: Pattern Recognition, Machine Learning, Biometrics and Medical Imaging

Write to Richa: rsingh@iiitd.ac.in

Read more: <http://www.iiitd.edu.in/~richa/>,

### **Saket Anand**

Ph.D. (2013), Electrical and Computer Engineering, Rutgers University, USA

Research Interests: Geometric Computer Vision, Semi-supervised learning, Robust methods, Scene understanding

Write to Saket: anands@iiitd.ac.in

Read more: <https://www.iiitd.edu.in/~anands/>

### **Sanjit Krishnan Kaul**

Ph.D. (2011), Electrical and Computer Engineering, Rutgers University, USA

Research Interests: Optimization of Wireless Networks, Enterprise 802.11 (WiFi) networks, Vehicular Networks, Anomalous activity detection using mobile phones.

Write to Sanjit: skkaul@iiitd.ac.in

Read more: <http://www.iiitd.edu.in/~skkaul/>

### **Sambuddho Chakravarty**

Ph.D. (2014), Computer Science, Columbia University, USA

Research Interests: Network Anonymity and Privacy, Network Surveillance and Anti-Censorship and Network and Distributed Systems Security

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### **Samrith Ram**

Ph.D. (2012), Department of Mathematics, IIT Bombay

Research Interests: Finite Fields and Combinatorics

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Read More: <https://sites.google.com/site/samrithram/>

### **Sanat K Biswas**

Ph.D.(2017), Space Vehicle Navigation, The University of New South Wales

Research Interests: Space vehicle guidance, navigation and control, orbit determination, GNSS-based navigation, non-linear dynamics and estimation algorithms

Write to Sanat : sanat@iiitd.ac.in

Read More : <http://iiitd.ac.in/sanat>

### **Sankha S Basu**

Ph.D.(2013), Mathematics, The Pennsylvania State University

Research Interests: Mathematical Logic - intuitionistic logic and paraconsistent logics

Write to Sankha: sankha@iiitd.ac.in

Read More: <http://iiitd.ac.in/sankha>

**Sarthok Sircar**

Ph.D. (2009), Applied Mathematics, University of South Carolina  
Research Interest: developing multiscale models and robust numerical algorithms for complex systems.  
Write to Sarthok: sarthok@iiitd.ac.in  
Read More: <http://iiitd.ac.in/sarthok>

**Shilpak Banerjee**

Ph.D. (2017), Mathematics, Pennsylvania State University  
Research Interests: Dynamical systems and ergodic theory  
Write to Shilpak : shilpak@iiitd.ac.in  
Read More: <http://iiitd.ac.in/shilpak>

**Shobha Sundar Ram**

Ph.D. (2009), Electrical Engineering, University of Texas at Austin, USA  
Research Interests: Electromagnetic sensor conceptualization, model and design, sensor circuit design and signal processing algorithms  
Write to Shobha: shobha@iiitd.ac.in  
Read more: <http://www.iiitd.edu.in/~shobha/>

**Shriram Venkatraman**

Ph.D. (2017) Anthropology, University College London  
Research Interest: Technologies in work places, organizational culture, and entrepreneurship.  
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Read More: <http://iiitd.ac.in/shriramv>

**Sneh Saurabh**

Ph.D. (2012), Electrical Engineering, IIT, Delhi  
Research Interests: Nanoelectronics, Exploratory Electronic Devices, Energy-Efficient Systems, VLSI Design and Verification and CAD for VLSI  
Write to Sneh: sneh@iiitd.ac.in  
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**Sneha Chaubey**

Ph.D. 2018 University of Illinois at Urbana-Champaign (UIUC)  
Research Interests: Number theory and its interactions with geometry and dynamics  
Write to Sneha: sneha@iiitd.ac.in  
Read More: <http://iiitd.ac.in/sneha>

**Sriram K.**

Ph.D. (2004), Chemistry, Indian Institute of Technology Madras, India  
Research Interests: Systems biology, Cell division cycle, Circadian rhythms, Computational cognitive neuroscience.  
Write to Sriram: sriramk@iiitd.ac.in  
Read more: <http://www.iiitd.ac.in/people/~sriram>

**Subhadip Raychaudhuri**

Ph.D. (2002), Physics, University of Rochester, USA  
Research Interests: (i) Systems biology of apoptotic cell death signaling in healthy and diseased cells and (ii) Immunobiology of B lymphocyte activation.  
Write to Subhadip: subhadip@iiitd.ac.in  
Read more: <https://sites.google.com/a/iiitd.ac.in/subhadip/>



### **Sujay Deb**

Ph.D. (2012), Computer Science, Washington State University, USA

Research Interests: design of novel interconnect architectures for multicore chips

Write to Sujay: [sdeb@iiitd.ac.in](mailto:sdeb@iiitd.ac.in)

Read more: <http://www.iiitd.edu.in/~sdeb/>

### **Sumit J Darak**

Ph.D. (2013), Nanyang Technological University (NTU), Singapore

Research Interests: Reconfigurable filter and filter banks for multi-standard wireless communication receivers, Dynamic Spectrum Learning, Tunable Bandwidth Access and RF Harvesting in Green Cognitive Radios.

Write to Sumit: [sumit@iiitd.ac.in](mailto:sumit@iiitd.ac.in)

Read more: <http://www.iiitd.ac.in/sumit>

### **Syamantak Das**

Ph.D., IIT Delhi

Research Interests: Intersection of theoretical computer science and discrete optimization

Write to syamantak: [syamantak@iiitd.ac.in](mailto:syamantak@iiitd.ac.in)

Read More: <http://iiitd.ac.in/syamantak>

### **Tanmoy Chakraborty**

Ph.D. (2015), IIT Kharagpur, India

Research Interests: Network Science, Data Mining, and Data-driven cyber security

Write to Tanmoy: [tanmoy@iiitd.ac.in](mailto:tanmoy@iiitd.ac.in)

Read More: <http://faculty.iiitd.ac.in/~tanmoy/>

### **Tavpritesh Sethi (Presently on Leave)**

Ph.D. (2013), CSIR-IGIB.

Research Interests: Big -data for clinical decision support, machine learning for critical care and community medicine, human physiology

Write to Tavpritesh: [Tavpritesh@iiitd.ac.in](mailto:Tavpritesh@iiitd.ac.in)

Read more: <https://www.iiitd.ac.in/tavpritesh>

### **Timothy Scott Moyers Jr**

Ph.D., Electroacoustic Composition and Multi-Channel Audio, University of Birmingham (England)

Research Interests: Utilizing VR Technology & Game Engines to Develop Real-Time Audiovisual Performance & Composition Software

Write to Timothy: [timothy@iiitd.ac.in](mailto:timothy@iiitd.ac.in)

Read More: <http://iiitd.ac.in/timothy>

### **Venkata Ratnadeep Suri**

Ph.D. (2013), Indiana University, Bloomington, Indiana

Research Interests: ICTs and Society, Information Literacy, Data Literacy, E-Health, M-health, Social media for Health, ICTs and Health behavior, ICTs and Development.

Write to Ratnadeep: [ratan.suri@iiitd.ac.in](mailto:ratan.suri@iiitd.ac.in)

Read More: <https://iiitd.ac.in/ratan>

**Vibhor Kumar**

Ph.D. (2007) from Helsinki University of Technology (now Aalto),

Research Interest: Genomics, Computational Biology, and Statistical Signal processing.

Write to Vibhor: vibhor@iiitd.ac.in

Read More: <https://sites.google.com/a/iiitd.ac.in/vibhulab/>

**Vikram Goyal**

Ph.D. (2009), Computer Science and Engineering, Indian Institute of Technology Delhi, India

Research Interests: Data Mining, Databases, Spatial Data Analytics

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**Vinayak Naik (Presently on Leave)**

Ph.D. (2006), Computer Science and Engineering, Ohio State University, USA

Research Interests: Mobile Computing, Sensor Networks, Wireless Networks, and Systems.

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Read more: <http://www.iiitd.edu.in/~naik/>

**Vivek Bohara**

Ph.D.(2011), Electrical and Electronic Engineering, Nanyang Technological University, Singapore

Research Interests: Cognitive Radio, Cooperative wireless communication, and Digital Predistortion Techniques.

Write to Vivek: vivek.b@iiitd.ac.in

Read more: <https://sites.google.com/a/iiitd.ac.in/vivek-ashok-bohara/>

**Vivek Kumar**

Ph.D. (2014), Research School of Computer Science, Australian National University

Research Interest: Parallel programming models and runtime systems.

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Read More: <http://vivekumar.github.io/>

## Deans and Registrar

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## Visiting Faculty

### **Abhijit Mitra**

Ph.D. (2017), under joint Indo-UK collaboration between IIT Delhi and British Telecom (BT), UK in the area of Elastic Optical Networks

### **Akshay Kumar**

Ph.D. (2014), University of Delhi, Senior Research Fellow Indian Council of Medical Research  
Consultant Psychologist BLK Super Speciality Hospital, Franchise owner of "Men are from Mars, Women are from Venus" Asia Pacific region

### **Alka Pande**

Ph.D., History of Art from Punjab University  
Consultant Arts Advisor and Curator, Visual Arts Gallery, India Habitat Centre in New Delhi. She is the guest curator of the Sculpture Gallery at the City Palace Museum, Udaipur.

### **Amrit Srinivasan**

Ph.D., University of Cambridge, UK  
Recipient of the Commonwealth Scholarship Award, the Shastri Indo Canadian Fellowship Award, the Charles Wallace India Trust Award and the ICCR's Visiting Chair in Humanities & Social Sciences Award

### **Anupam Saronwala**

MS in Computer Engineering from Syracuse University  
Charter Member of TIE and a member of Indian Angel Network

### **Ashok K. Mittal**

Vice-president, Quality Circle Forum of India  
Retired Professor & Dean (R&D, PRG) IIT Kanpur Operations Research/ Management; Intellectual Property

### **Bijoy Chand Chatterjee**

Ph.D. (2014), Department of Computer Science & Engineering, Tezpur University  
Routing and spectrum allocation in optical networks, QoS-aware schemes, resource allocation in Hadoop, and cross-layer design

### **Drishti Sharma**

MD in Community Medicine from Maulana Azad Medical College, New Delhi.  
Interdisciplinary research, with fields of psychology, education, computer science and economics.

### **G.S. Visweswaran**

Retired Professor from IIT-Delhi  
CAD of VLSI, Design of Digital, Analog and Mixed Signal VLSI Circuits

### **Hemant Kumar**

Founder - Softek Ltd., VP at HCL Tech. B.Tech.(1977), IIT Kanpur  
Software Development, Compilers, Databases, Inventory Management and Banking Software [Since June 2011]



**Indrani De Parker**

Ph.D. (per.), Design Education in 21st Century India, IIT, Mumbai

Indrani De Parker is an alumnus of the National Institute of Design (NID), Ahmedabad. She is a communication designer and design educator.

**Manohar Khushalani**

Bachelor in Civil Engineering from BITS Pilani Courses on 3D Modelling and Finite Element analysis from IIT, Delhi

Former Director, Environment, and Sociology, at the National Water Academy, Khadakwasla, & Member Secretary, National Environmental Monitoring Committee for River Valley Projects

**Naveen Prakash**

Ph.D. (1980) IIT Delhi

Data Warehouse Requirements Engineering, Information Systems for the Internet of Things, and Business Rules for Requirements Specification

**Pankaj Vajpayee**

President Value Research India (P) Ltd. MBA (Finance) - University of Delhi; 1993 B.Tech. - IIT Delhi - 1990

Has over 24 years of corporate experience primarily in the field of investment banking and portfolio investment advisory activities.

**Raj Ayyar**

Full-time Assistant Professor, East Florida State University

Adjunct Faculty, West Valley College and Laney College MA (Philosophy), St. Stephen's College, Delhi MA (Philosophy), Southern Illinois University, USA

**Samaresh Chatterji**

Ph.D. (1979), Mathematics, Wayne State University, Detroit

Former Dean - Academic Programs, DA-IICT, Gandhinagar Abstract Algebra, Graph Theory

**Shachi Sharma**

Ph.D. (2007) in computer science (in the area of broadband networks) from Jawaharlal Nehru University, New Delhi.

Former research scientist at IBM Research Lab. Her research interests include the performance modeling and simulation of communication networks, context-aware computing, cloud computing, Internet of Things and blockchain.

**Sumit Mediratta**

Ph.D. from University of Southern California (USC), Los Angeles

At USC ISI, he made strong contributions in the advanced computer architecture applied research. At NVIDIA Graphics, he was involved in the development of cutting edge Media and Communications Processors, and Graphics Processing Units (GPUs)

**Swapna Purandare**

(Ramanujan Fellow SERB-DST)

Ph.D. (2014), Biological Sciences (Ecology, Evolution, Behavior), University of Nebraska-Lincoln, USA  
Evolutionary Ecology, Biodiversity Conservation, Bioinformatics, NGS, eDNA, Metagenomics

## Administrative Officers

<p><b>DIRECTOR'S OFFICE</b> Vinod Kumar</p> <p><b>REGISTRAR'S OFFICE</b> Aarti Yadav</p> <p><b>ACADEMICS &amp; ADMISSIONS</b> Anshu Dureja Ashutosh Brahma K.P.Singh Nisha Narwal Prachi Mukherjee Priti Patel Roshan Kumar Mishra Sheetu Ahuja</p> <p><b>CORPORATE COMMUNICATION &amp; ALUMNI RELATIONS</b> Pallavi Kaushik</p> <p><b>FACILITY MANAGEMENT AND SECURITY SERVICES</b> Arun Verma</p> <p><b>FINANCE &amp; ACCOUNTS</b> Amit Shankdher Kapil Chawla Paridhi Rawat</p> <p><b>HUMAN RESOURCES AND GENERAL ADMINISTRATION</b> Aakriti Sinha Cursevak Singh Nayana Samuel</p> <p><b>INCUBATION CENTRE</b> Alok Nikhil Jha</p> <p><b>LIBRARY &amp; INFORMATION CENTRE</b> Rajendra Singh</p> <p><b>MATERIAL MANAGEMENT AND DEVELOPMENT</b> Ajay Kumar</p> <p><b>PLACEMENTS</b> Jaffar Ansari Navin Kumar Gaur Rashmil Mishra Shweta Jaiswal</p>	<p><b>CONSTRUCTION PROJECT</b> Anurag Tyagi Sanjay Roy Umesh</p> <p><b>RESEARCH &amp; PROJECTS</b> Nidhi Yadav</p> <p><b>RESEARCH LAB</b> Abhijeet Mishra Khagendra Joshi Rahul Gupta Sana Ali Naqvi</p> <p><b>STUDENT AFFAIRS</b> Khushpinder Pal Sharma Rahul Ravi Bhasin</p> <p><b>SYSTEMS &amp; NETWORKING</b> Abhinay Saxena Adarsh Kumar Agarwal Bhawani Shah Chahan Rashikbhai Katra Danish Parvez Rahul Verma Yogesh Sangwan</p> <p><b>WEB DEPARTMENT</b> Ankit Agarwal</p> <p><b>CENTERS &amp; DEPARTMENTS</b> Binoj Baby Priti Patwal Risha Lal Sanjna Khosla Shipra Jain</p>
---	---



# APPENDICES

## Appendix A: Papers published

### Journal Papers - 86

- 1) A. Grover, G.S. Visweswaran, CR Parthasarathy, M. Daud, D. Turgis, B. Giraud, J.P. Noel, I. M. Panades, G. Moritz, E. Beigné, P. Flatresse, P. Kumar and S. Azmi, "A 32 kb 0.35–1.2 V, 50 MHz–2.5 GHz Bit-Interleaved SRAM With 8 T SRAM Cell and Data Dependent Write Assist in 28-nm UTBB-FDSOI CMOS", IEEE Transactions on Circuits and Systems, vol 64(9), pp: 2438-2447, 2017.
- 2) S. Pathak, A. Grover, M. Pohit and N. Bansal, "LoCCo-Based Scan Chain Stitching for Low-Power DFT", IEEE Transactions on Very Large Scale Integration (VLSI) Systems, vol 25(11), pp: 3227-3236, 2017.
- 3) J. Maggu, V. Singhal and A. Majumdar, "Simultaneous Detection of Multiple Appliances from Smart-meter Measurements via Multi-Label Consistent Deep Dictionary Learning and Deep Transform Learning" IEEE Transactions on Smart Grid, 2018.
- 4) S. Singh and A. Majumdar, "Analysis Co-Sparse Coding for Energy Disaggregation", IEEE Transactions on Smart Grid, 2017.
- 5) V. Singhal, H. Agrawal, S. Tariyal and A. Majumdar, "Discriminative Robust Deep Dictionary Learning for Hyperspectral Image Classification", IEEE Transactions on Geosciences and Remote Sensing, vol. 55 (9), pp: 5274-5283, 2017.
- 6) A. Gogna and A. Majumdar, "Balancing Accuracy and Diversity in Recommendations using Matrix Completion Framework", Knowledge Based Systems, vol. 125, pp: 83-95, 2017.
- 7) J. Maggu, A. Majumdar, "Kernel Transform Learning", Pattern Recognition Letters, Vol. 98, pp: 117-122, 2017.
- 8) V. Singhal, A. Majumdar and R. K. Ward, "Semi-supervised Deep Blind Compressed Sensing for Analysis and Reconstruction of Biomedical Signals from Compressive Measurements", IEEE ACCESS, vol. 6 (1), pp: 545-553, 2017.
- 9) K. Gupta and A. Majumdar, "Imposing Class-wise Feature Similarity in Stacked Autoencoders by Nuclear Norm Regularization", Neural Processing Letters, vol. 48 (1), pp: 615-629, 2018.
- 10) J. Maggu, P. Singh and A. Majumdar, "Multi-echo Reconstruction from Partial K-space Scans via Adaptively Learnt Basis", Magnetic Resonance Imaging, vol. 45, pp: 105-112, 2018.
- 11) S. Singh and A. Majumdar, "Deep Sparse Coding for Non-Intrusive Load Monitoring", IEEE Transactions on Smart Grid (accepted) (I.F. 6.6) – 10 pages.
- 12) N. Ansari and A. Gupta, "Image Reconstruction using Matched Wavelet Estimated from Data Sensed Compressively using Partial Canonical Identity Matrix," IEEE Transactions on Image Processing (IEEE-TIP), vol. 26(8), pp: 3680-3695, 2017.
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## Appendix B: Tools & Technology Developed & Deployed

### Aman Parnami

- 1) Sleeve for Traffic Policemen (filed): Developed a novel wearable solution for increasing safety as well as enabling manual management of traffic by traffic policeman in low visibility conditions. This was a WARDI course project.
- 2) SmartBag (prior art search done, drafting): Developed a novel wearable tool management case for service providers such as plumber, electricians. This was a WARDI course project.
- 3) Self-powered textile-based wellbeing monitoring devices (prior art search done, drafting): Developed a method of harvesting energy for powering and e-textile based body-worn medical monitoring devices . This is part of ongoing Ph.D. thesis research also started as a WARDI course project.

### Donghoon Chang

- 1) Core Module Development of Access Control using Iris/Face recognition for actual products of a Korean company, IRISYS.
- 2) 2. Software Development of Fingerprint Recognition System as a part of products requested by ETRI, Korea.

### Anuj Grover

- 1) “Low Voltage, Master Slave Flip Flop” by Alok Tripathi, Amit Verma, **Anuj Grover**, Deepak Bihani, Tanmoy Roy, Tanuj

### A.V. Subryamanyam

- 1) National Police Academy, Hyderabad is in the process of procuring pre-requisites for deploying the tool developed under the closed project ‘Design of Multimedia Forgery Detection System’.

### Pravesh Biyani

- 1) **Online Routing Portal for Employee Transportation (ETS) for Corporates:** He now deployed his work from the last few years in form of a portal for corporates to plan their employee transportation. Project page: <http://traffickarma.iiitd.edu.in:8090/login/>
- 2) **Possible Spin-off: EATM (eat-atm):** Developed an automated fresh food vending machine using RF (Radio Frequency), Cameras and related ML and AI technologies. The vending machine was deployed for around 4 weeks in March/April 2018 in one of IIIT Delhi hostels. The EATM machine sold around 350 units of food worth 20000 Rs in an automated manner. A peripheral APP etc was developed which was downloaded around 200 times with 80 users who bought food. The project involved 5 B.Tech. students, 1 faculty member (Pravesh Biyani) and 1 outside partner who funded the project to the tune of 500,000 Rs. There is a possibility of spin-off from IIIT Delhi.

## Appendix C: Patents

- I. Application No.: 201811025230  
Date of filing: 04.07.2018  
Title: WEARABLE DEVICE AND METHOD OF SLAYING INSECTS  
Inventors: Himanshu Chandana (Student) & Aman Parnami  
Status: Filed
- II. Application No.: 201811025231  
Date of filing: 04.07.2018  
Title: WEARABLE DEVICE AND METHOD OF OPERATING THE SAME TO PERFORM MULTIPLE FUNCTIONS SEAMLESSLY  
Inventors: Sagar Khurana(Student), Paras Jain(Student), Harshit Verma (Student) & Aman Parnami  
Status: Filed
- III. Application No.: 201811008597  
Date of Filing: 08.05.2018  
Title: A SYSTEM AND METHOD FOR ENERGY HARVESTING DURING ANALOG SIGNAL SAMPLING  
Inventors: Neha Jain, Dr. Vivek Bohara, Dr. Anubha Gupta  
Status: Filed
- IV. Application No.: 201611022038  
Date of filing: 28.06.2016  
Title: A Generic tri-frequency impedance transformation network for RF/microwave active and passive circuits, components and systems  
Inventors: M.A. Maktoomi & M.S. Hashmi  
Status: Filed (Was filed in 2016 but documentation process is completed in 2018)
- V. Application No.: 201611028802  
Date of Filing: 24.08.16  
Title: A Method and System for Multi-Frequency DC-Feed Network Design  
Inventors: M.A. Maktoomi & M.S. Hashmi  
Status: Filed(Was filed in 2016 but documentation process is completed in 2018)



## Appendix D : Sponsored and Consultancy Research Projects

### New Sponsored Research Projects

Sl No	Title of the Project	Name of the PI	Funding Agencies	Total Sanction Amount Rs. (Lakhs)
1	Inspire Faculty Award	Dr. Debarka Sengupta	DST	13.32
2	Energy and water disaggregation for Non- Intrusive load monitoring in buildings	Dr. Angshul Majumdar	DST	24.09
3	Self-Contained Flexible Oxide Electronics for Smart Packaging	Dr. Pydi Ganga Bahubalindrani	DST-SERB	33.76
4	SSB-Honorarium	Dr. G.P.S Raghava	CSIR	0.30
5	Inspire Faculty Award	Dr. Bijoy Chand Chatterjee	DST	35.00
6	Analyzing and Measuring the Collateral Damage of an Entity of the Internet	Dr. Ponnurangam Kumaraguru	DRDO	34.01
7	Minimal Residual Disease Estimation in Multiple Myeloma using Image Processing: design and Development of Myelomaimager - an Automated Computer	Dr. Anubha Gupta	DST-SERB	43.12
8	Looking Beyond Back Propagation in Deep Learning	Dr. Angshul Majumdar	DST-CEFIPRA/CAI	35.48
9	An effective Multi-Task Learning Approach for context - Sensitive Speech Analysis	Dr. Arun Balaji Buduru	DRDO-CARS	9.78
10	Development of USB Protocol, UAF Protocol, Fingerprint & Secure USB	Dr. Donghoon Chang	Irisys Co. Ltd.	15.61
11	Inspire Faculty Award	Dr. Abhijit Mitra	DST	35.00
12	Emergency flood planning and management using unmanned aerial system	Dr. P.B.Sujit	Exter University, UK	149.90
13	Ramanujan Fellowship	Dr. Tanmoy Chakraborty	DST-SERB	38.00
14	NIHR Global Health Research Group on Psychosis Outcomes: The Warwick - India- Canada (WIC) Network	Dr. Pushpendra Singh	NIHR	43.20
15	Cartilage mechanics: multiscale modeling, analysis and scientific computing	Dr. Sarthok Sircar	DST-SERB	21.91
Total				532.48

### New Consultancy Projects

S. No.	Project Title	PI	Funding Agency	Sanction Amount(Lakhs)
1	Robert Bosch Engineering and business Solutions Limited	Dr. Ponnurangam Kumaraguru	Robert Bosch	7.75
2	Samsung India Electronics	Dr. Debarka Sengupta	Samsung	2.54
3	Transach Pvt Ltd.	Dr. Donghoon Chang	Transach	5.51
4	Mycol life circle pvt ltd	Dr. Debarka Sengupta	My col	10.2
5	Anyang Korean Project -2	Dr. Donghoon Chang	Anyang Creative Industry	5.96
6	TCS Research Advisory Engagement	Dr. Angshul Majumdar	TCS	7.00
7	Plato consultancy	Dr. Donghoon Chang	Plato	1.5
			Total	40.46

### Running Sponsored Research Projects

S.No	Title of the Project	Name of the PI	Funding Agencies	Total Sanction Amount Rs. (Lakhs)
1	International Development Research Centre,Canada and Privacy International,UKPrivacy In India.	Dr. Ponnurangam Kumaraguru	Privacy International	20.55
2	An Inter-Disciplinary Approach Toward building Ontology for Online Extremism	Dr. Ponnurangam Kumaraguru	DST-Indo-Ireland	6.84
3	Research and Exploration in Support of the proposed Project Title Use of cell phone for detecting and Controlling Infectious Diseases from National Geographic Society	Dr. Vinayak Naik	National Geographic Society	9.86
4	Smartphone-Based Anolalous Human Activity Detection & Prediction	Dr. Sanjit Kaul	DST-SERB	19.84

5	Dynamical Analysis on the Functional relationship between circadian rhythms & memory formation to understand post-traumatic memories in human	Dr. Sriram K	DST	15.89
6	EMC: Development of distributed algorithms for incremental Sensing Communication	Dr. Amarjeet Singh	EMC Data Storage System India Pvt. Ltd	9.60
7	Human Sense: Towards context aware sensing, inference and actuation for applications in Energy and Healthcare	Dr. Pushpendra Singh	Media Lab Asia	184.41
8	Small Cell WiFi Networks For The Enterprise	Dr. Sanjit Kaul	DeitY	88.34
10	Design and Development of Leukoanalyzer , an Automated Computer Assisted Tool for Minimal Residual Disease Estimation (MRD) in B-lineage Acute Lymphoblastic Leukemia(ALL) using Image Processing Techniques.	Dr. Anubha Gupta	DeitY	28.31
11	Design and development of Digital Multimedia Forgery Detection system	Dr. A. V. Subramanyam	DeitY	49.80
12	Creating Course Content for Privacy and Security in Online Social Media	Dr. Ponnurangam Kumaraguru	Intel Corporation	12.19
13	Mobile-based Diagnosis of Sleep Apnea	Dr. Vinayak Naik	DST-SERB	51.01
14	Google Award for School	Prof. Pankaj Jalote	Google	9.50
15	E- Rickshaw Swarath	Dr. Sanjit Kaul		27.10
16	Formulation of Modelling Strategy Of SSPL GAN-HEMT based on Non -Linear measurement data	Dr. Mohammad S Hashmi	CARS: DRDO	9.60
17	Mechanism, Impact and Scenario Analysis	Dr. Ponnurangam Kumaraguru	CARS: DRDO	0.90
18	Joint Research between EMC & IIITD	Dr. Ponnurangam Kumaraguru	EMC Data Storage System India Pvt. Ltd	9.60
19	ISEA Project Phase-II	Dr. Ponnurangam Kumaraguru	CDAC	36.06
20	Nokia Localization	Dr. Vinayak Naik	NOKIA	11.52
21	Nokia Health	Dr. Vinayak Naik	NOKIA	6.31
22	UAV	Mr. Parikshit		0.70
23	Integrating open sources intelligence from traditional sources and online social networks for Intelligence gathering	Dr. Ponnurangam Kumaraguru	DeitY	168.70
24	SRP-Irisys Company Ltd	Dr. Donghoon Chang	Irisys Company Ltd	5.74
25	IBM India	Dr. Mayank Vatsa	IBM	0.90

26	Low cost high resolution cadastral map generation using UAV (Phase-1)	Dr. P B Sujit	PEC University of Technology	12.71
27	Algorithmic 3D Modelling and Virtual Spatial interaction	Dr. Ojaswa Sharma	DST-SERB	27.22
28	Efficient Algorithms for Inference in Higher Order MRF-MAP Problems	Dr. Chetan Arora	DST-SERB	23.28
29	Advance Driver assistance System	Dr. Chetan Arora	IIT Delhi/Joint Project	8.76
30	Frontal Radar Imaging of Humans Behind Walls	Dr. Shobha Sundar Ram	AFRL	39.48
31	J.C. Bose Fellowship Award	Dr. G.P.S. Raghava	SERB	136.00
32	ExRe: Examining and Enabling Resilience for Internet Vulnerabilities of Large Organisations using Network Cartography	Dr. Sambuddho Chakravarty	Persistent Systems Pvt Ltd	44.00
33	Investigation of Tunnel Field-Effect Transistors for Energy Efficient Circuits	Dr. Sneha Saurabh	DST-SERB	41.74
34	An Yang Project	Dr. Donghoon Chang	Anyang	3.78
35	Performance Improvement in Indoor Visible Light Communication (VLC) system using MIMO-OFDM Based Techniques	Dr. Anand Srivastava	DST	6.30
36	Anyang Korean Project - 2	Dr. Donghoon Chang	Anyang	3.99
37	Energy and water disaggregation for Non- Intrusive load monitoring in buildings	Dr. Angshul Majumdar	DST	24.09
38	Self-Contained Flexible Oxide Electronics for Smart Packaging	Dr. Pydi Ganga Bahubalindrani	DST-SERB	33.76
39	Analyzing and Measuring the Collateral Damage of an Entity of the Internet	Dr. Ponnurangam Kumaraguru	DRDO	34.01
40	Minimal Residual Disease Estimation in Multiple Myeloma using Image Processing: design and Development of Myelomaimager - an Automated Computer	Dr. Anubha Gupta	DST-SERB	43.12
41	Looking Beyond Back Propagation in Deep Learning	Dr. Angshul Majumdar	DST-CEFIPRA/CAI	35.48
42	An effective Multi-Task Learning Approach for context - Sensitive Speech Analysis	Dr. Arun Balaji Buduru	DRDO-CARS	9.78
43	Development of USB Protocol, UAF Protocol, Fingerprint & Secure USB	Dr. Donghoon Chang	Irisys Co. Ltd.	15.61
44	Emergency flood planning and management using unmanned aerial system	Dr. P.B.Sujit	Exter University	149.90
45	Ramanujan Fellowship	Dr. Tanmoy	SERB	38.00

		Chakraborty		
46	NIHR Global Health Research Group on Psychosis Outcomes: The Warwick - India- Canada (WIC) Network	Dr. Pushpendra Singh	NIHR	43.20
47	Cartilage mechanics: multiscale modeling, analysis and scientific computing	Dr. Sarthok Sircar	SERB	21.91
48	VOX-Fp&POL-Violent Online Political Extremism "Networking of Researchers for a High Level Multi-Organisational & Cross-Border Collaboration – Network of Excellence"	Dr. Ponnurangam Kumaraguru	UK	3.63
49	NEPTEL MOOC Courses- Mobile Computing	Dr. Pushpendra Singh	NEPTEL	3.95
50	MSR- Unrestricted Research Grant Air Pollution	Dr. Vinayak Naik	Microsoft	1.56
51	Inspire Faculty Award	Dr.Pravesh Biyani	DST	35.00
52	Inspire Faculty Award	Dr.Agshul Majumder	DST	35.00
53	Inspire Faculty Award	Dr.Sumit Darak	DST	35.00
54	Inspire Faculty Award	Dr. Debarka Sengupta	DST-Inspire	13.32
55	Inspire Faculty Award	Dr.Sujay Deb	DST	35.00
56	Inspire Faculty Award	Dr.Shobha Sundar Ram	DST	35.00
57	Smart Electrical Energy Disaggregation using machine learning Approaches.	Dr.Amarjeet Singh	TCIL	2.50
58	Course Fees of Dr. P.K	Dr. Ponnurangam Kumaraguru	Google	0.20
59	SSB-Honorarium	Dr. G.P.S Raghava	CSIR	0.30
60	Inspire Faculty Award	Dr. Bijoy Chand Chatterjee	DST-Inspire	35.00
61	Inspire Faculty Award	Dr. Abhijit Mitra	DST-Inspire	35.00
62	Prime Minister Fellowship	Mr. Venkatesh Vinayak Rao	CII	3.00
			Total	1942.12

### Running consultancy projects

S. No.	Project Title	PI	Funding Agency	Sanction Amount (in lakhs)
1	CRM-DMS for Indian Oil Corporation	Prof. Pankaj Jalote	Indian Oil Corporation	2.50
2	IEEE -Website Consultancy	Dr. Richa Singh	IEEE	3.92
3	IEEE -Website Maintenance Consultancy	Dr. Richa Singh	IEEE	1.96



4	USB-Korea Consultancy	Dr. Donghoon Chang	Irisys Company Ltd	4.43
5	IEEE Consultancy	Dr. Mayank Vatsa	IEEE	4.00
6	SPMCL Consultancy	SPMCL Consultancy	SPMCL	2.50
7	Teracom Project	Dr.P.B.Sujit	Kritical Solutions	4.20
8	Technical consultancy for Savita Telecom Services	Dr.Mohammad Hashmi	Savita Telecom Services	1.50
9	Estimating 6-DOF Camera Pose for Augmented Reality Applications	Dr.Chetan Arora	Beehives systems	12.00
10	IEEE Biometrics Council - Website and Social Media Pages	Dr. Richa Singh	IEEE	0.99
11	IEEE Biometrics Council - Newsletter Design	Dr. Mayank Vatsa	IEEE	5.31
12	Identify food pairing opportunities for tea	Dr. Ganesh Bagler	Unilever Pvt. Ltd	4.27
13	Deep Learning Technologies for Enhancing Fashion Recommendation.	Dr. Chetan Arora	Staq Technology	1.05
14	Origin Destination Matrix Estimation for Mobility in India.	Dr. Pravesh Blyani	Yatra	4.40
15	Consultancy for DOA	Dr. Shobha Sunder Ram	BEL	8.65
16	DSP training	Dr. Shobha Sunder Ram	Tata Advance System	1.00
17	Anyang Korean Project	Dr. Donghoon Chang	Anyang Creative Industry	4.81
18	Robert Bosch Engineering and business Solutions Limited	Dr. Ponnurangam Kumaraguru	Robert Bosch	7.75
19	Training for SWC	Dr. Debarka Sengupta	Samsung India Electronics	2.54
20	Mycol life circle pvt ltd	Dr. Debarka Sengupta	My col	10.2
21	Anyang Korean Project -2	Dr. Donghoon Chang	Anyang Creative Industry	5.96
22	TCS Research Advisory Engagement	Dr. Angshul Majumdar	TCS	7.00
23	Plato consultancy	Dr. Donghoon Chang	Plato	1.5
Total				102.45

## Appendix E : External Collaborations

### Academic

#### Aasim Khan

LMU Munich, Germany

#### Abhijit Mitra

Centre of Quantum Technology (CQT) in National University of Singapore.

#### Anand Srivastava

- Working with Prof Byrav Rammoorthy of UNL, co-guide for one of my Ph.D. student
- Research Collaboration with NILES, Cairo University Giza, Egypt (2017-2019)

#### Angshul Majumdar

- Rabab Ward (University of British Columbia.
- Ivan Bajic (Simon Fraser University)for Non-Intrusive Load Monitoring in Buildings
- Emilie Chouzenoux (University of Paris). PI for French counterpart of “Looking Beyond
- Backpropagation in Deep Learning”.

#### Anubha Gupta

- Prof. Ritu Gupta (AIIMS, Delhi)- development of
- Prof. Ajay Garg (AIIMS, Delhi)- fMRI signal and image processing
- Dr. Ananya Sen Gupta (University of Iowa) - Signal Processing for Underwater Communication
- Prof. S.D. Joshi (IIT Delhi)- EEG Signal Processing
- Dr. Vimal Bhatia (IIT Indore)- UWB communication

#### A V Subramanyam

- Prof. Sridha Sreedharan and Prof. Clinton Fookes, Electrical Engineering, Computer Science, QUT, Australia
- Prof. Mohan Kankanhalli, School of Computing, National University of Singapore, Singapore
- Dr. Sabu Emmanuel, Visiting Faculty, IIT Palakkad, Kerala

#### Arun Balaji buduru

- Prof. Chester Rebeiro, IIT-Madras; Preliminary discussions on potential collaborations.
- Prof. Stephen S. Yau, Arizona State University; Predicting security Breaches in Partially Observable Environments;
- Prof. Vijay Varadharajan, The University of Newcastle-Australia; Adaptively Re-Configuring IoT devices for effective security

#### Bijoy Chand Chaterjee

- Prof. Eiji Oki, Kyoto University, Japan
- Prof. Andrea Fumagalli, University of Texas at Dallas, Dallas, USA
- Prof. Naoaki Yamanaka, Keio University, Japan
- Prof. Malathi Veeraraghavan, University of Virginia, USA
- Prof. Byrav Ramamurthy, University of Nebraska Lincoln, USA
- Prof. Norvald Stol, Norwegian University of Science and Technology, Norway

#### Chetan Arora

- Prof. S.N. Maheshwari, IIT Delhi.
- Prof. S. Banerjee, IIT Delhi. DST ICPS

- Prof. M. Balakrishnan, IIT Delhi
- Dr. Parag Singla, IIT Delhi
- Prof. C.V. Jawahar, IIIT Hyderabad
- Dr. Aditya Nigam, IIT Mandi.

#### **Debajyoti Bera:**

- Prof. Subhamoy Maitra, ISI Kolkata: Quantum computing and cryptology
- Kishore Kothapalli, IIIT-Hyderabad: Shortest-path based graph algorithm

#### **Debarka Sengupta**

Dr. Shyam Prabhakar, Assoc. Director, Genome Institute of Singapore | Project involves tracking transcriptomic changes at single cell resolution due to ageing

#### **Ganesh Bagler**

- Prof. V Sunitha, DA-IICT.
- Dr. Gopaljee Jha, NIPGR.

#### **Gaurav Arora**

- David A. Hennessy, Professor of Agriculture, Resource and Food Economics, Michigan State University
- Hongli Feng, Associate Professor of Agriculture, Resource and Food Economics, Michigan State University
- Ruiqing Miao, Assistant Professor of Agricultural Economics, Auburn University
- Peter T. Wolter, Assistant Professor of Natural Resource Ecology and Management, Iowa State University

#### **Kaushik Kalyanaraman**

- Andrea Dziubek, State University of New York Polytechnic, Utica
- Anil N. Hirani, University of Illinois at Urbana-Champaign
- Pankaj Jagad, King Abdullah University of Science and Technology
- S. V. Kulkarni, Indian Institute of Technology Bombay
- Mamdouh Mohamed, King Abdullah University of Science and Technology
- Edmond Rusjan, State University of New York Polytechnic, Utica
- Ravi Samtaney, King Abdullah University of Science and Technology

#### **Mayank Vatsa**

- Prof. Afzel Noore, West Virginia University
- Prof. Kevin Bowyer, University of Notre Dame
- Dr. Stephanie Schuckers, Clarkson University
- Dr. Adam Czaka, Warsaw University

#### **Mohammad Hashmi**

- Prof. Fahdel M. Ghannouchi (University of Calgary, Canada) - development of multi-band circuits and components for 5G regime.
- Prof. Ramesh Pokharel (Kyushu University, Japan) - on-chip antenna techniques.
- Prof. Jaleel Akhtar (IIT Kanpur) - Low Cost 1-port Vector Network Analyzer.
- Prof. Paul J. Tasker (Cardi\_ University, UK) - Advanced RF Measurement Techniques.

#### **Mukulika Maity**

- Prof. Sumit Roy, University of Washington, Performance Evaluation of IEEE 802.11ax, 1
- Prof. Venkatesh Ramaiyan, IIT Madras, POWER: Platform for Open WLAN Experimentation and Research,

1

- Dr. Srikanth Subramanian, Nanocell Networks, POWER: Platform for Open WLAN Experimentation and Research, 1
- Dr. Nadeem Akhtar, Mojo Networks, POWER: Platform for Open WLAN Experimentation and Research, 1

#### **Ojaswa Sharma**

- Dr. Arindam Dey, University of South Australia. Working on

#### **P.B. Sujit**

- Pratap Totekar – Virgia Tech
- Suresh Sundaram – NTU Singapore
- Tor Johansson – NTNU Norway

#### **Ponnurangam Kumaraguru**

- Georgia Tech. Online Social Media. Students = 2.
- National Technical University Singapore. Students = 1. The student spent the last 6 months in Singapore.
- Max Planck Institute. Students = 1. The student is currently visiting MPI.

#### **Pushpendra Singh**

- Prof. Nancy Reynolds, Yale University, USA ii.
- Dr. Bhanu Duggal, JJ Hospital, Mumbai
- Dr. Mona Duggal, PGIMER, Chandigarh
- Neha Kumar, Georgia Institute of Technology, USA

#### **Pravesh Biyani**

- Jim Hogan, Associate Prof., QUT Australia
- Ketan Rajawat, Assistant Prof., IIT Kanpur.
- Samitha Samaranayake, Assistant Prof., Cornell University.
- Ashish Bhaskar, Associate Prof., QUT Australia.
- Surendra Prasad and Ramanjit Ahuja, IIT Delhi.
- Rijurekha Sen. Assistant Prof, IIT Delhi.
- Geeta Tiwari and Ramachandra Rao, Profs. Civil Dept, IIT Delhi.

#### **Pydi Ganga Mamba Bahubalindrani**

Prof. Deepak Gupta and Dr. Ashutosh Tipathi a. Organization: National center for flexible electronics, IIT Kanpur, India

#### **Rahul Purandare**

- Anita Sarma from the Oregon State University
- Dr. Subodh Sharma from IIT-Delhi.

#### **Rajiv Raman**

- Saurabh Ray, NYU Abu Dhabi
- Pawan Aurora, IISER Bhopal

#### **Rajiv Ratn Shah**

- Dr. Shree Gopal Sharma ,Nephrologist, Arkana Laboratories, USA
- Dr. Debanjan Mahata, Senior Machine Learning Engineer, Bloomberg, USA
- Dr. Roger Zimmermann, Associate Professor, National University of Singapore, Singapore
- Dr. Shin'ichi Satoh, Professor, National Institute of Informatics, Japan
- Dr. Yifang Yin, Research Fellow, National University of Singapore, Singapore

- Dr. Jing Jiang, Associate Professor, Singapore Management University, Singapore
- Dr. Omprakash Kaiwartya, Lecturer, Nottingham Trent University, U.K.
- Dr. Mukesh Prasad, Lecturer, University of Technology Sydney, Australia
- Dr. Yi Yu, Assistant Professor, National Institute of Informatics, Japan

#### **Richa Singh**

- Prof. Afzel Noore, West Virginia University
- Prof. Kevin Bowyer, University of Notre Dame
- Dr. Stephanie Schuckers, Clarkson University
- Dr. Adam Czaka, Warsaw University

#### **Saket Anand**

- Dr. Ryan Farrell, Asst. Professor, Brigham Young University, USA, 'Visual Wildlife Monitoring'
- Dr. Maneesh K. Singh, Verisk Analytics, New Jersey, USA, 'Statistical Machine Learning Using Deep Neural Architectures'
- Prof. Milind Tambe, Dr. Bistra Dilkina, Univ. of Southern California, USA, 'AI for Wildlife Conservation'

#### **Sambuddho**

Dr. Hrishikesh Bhattacharya, Asst. Prof. Rochester Institute of Technology, New York..

#### **Samrith Ram**

- Y. Aubry, Institut de Mathématiques de Toulon (IMATH)
- W. Castryck, Laboratoire Painlevé, Université de Lille-1
- S.R. Ghorpade, IIT Bombay
- G. Lachaud, Aix Marseille University, CNRS
- M.E. O'Sullivan, Department of Mathematics and Statistics, San Diego State University

#### **Sanjit Krishnan Kaul:**

- Roy Yates, Rutgers University.
- Jussi Kangasharju, University of Helsinki.

#### **Shobha Sundar Ram**

Prof. Sumit Roy, University of Washington, USA

#### **Shriram Venkatraman**

- University College London, UK – Prof. Daniel Miller and University College London Press, UK
- Imperial College London, UK and Northwestern University, USA – Dr. Razvan Nicolescu and Dr. Nell Haynes
- LMU – Germany – Prof. Sahana Udupa
- Oxford Internet Institute – Prof. Ralph Schroeder and Dr. Bharath Ganesh
- California Institute of Integral Studies, USA – Prof. Michelle Marzullo
- Indian Institute of Management, Kozhikode – Dr. Anupam Das and Prof. Sumit Mitra

#### **Sneh Saurabh**

- Prof. Supriyo Datta and his team (Purdue University): Project related to Probabilistic Spin Logic (PSL), 1 student, No funding

#### **Sujay Deb**

- Dr. Amlan Ganguly, Rochester Institute of Technology, Project: Interference aware wireless NoC design,
- Prof. Preeti Ranjan Panda, IIT Delhi, Project: Cache coherency in HSA,
- Dr. Pratha Pande, Washington State University, Project: Low power NoC design,



**Sumit J Darak:**

Manjesh Kumar Hanawal, IIT Bombay

**Tanmoy Chakraborty**

- Prof. Soumen Chakraborti, IIT Bombay, India
- Prof. Saptarshi Ghosh, IIT Kharagpur,
- Prof. Amitava Das, IIIT, Sri City India
- Prof. Viswanath Gunturi, IIT Ropar, India
- Prof. Subrata Nandi, NIT, Durgapur, India
- Prof. Sushmita Ruj, ISI, Kolkata
- Prof. V.S. Subrahmanian, Dartmouth College, USA
- Prof. Jaegul Chao, Korea University, Korea
- Prof. Noseong Park, University of North Carolina, Charlotte, USA
- Prof. Sushil Jajodia, George Mason University, USA

**Vibhor Kumar**

- Ankur Sharma, Ramanuj DasGupta , Genome institute of Singapore , analysis of epigenome and single cell expression of cancer stem cells.
- Dr Nirmala Arul Rayan (GIS), Dr Michael J. Meaney (McGill university), studying effect of fluoxetine in rat and chimp brain using genomic signals.
- Dr Jayadeva, co-supervising a Ph.D. student at IIT Delhi. Developing novel machine learning method for inferring direct interactions in biological networks.

**Vikram Goel**

- Prof. Sushil K. Prasad, Georgia State University

**Vivek Kumar**

- Prof. Vivek Sarkar, Georgia Tech., Atlanta, USA : A Pluggable Framework for Composable HPC Scheduling Libraries

**Vivek Ashok Bohara**

- Collaborations with Dr. Prof. Daniel Benevides da Costa of Federal University of Ceará (UFC)
- Prof. Ugo Silva Dias from University of Brasília on the project titled “Energy harvesting protocols”.
- Collaborations with Prof. Guan Yong Liang and Dr. Liu Zilong of Nanyang Technological University,
- Collaborations with Dr. Prabhat Sharma of VNIT,

**Industry Labs****Abhijit Mitra**

- British Telecom Global Research and Innovation Program,
- Collaborating with Prof. Andrew Lord, Head of Optics British Telecom.

**Anand Srivastava**

- Signed Collaboration with BT, UK for joint development in EON and QKD

**A V Subramanyam**

- Kuntal Dey, IBM India Research Lab, India , Project: Ad to Ad Generation using Text InfoGAN

**Gaurav Arora**

- Chuck Loesch, Department of Fish and Wildlife Service, U.S.A.
- Sambarta Dasgupta (Ph.D.), Intuit Inc., Mountain View, CA, USA

**Mayank Vatsa**

- Dr. Nalini Ratha, IBM IRL
- Dr. Anush Sankaran, IBM

**Mohammad Hashmi**

- Mr. M. Sohaib, Director, Siways Microelectronics - Cost Effective WiFi Booster.

**Mukulika Maity**

- Attended WiFi Think Fest conducted by Mojo Networks and Nanocell Networks for collaboration

**P.B. Sujit**

- Srikanth Saripalli – Texas A&M
- Siva Rathinam – Texas A&M

**Pydi Ganga Mamba Bahubalindrani**

- Prof. Joao Goes: a. Organization: UNINOVA, FCT--UNL, Portugal
- Prof. Pedro: a. Organization: CENIMAT, FCT--UNL, Portugal
- Iman Kainpoor and Prof. Vitor a. Organization: INESC--TEC. PORTO, Portugal

**Richa Singh**

- Dr. Nalini Ratha, IBM IRL

**Sanat K Biswas**

- Prof. A. G. Dempster, Director, Australian Centre for Space Engineering Research, UNSW Sydney.
- Robert Beddington, Centre for Quantum Technology, NUS.

**Saket Anand**

- Dr. Ravi Kumar, Infosys Advanced Engineering Team, Mysore, 'Autonomous Golf Cart'
- Prof. Q. Qureshi, Prof. Y. V. Jhala, Wildlife Institute of India, Dehradun, 'Visual Wildlife Monitoring',
- Dr. Prateek Jain, Dr. Harhsa Vardhan Simhadri, Microsoft Research, India, 'Machine Learning on Constrained Devices'
- Dr. Ranjna Nagpal, Deputy Director General, National Informatics Center (NIC), 'AI for Sustainability'

**Shobha Sundar Ram**

- Dr. Kumar Vijay Mishra, Scientist, Army Research Lab, USA,
- Dr. Alexander Kamann, CARISSMA - Center of Automotive Research on Integrated Safety Systems and Measurement Area
- Dr. Anshu Gupta, Continental Technology.

**Sneh Saurabh**

- Dr. Raghavendra Saxena (SSPL, DRDO)

**Sujay Deb**

- Collaborator: Prof. Jean-Philippe Diguët, CNRS senior researcher, Lab-STICC, Lorient/Brest, France,
- Collaborator: Dr. Manoj K. Das, The INCLen Trust, Project: Cuffless BP monitor,
- Collaborator: Dr. Kanad Basu, NYU, Project: Post-silicon validation of wireless NoC,

**Sumit J Darak:**

- Prof. Y C Kuan, NCTU, Taiwan, Project Name: Online learning for massive MIMO

- Carlos Bader, CentraleSupélec, France, Project Name: Reconfigurable Waveform for air-to-ground communications
- Anil Kumar, TCS Innovation Labs, Bangalore, Project Name: Non-uniform sampling for multi-antenna receivers

#### **Tanmoy Chakraborty**

- Dr. Siddharth Pal, Scientist, Raytheon BBN Technologies, USA , Modeling citation trajectory of scientific papers
- Samik Datta, Flipkart, India , Fake review detection E-commerce platform
- Dr. Sameep Mehta, IBM Research, India
- Dr. Sumit Bhatia, IBM Research, India , Deep learning in scientific literature
- Dr. Arindam Pal, TCS Research, India , Vulnerability of network communities

#### **Vivek Kumar**

- Dr. Gaurav Mitra, Texas Instruments, Sugarland, Texas, USA , Energy Efficient Runtime for Multiprocessor System-on-Chip
- Dr. Julian Dolby, IBM TJ Watson Research, NY, USA , Parallelism in JavaScript

## Appendix F : Awards and recognitions

### Abhijit Mitra

- Nominated by British Telecom as a Junior Speaker for Rank Prize Funds in UK, June 2018 while recognising my contributions to backbone optical network design in the BT-UK network.
- Awarded DST Inspire Faculty Research Grant for period of 5 years to design backbone optical network for Indian subcontinent.
- Invited panelist for writing the 5G white paper on security of metro networks in India. The development of 5G security vertical is headed by Prof. Ranjan Bose, EE Dept., IIT Delhi.

### Anand Srivastava

- Delivered Half day Tutorial in IEEE ANTS 2017 on VLC-Technology, Status, Challenges
- Chief guest in Ambedkar Institute of Technology for giving prizes in Techno-cultural Festival
- Panel Chair for IEEE ANTS 2018

### Anubha Gupta

- 1. Our research paper titled “Use of Portable EEG Sensors to Detect Meditation,” earned best paper runner-up award at International Conference on COMmunication Systems & NETworkS (COMSNETS)-NetHealth WS, Bangaluru, India, January 2018.
- TPC member of NCC 2018.

### Anuj Grover

- Certified as Level-2 Practitioner of TRIZ (Theory of Inventive Problem Solving) by MATRIZ (International TRIZ Association) in April 2018

### Bijoy Chand Chaterjee

- ERCIM postdoctoral fellowship from May 2018 to April 2019, Host Institute: Norwegian University of Science and Technology (NTNU), Norway

### Chetan Arora

Program Co-Chair for NCVPRIPG 2017.

### Ganesh Bagler

- Felicitated with 'Outstanding Educator Award' based on the student feedback of 2018 graduating batch at the Indraprastha Institute of Information Technology Delhi.
- Talk as the Guest of Honor, “The Science of Indian Cuisine”, 7th International Chef's Conference organized by the Indian Federation of Culinary Association, 1–3 September 2017, New Delhi.
- Invited as a Theoretical Physics Seminar Circuit (TPSC) Speaker to visit Physical Research Laboratory, Ahmedabad. 17-19 January 2018. Summary.

### G. P. S. Raghava

Uttar Pradesh Govt. felicitated on occasion of UP Diwas on 26th January 2018 for my contribution in the field of Bioinformatics

### Mayank Vatsa

- ACM Senior Member, 2017
- Two Best Poster Presentation Awards at IEEE International Joint Conference on Biometrics, Denver, USA 2017
- Highest Impact Award at Biometrics Workshop at IEEE Conference on Computer Vision and Pattern Recognition, Honolulu, USA 2017

### **Mohammad Hashmi**

- DeitY Young Faculty Research Fellowship for 5 years (2016-2021).
- IEEE MTT-S Delhi Chapter Executive Committee Member.
- Associate Editor, IEEE Microwave Magazine.
- First Prize (Winner), Filter Design Contest, IEEE MTT-S IMaRC 2017, held at Ahmedabad. With my students Deepayan Banerjee and Antra Saxena.

### **Mukulika Maity**

- Awarded with WACI Best Paper Award, Varun Jain, Mansi Goel, Mukulika Maity, Vinayak Naik, Ramachandran Ramjee, WACI 2018
- Secured the First Position at WiFi ThinkFest, Akanksha Pandey, Dheryta Jaisinghani, Mukulika Maity, Vinayak Naik, Mojo Networks, 2017

### **Ojaswa Sharma**

- BTP work of one of my students (Palash Ranjan Bansal) on Medical Virtual Reality was covered in leading news media like the Financial Express, India Today, and Business Standard
- Our work on Medical Virtual Reality won the Microsoft Imagine Cup India Finals.

### **Ponnurangam Kumaraguru**

- Received the NVIDIA India GPU Grant in the form of Titan X Pascal! This GPU is among the top-of-the-line general purpose GPUs with 12 GB memory and 3584 CUDA cores. July 2017.
- Received Teaching Excellence Award, IIIT Delhi.

### **Pushpendra Singh**

- Received Outstanding Educator Award by the graduating batch of 2018.

### **Pydi Ganga Mamba Bahubalindrani**

- Got teaching excellence award for Mixed-signal design course as can be noticed here.

### **Rajiv Ratn Shah**

- Heidelberg Laureate Forum (HLF) 2018 fellowship, 200 most qualified young researchers across the world are provided an opportunity to meet Laureates in Computer Science and Mathematics for a week at Heidelberg.
- European Research Consortium for Informatics and Mathematics (ERCIM) 2017 fellowship, A few young scientists across the world are hosted in leading European Research Institutes.
- General co-chair of Multimodal Representation, Retrieval, and Analysis of Multimedia Content (MR2AMC), 2018 in the first IEEE Conference on IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), 2018
- Registration co-chair of IEEE Symposium Series on Computational Intelligence 2018
- Area chair of the 3rd International Conference on Computer Vision & Image Processing (CVIP), 2018
- Area chair of the 2nd International Conference on Computer Vision & Image Processing (CVIP), 2017
- Session chair of the 26th ACM International Conference on Information and Knowledge Management (CIKM), 2017

### **Richa Singh**

- Fellow, International Association of Pattern Recognition (IAPR), 2018
- ACM Senior Member, 2017
- Two Best Poster Presentation Awards at IEEE International Joint Conference on Biometrics, Denver, USA 2017
- Highest Impact Award at Biometrics Workshop at IEEE Conference on Computer Vision and Pattern Recognition, Honolulu, USA 2017



**Shobha Sundar Ram**

Teaching Excellence Award from graduating ECE batch (B.Tech and M.Tech) in 2018 at Indraprastha Institute of Information Technology Delhi, India

**Shriram Venkatraman**

- Outstanding Educator Award – 2017-2018 (including commendation letter from Director, IIITD)
- Teaching Excellence Award – 2017 (for winter 2017 course)

**Sneh Saurabh**

- Senior Membership of IEEE
- Web Chair for 32nd International Conference on VLSI Design (VLSID) 2019, To be held in NCR
- Teaching Excellence Award: Winter 2017 for Introduction to Nanoelectronics
- Teaching Excellence Award: Monsoon 2016 for VLSI Design Flow
- Editorship for IETE Technical Review

**Sujay Deb**

- Best paper award in IEEE International Symposium on Nanoelectronic and Information Systems (INIS) 2017.
- Selected as Registration Chair of IEEE International Conference on Embedded and VLSI Design (VLSID) 2019.
- Publications Chair of The Ninth International Green and Sustainable Computing Conference (IGSC) 2018.
- Selected as Track chair: ICCE 2019, "Security and Privacy of CE Hardware and Software Systems (SPC) "

**Sumit J Darak:**

- Second best paper award at IEEE DASC 2017 held at Florida, USA. The first author of the paper is my Ph.D. student, Niharika Agrawal and this work was done in collaboration with Prof. Carlos Bader, CentraleSupélec, France.
- Young scientist award and conference travel grant for GASS-URSI conference held at Montreal, Canada. This first author of the paper is UG intern, Abhishek Unnam from NSIT, Delhi.
- IIIT-Delhi best master thesis award for M.Tech. student, Sasha Garg. This work was done in collaboration with Prateek Sikka, NXP Semiconductors.
- Best poster award to Ph.D. student, Rohit Kumar, at IIIT-Delhi Research Showcase, 2018.
- Academic research grant (\$2000) from National Instruments (NI) to attend IEEE WCNC 2018.
- Ettus Travel grant (Rs. 30K) to attend WiOpt 2018.

**Tanmoy Chakraborty**

- Ramanujan Fellowship

**Vibhor Kumar**

- Received teaching excellence award (2017- 2018) at IIIT Delhi

**Vivek Kumar**

- Excellence in teaching award for CSE502, September 2017

**Vivek Ashok Bohara**

- Local Arrangements Co-Chair: ACM MobiCom 2018
- Publicity Co-chair: Comsnets 2018
- Tutorial Co-Chair: IEEE ANTS 2018

## Appendix G Invited as speaker

### Aasim Khan

- Invited for deliver Public lecture on the topic “New Media and Society” at the annual convention of the Department of Sociology, Miranda College, University of Delhi. March 4, 2018
- Invited to be a panelist on a public discussion on the book by Prof Ghazala Jameel at the School of Law and Public Policy, Jindal Global Law School, Sonapat Haryana (November 2017)
- Forthcoming (June 22nd, 2018): Public Lecture as part of the Connection Series, University of Chicago Delhi Center. A discussion with Prof Patrick Jagoda, Associate Professor, University of Chicago at U Chocago Delhi Center. Details TBD.

### Abhijit Mitra

- Organised talks by Dr. Robert Bedington on “ Satellite based QKD infrastructure” at IIIT Delhi and IIT Delhi, January 2018.. Dr. Bedington is lead of satellite systems in Centre of Quantum Technology, National University of Singapore.
- Organised talk by Prof. Anirban Pathak, “ Quantum Communication and Quantum Key Distribution”, IIIT Delhi, March 2018. Prof. Pathak is winner of prestigious Shri Om Prakash Bhasin Award and widely recognised as an authority in Quantum Communication.
- Organized institute seminar and workshop on “ Mobile networks 4G and beyond” which had a series of 3 lectures delivered by Mr. Ramakrishan Sethuraman, Head of Technology, Nokia Networks, India.

### Aman Parnami

- Invited lectures at NIT Agartala, National Workshop on HCI, 25-26th April 2018
- Jury Member for TiE QGlue Design Led Entrepreneurship Awards 2017, Dec 2017
- Represented IIIT-DelhiDesign Department at India-UK Design Education Workshop Part 2, Jan 29-31 2018
- Presented student innovations and represented IIIT Delhi at DIC IIT-BHU Meetup (8th March 2018) and Innovation Festival in Rashtrapati Bhawan (23rd March 2018), respectively.
- Invited to Indian Institute of Craft and Design, Jaipur for establishing collaboration with the Human-Centered Design Department.

### Anand Srivastava

- Lecture on VLC in the TQUIP program conducted by IIT Delhi
- Lectures in Various Delhi Govt Colleges
- Member UPSC selection committee
- Chairman of the committee formed by MEITY for selecting Scientist B.
- Member selection committee for Delhi Govt colleges

### Angshul Majumdar

“Deep Dictionary Learning”, University of British Columbia, April, 2018.

### Anubha Gupta

- Delivered two talks on “fMRI Data Analysis” in Faculty Development Program on Signal Processing and Its Applications jointly organized by the Department of Electronics Engineering, JSS Academy, Noida and Dr. APJ Abdul Kalam Technical University, Lucknow on April 26, 2018.
- Delivered an invited talk on “Multivariate Graph Learning for building Static and Dynamic Brain Networks using resting state fMRI data” in the Advanced Imaging Seminar Series at Health SciencesCentre, University of Calgary, Canada, on April 19, 2018.
- Delivered an invited talk on “Building Functional Brain Networks using fMRI Data Analysis” in TEQUIP III sponsored STTP on Advances in Image Processing and Computer Vision to be organized by Department of Electronics & Communication Engineering, Delhi Technological University on April 06, 2018.

- Delivered a talk on “Medical microscopic image classification using Deep Learning” in the symposium on “Applications of Pattern Recognition and Machine Learning in Medical Science”, at Jawaharlal Nehru University, New Delhi, on September 18, 2017.
- Delivered a talk on “Recent trends in biomedical signal processing,” Workshop on Emerging Technologies in ECE, IIIT-Delhi, May 22, 2017.
- Delivered an invited talk on “Deep Learning in Genomics: An Overview,” for Deep Learning Delhi community organized by NVIDIA in Delhi on May 21, 2017.

#### **Anuradha Sharma**

- Organized an AIS/IST on “Gröbner Bases and their Applications” at IIIT-Delhi during Dec. 11-23, 2017. (Prof. J. K. Verma, Department of Mathematics, IIT Bombay, was a co-convener of this program).

#### **Arun Balaji buduru**

- Invited talk on “User Centric Approaches to Securing Devices” at ABB-Bangalore on March 23, 2018
- Invited talk on “Adaptive Approaches to Protecting Cyber Infrastructures with User-Centric Techniques” at IIT-Madras on June 6, 2017
- Invited Lecture on “Information Assurance for Smart World Environments -- Challenges and Future Research” at IIIT-Noida on June 9, 2017

#### **Bijoy Chand Chaterjee**

- Future research directions in optical networks at Ekagga Technology & Services Pvt. Ltd, Bangalore, India
- Hitless defragmentation scheme in elastic optical networks considering route partitioning at CV Raman Engineering College, Bhubaneswar, India
- Data Communication and High Speed Optical Networks in Computer science departmental workshop at Shyampur Siddheswari Mahavidyalaya, Belpukur, India.
- Elastic optical networks: A tutorial in North-Eastern Hill University, Shillong, India.

#### **Chetan Arora**

- Invited talk at IISc Bangalore on Egocentric Vision. July 2017.
- Invited speaker at Deep Learning Summer Schools at IIIT Hyderabad, July 2017.

#### **Debarka Sengupta**

- Conducted course on Advanced Algorithms for Samsung R&D Noida and Delhi offices (> 70 hours)
- Invited lecture and Trident Academy of Technology on Machine Learning

#### **Donghoon Chang**

- Invited Lecture, “Fingerprint-based Authentication”, ETRI (Electronics and Telecommunications Research Institute), Korea, June, 2017.
- Invited Lecture, “Authentication Mechanism”, Shaheed Bhagat Singh College (Delhi University), September 2017.
- Invited Lecture, “Impossible results of Reusable Garble-based Approach”, Seoul National University of Science and Technology, April, 2018.
- Invited Lecture, “Impossible results of Reusable Garble-based Approach”, Korea University, April, 2018.

#### **Ganesh Bagler**

- ‘Computational Gastronomy: The emerging data science of food, flavors, and health’, Institute Seminar, National Institute of Plant Genome Research, New Delhi, 9 April 2018.
- ‘Computational Gastronomy: The emerging data science of food, flavors, and health’, Department of Food Science and Technology, Faculty Development Program, Recent Developments in Translational Medicine, Delhi Technological University, New Delhi, 14 March 2018.
- ‘Computational Gastronomy: The emerging data science of food, flavors, and health’, Department of Food Science and Technology, Pondicherry University, 22 Feb 2018.

- ‘Network Modeling: Concepts and Applications’, National workshop on use of appropriate softwares in mathematical modeling and statistical analysis, Department of Mathematics and Statistics, Modern College, Pune, 9-10 Feb 2018.
- ‘Discovery of the molecular essence of Indian cuisine by data analytics’, Computer Society of India, Student Branch, Pandeet Deendayal Petroleum University (PDP), Gandhinagar. 19 January 2018
- “National Workshop on Network Modeling and Graph Theory”, Department of Mathematics, Dibrugarh University, Assam. 14-15 December 2017.
- Bioprocessing India 2017, IIT Guwahati, “Network Biology: A paradigm for integrative modeling of biological complex systems”, (7-9 December 2017).
- “The Impact of Technology on Food”, Symbiosis College of Arts and Science, Pune. 5 December 2017
- “The science of Indian cuisine and its applications”, G. B. Pant University of Agriculture & Technology, Pantnagar (14th November 2017)
- “Data analytics for food, nutrition and health”, Academia Industry Meet 2017 at the G. B. Pant University of Agriculture & Technology, Pantnagar (13th November 2017)
- “Data analytics for food, nutrition and health” at the “National Workshop on Challenges and Opportunities in Data Analytics and its Applications”, at the Department of Computer Science and Engineering, Jamia Hamdard, Delhi. Supported by the Science and Engineering Research Board (SERB), Ministry of Science and Technology, Govt. of India (16 October 2017)
- “Controllability of brain networks”, National Brain Research Center (NBRC), New Delhi. 7 September 2017.

#### **Gaurav Arora**

- Arora, G., H. Feng, D.A. Hennessy, and P.T. Wolter “Conservation Easement Acquisitions Amidst Localized Spillover Effects in Grassland Conversions: Analysis using Remotely-Sensed Data”, Center for Development Economics and Department of Economics, Delhi School of Economics, April 12, 2018.
- Arora G., “On the (scope and need for) Economics of Internet-Of-Things for Indian Agriculture”, Technologies for Emerging Markets team, Microsoft Research India, Bangalore, January 13, 2018.

#### **Kaushik Kalyanaraman**

- Delhi University North Campus, Mathematics Department; talk titled “Donuts, Fluid Flows and Sports Rankings: Analysis, Computations, and Connections.” on January 11, 2018.
- Delhi Technological University for SIAM Evolute 2018 as invited speaker; talk titled “A Holey Grail for Ranking Sports Teams!” on April 19, 2018.

#### **Mayank Vatsa**

- What is AI and its Usage in GAIL, Gas Authority of India Limited, March 2018
- Deep Learning, TEQUIP III sponsored STTP on Advances in image processing and Computer Vision, Delhi Technological University, March 2018
- Perils and Patches of AI, AI Conclave at IIIT Delhi, February 2018
- Perils and Patches of AI, AI Conclave at IIT Delhi, January 2018
- Biometrics and Forensics, IFIP International Conference on Digital Forensics, 2018

#### **Mohammad Hashmi**

- Delivered an invited talk titled "Circuits for mmW and THz Wireless Communications", during IEEE MTT-S workshop at IIT Patna, June 2017.
- Delivered an invited talk titled "Noise Mitigation Scheme in Multi-conductor Transmission Lines", during UGC sponsored workshop at AMU, July 2017.

#### **Ponnurangam Kumaraguru**

- Continued Education Programs – Instructor: Organized 2+ CEPs this year in campus on Using Online Social Media for Policing, Intelligence, Investigation, and Law & Order.

- Digital Privacy. NIC, Delhi. April 27, 2018. 50+ physically in Delhi and about 50+ all across the country, like bengaluru, hyderabad, odissa, kerala, etc.
- Killfies, Fake content, scams, manipulated accounts on social media. Societal computing Seminar. Carnegie Mellon University, USA. April 4, 2018. 20+ students / faculty.
- Social Media for Policing. National Police Academy. March 23, 2018.
- Social Computing. Greater Noida Institute of Technology. March 21, 2018. 200+ students.
- Contemporary Cyber Crime. Part of One-day workshop on Cyber Crime: Awareness and Defense. Bharati Vidyapeeth's College of Engineering, New Delhi. March 9, 2018. Chief Guest
- Part of the Panel on Privacy: Reaching All Communities. Part of the Workshop on Privacy & Growth in a Global Economy, organised by U.S. Department of State, Federal Trade Commission. March 7, 2018. 30+ industry practitioners.
- Privacy and Security in Online Social Media. ACM Distinguished Talk. Part of APOGEE - BITS, Pilani, 35th edition of the technical fest. BITS Pillani, Rajasthan. Feb 22, 2018. 150+ students.
- Fake Content, Scams, Privacy, Manipulated Accounts on Social Media. BITS Pillani, Hyderabad. Feb 16, 2018. 60+ students & faculty.
- Social Media for Policing. National Industrial Security Academy. Feb 14, 2018.
- Social Complexity & Computing in Online Networks. IIT Hyderabad. Feb 15, 2018. 20+ students & faculty.
- Social Media Forensics. 24th All India Forensics Science Conference. Feb 11, 2018. 350+ participants.
- Social Media for Policing. CBI Academy. March 23, 2018.
- Privacy and Security in Online Social Media. ACM Distinguished Talk. Bennett University, Noida. Jan 25, 2018. 60+ students & faculty.
- Privacy Technologies. National Workshop on Privacy organised by CIS India. Dec 13, 2017. 15 participants.
- Taught a full-credit course on Privacy and Security in Online Social Media. Amrita University. Dec 2017. 15 students took the course. Had B.Tech., M.Tech., and Ph.D. students in the class.
- Privacy and Security in Online Social Media. Webinar on Techgig.com. Dec 1, 2017. 50+ participants.
- Part of the panel on Emerging Technologies for Monitoring and Control of Illegal Cyber Content. 2000+ total delegates from 120+ countries for the Global Conference on Cyberspace GCCS 217. Around 200+ delegates attended the panel. Conference was inaugurated by the Prime Minister of India. Nov 24, 2017
- Privacy and Security in Online Social Media. ACM Distinguished Talk. Shiv Nadar University, Noida. Nov 15, 2017. 60+ students & faculty.
- Social Media for Policing. CISF, Delhi. Nov 2, 2017.
- Cybercrime. Mamta Modern School, VikasPuri. Oct 31, 2017. 130+ XI standard students.
- Privacy. Bosch Data Security Officers (DSO) APAC summit 2017, Bengaluru. October 24, 2017. 12+ participants.
- Data Science for Security & Privacy. Part of siNUsoid'17, TechFest at NIIIT University. Sept 28, 2017. Keynote
- Data Science for Social Good. PyData Delhi 2017. Sept 3, 2017. 150+ participants. Keynote
- Privacy and Security in Online Social Media. DRDO. As part of Special Training Program on Cryptology and Information Security (CIS 2017). Sept 2017. 50+ government of India officials.
- When Selfie Becomes a KillFie. As part of Technical Festival "MindBent" at IITL Dwaraka School, Delhi. Aug 4, 2017. 200+ students. Keynote
- Security in Social Media. Accenture Technology Lab. Talk was part of 30 years celebrations of Accenture. July 24, 2017
- Online Social Media. Philips Research. July 25, 2017. 40+ participants.
- Browser Extensions, Identity Resolution, and Privacy on Online Social Media. Summer School on Real-world Crypto & Privacy <https://summerschool-croatia.cs.ru.nl/2017/> June 11 – 15, 2017. 100+ students.
- Using Online Social Media for Policing, National Police Academy (NPA), Hyderabad. May 16, 2017. 38 officers.
- Social Media tracking for Issue Management: Point - Counterpoint. Organised for Indian Information Service Officers, May 11, 2017. In IIIT Delhi. 10 officers.

### **Pravesh Biyani**

- Seminar in QUT Australia (invited lecture)
- Seminar in CUHK, Hong Kong

### **Pydi Ganga Mamba Bahubalindrani**

- Gave invited talks in many colleges including GMRIT

### **Rahul Purandare**

- Was invited to give talks on Program Analysis at TRDDC, Ashoka University, College of Engineering – Idukki (Kerala).
- Co-organized a workshop on IT technologies for students from Delhi High-Schools.

### **Rajiv Ratn Shah**

- Seminar on the National Institute of Informatics (NII) International Internship program in March 2018.
- “Multimedia Research” in the School of Computing & Systems Sciences at Jawaharlal Nehru University, New Delhi, India in 2017.

### **Rakesh Chaturvedi**

- Invited Seminar at Department of Economics, Korea University, October
- Discussant at Winter School, Delhi School of Economics, December
- WINE Conference at Indian Institute of Science Bangalore, December

### **Richa Singh**

- Adversaries in AI, Women in Machine Learning and Data Science, IIIT Delhi, March 2018
- Adversarial Attacks on Deep Learning Algorithms, India-EMBO Symposium on Big Data in Biomedicine, New Delhi, February 2018
- Machine Learning in Forensics, Winter school cum Faculty Development Program on THz Communication and Image Processing, Ambedkar Institute of Technology, New Delhi, February 2018
- Machine Learning in Forensics, Annual IFIP WG 11.9 International Conference on Digital Forensics, New Delhi February 2018
- Domain Adaptation in Biometrics, UGC supported National Workshop on A Trend towards Machine Learning: Techniques and Applications, New Delhi, January 2018
- Introduction to Biometrics and Performance Evaluation, UGC supported National Workshop on “A Trend towards Machine Learning: Techniques and Applications”, New Delhi, January 2018

### **Samrith Ram**

- Invited to 16th International Conference on Arithmetic, Geometry, Cryptography and Coding Theory,
- Centre International de Rencontres Mathématiques, Marseille, France, Jun 2017.
- Invited speaker at National Conference on Advances in Applied Mathematics and Statistics (NCAAMS2017, Delhi), Mata Sundri College (University of Delhi), Sep 2017.
- “A Trick of Diaconis and Linear Recurrences over Finite Fields”, Guest lecture at Évariste club, IIIT Delhi, Oct 2017.
- “Polynomial Matrices over Finite Fields with given Smith Form”, seminar at University of Neuchâtel, Switzerland, Dec 2017.

### **Sanat K Biswas**

- Invited Talk: Single Propagation Techniques for the Unscented Kalman Filter to Reduce Processing Time, at Second International Conference on Computer Vision and Image Processing & Workshop on Multi-Media 2017, 11 Sep., 2017 at IIT Roorkee Greater Noida Extension Centre.
- IEEE CASS-CSS Delhi Chapter Talk: Computationally Efficient Non-linear Kalman Filters



for On-board Space Vehicle Navigation, 22 March 2018 at IIT Delhi

- Invited talk at Department of Aerospace Engineering IISc: GNSS and Sensor Fusion, 16 April, 2018
- Invited talk at Aeronautical Development Agency: GNSS and Sensor Fusion, 16 April, 2018

#### **Sankha S. Basu**

- Intuitionism and Computability, 19th Annual Meet of the Calcutta Logic Circle, Dept. of Pure Mathematics, University of Calcutta, Kolkata, October 13-15, 2017
- The Logics of Possibility and Necessity, T-Talk, IIIT-Delhi, Jan 18, 2018

#### **Saket Anand**

- Invited lecture on AI and Machine Learning at National Informatics Center annual event.

#### **Sambuddho**

- Invited talk – Cybersecurity 101 – Department of East Asian Studies, Delhi University, March 2017

#### **Sujay Deb**

- Invited talk on “HyWin: A High-Performance Interconnection Platform for Heterogeneous System Architectures”, at Rochester Institute of Technology, Department of Computer Engineering, August 9, 2017.

#### **Sarthok Sircar**

- Organized Institute Seminar: Prof. Rathish Kumar, IIT Kanpur, April 19th, 2018.

#### **Sumit J Darak**

- Organized half-day workshop at IIIT-Delhi on “Design and Implementation of Wireless Communication Systems Using Matlab/Simulink and Zynq SoC”.
- Organized full-day workshop at IIIT-Delhi on “Model Based Design for Software Defined Radio” Using Matlab/Simulink and FPGA”.

#### **Shriram Venkatraman**

- Indian Institute of Science (IISc) – Invited Lecture - Workshop on Analysis and Inference (WAIU) – Presented on Small Data

#### **Tanmoy Chakraborty**

- Invited talk at Delhi Technical University (DTU), May 2018
- Invited talk at TCS Research Lab, Kolkata, India, Dec 2017.
- Tutorial at 14th International Conference on Natural Language Processing (ICON) at Kolkata, India, Dec 2017
- Invited at Amazon AI Summit, Bangalore, September 2017.

#### **Vikram Goel**

- Invited Talk on Big Data Technologies at YMCA university, Faridabad, May 9, 2017.
- Keynote Speaker in National Conference on “Networking, Cloud Computing, Analytics, and Computing Technologies”, 27th May, Topic: Graph Data Analytics- Recent Advances, Manav Rachna International University, Faridabad, Haryana.
- Invited Talk on Graph Pattern Mining, YMCA University, Haryana, January 11, 2018.
- Keynote Talk on Data Mining Applications, at DAVIM, Haryana, March 10, 2018.

**Vinayak S. Naik**

- A talk titled "Smart Transport for Smart Cities" at CSE Department in IIT Bombay, India on Feb 21, 2018
- Invited talk titled "Use of Machine Learning to Detect Physical Analytics of People Using Their Smart Phones and Wearables" at the Joint Indo-Sri Lanka workshop on Big Data at the University of Peradeniya, Sri Lanka on Dec 13, 2017
- Invited speaker at Mojo R&D Meet, in IITB, Mumbai on June 24, 2017

## Appendix H : Professional Services by faculty

### Aasim Khan

- Delivered a seminar on the ‘Role of Critical Thinking in Social Science Research’ as part of the “Research Methodology course for SC/ST Ph.D. Scholars in Social Sciences”, organized at the Department of Sociology, Jamia Millia Islamia, 8th March, 2018
- Book Reviews: Including “Contested Knowledge: Science, Media, and Democracy in Kerala” by Shiju Sam Varughese (OUP, 2017), Published in The Book Review, January, 2018

### Abhijit Mitra

- Member of 5G white paper drafting committee for security vertical headed by Prof. Ranjan Bose, IIT Delhi.

### Anand Srivastava

- Reviewer of various journals ( Optics Communication, PNET, IEEE Access etc)
- IIT Delhi M.Tech. thesis examiner
- M.Tech. examiner for Delhi Govt colleges

### Angshul Majumdar

- IEEE Signal Processing Society, Chapters’ Chair (2016-2018)
- Chair, IEEE Signal Processing Society, Delhi Chapter (2015 - )
- Reviewer for ICASSP, ICIP, EUSIPCO, MICCAI and Reviewer for Pattern Recognition, Information Fusion, IEEE TIP/TSP/Cybernetics, TGRSS etc.

### Anubha Gupta

- Associate Editor, IEEE Access
- Participated in two NBA (National Board of Accreditation, India) accreditation visits as ECE expert for UG programs.
- Reviewer for leading conferences ICIP 2018, ICASSP 2018, NCC 2018, MICCAI 2017, PIMRC 2017, NCVPRIG 2017. Also reviewed journal papers for IEEE Access, Information Fusion, Elsevier, IETE, in the last academic year.
- Reviewed a book proposal for Elsevier Science.
- M.Tech. External Examiner, IIT Delhi

### Anuj Grover

- Reviewer for IEEE Transactions on Very Large Scale Integration (VLSI) Systems
- Reviewer for IEEE Transactions on Circuits and Systems I : Regular Papers
- Reviewer for IEEE Transactions on Circuits and Systems II : Express Briefs
- Reviewer for IET Circuits, Devices and Systems journal

### A V Subramanyam

- Program Committee Member
  - Member, Program Committee, ACM Multimedia, Seoul, South Korea
  - Member, Program Committee, IEEE International Conference on Multimedia Information Processing and Retrieval, California, USA
- Reviewer
  - - IEEE Transactions on Multimedia
  - - IEEE Transactions on Image Processing
  - - IEEE Access
  - - IEEE Transactions on Circuits and Systems for Video Technology
  - - ACM Transaction on Multimedia Computing, Communications and Applications

- -Springer Journal of Multimedia Tools and Applications
- -Springer Journal of Multimedia Systems
- -SPIE Journal of Electronic Imaging
- -EURASIP Journal on Image and Video Processing
- Co-organizer of 1st International Workshop on FakeMM, San Jose, CA, USA (<http://www.cs.albany.edu/~patrey/FakeMM/>)

#### **Aman Parnami**

- Reviewer for international HCI conferences: CHI 2018, UbiComp 2018, DIS 2018

#### **Anuradha Sharma**

- Reviewer for Mathematical reviews of the American Mathematical Society, IEEE Trans. Inform. Theory, Finite Fields and their applications, Discrete Mathematics, Indian Journal of Pure and Applied Maths, Journal of Ramanujan Math Society, Designs Codes and Cryptography.
- Member of the Technical Program Committee for ADMA 2018.

#### **Arun Balaji buduru**

- PC Member IEEE Big Data Congress
- PC Member for International conference on security, privacy and applied cryptography engineering [SPACE]
- Reviewer for IEEE Transactions on Service Computing
- Reviewer for IEEE International Conference on Mobile Services
- Technical program chair for Security and Privacy Symposium

#### **Chetan Arora**

- Program Co-Chair for NCVPRIPG 2017.
- Area Chair for ICVGIP 2018.
- Program committee member for all major computer vision conferences: CVPR, ICCV, ECCV, ACCV etc.

#### **Debajyoti Bera:**

- Co-chair of Algorithms track, IC3 2018 conference.
- Reviewer of CCC 2018

#### **Debarka Sengupta**

- Part of Brookings NFHS consortium, Advised NITI

#### **Donghoon Chang**

- Editor, Journal of Platform Technology (2017,2018)
- Program Committee Member: Inscrypt 2017, Inscrypt2018, ICISC2018, ProvSec2018, CICT-2018, ICMC 2018

#### **Gaurav Arora**

- Journal Paper Reviewer (1 manuscript each for): PloS One; Proceedings of National Academy of Sciences, India: Seciona A: Physical Sciences; Journal of Soil and Water Conservation; Journal of Agricultural and Applied Economics.

#### **Ganesh Bagler**

- Conducted "Symposium on Computational Gastronomy: The emerging data science of food, flavors, and health" on 17th March 2018 at the Center for Computational Biology, IIIT-Delhi. The symposium has highlighted the pivotal contributions from the 'Complex Systems Laboratory', IIIT-Delhi on the forefront of the emerging data science of 'Computational Gastronomy' through pioneering

integrative studies in food pairing, culinary fingerprints, flavor percepts and health impacts of food, other than creating data repositories for flavor molecules, food-disease associations and recipes from across the world regions.

- Taught a one week-long 'Short Course in Network Biology' at the Bioinformatics Centre, Pondicherry (Central) University from 19th to 24th February 2018. The course involved intense lectures as well as lab sessions which were conducted in the evenings and was attended by ~120 participants (faculty, research scholars, and other students), who then were evaluated through an online examination before being awarded certificates. People from various departments including Bioinformatics, Biotechnology, Biochemistry and Molecular Biology, Microbiology, Computer Science, Chemistry, Physics and Green Energy Technology participated.

Course Website: <https://www.usebackpack.com/iii111/courses/02c584/info>

Students' Feedback (Anonymous): <https://www.surveymonkey.com/results/SM-5JQKHMTH8/>

- Conducted an active Summer Research Internship Program during June-July 2017s. It was my experiment in pedagogy and research to involve a team of UG students (as Summer Research interns in my lab) in addition to M.Tech.(CB) students and my Ph.D. research scholars, to address a challenging problem. I am glad that, after coordinated efforts from the team, while ensuring learning objectives of the internship program, we could put together a resource that hopefully will serve as a foundation for data-driven studies, paving the way for an improved understanding of flavor mechanisms. A total of 9 UG students, 4 M.Tech. students (including 3 from M.Tech.-CB 2016 batch) and 3 of my Ph.D. research scholars were part of the team. Other than one of my Ph.D. students, 7 UG summer research interns and 3 of our M.Tech.-CB students share the first authorship in this important publication. The summer internship call got an overwhelming response for which 7 interns were selected from 850+ applications for 4 projects from my lab.
- Conducted a "Symposium on Network Biology" at Center for Computational Biology, IIT-Delhi on 18th October 2017. In this well-attended symposium experts provided exposition to salient research topics in network biology to the participants.
- Program Committee Member of COMPLEXIS-2018.
- Acting as a Mentor for the DU-CIC Star Innovation Project at SVC: "Network analysis in the systems biology of neurological disorders". (Discussion meetings to advise a group of 8-10 students).
- Peer reviewer for Physica A, Chaos, Philosophical Transactions B, PLoS One and COMPLEXUS.
- Served as a Jury for selection of the 'Origin Best Researcher Award' for the National Science Day 2018 celebrations at the Central University of Kerala.
- Served as a committee member of the Doctoral Advisory Committee for progress evaluation of Ph.D. thesis of two students at CSIR-IGIB: Debi Prasanna Dash and Rintu Kumar
- Served as the Ph.D. Thesis Examiner of Akshara Pande at CSIR-IGIB, AcSIR.
- Served as the M.S. (Research) thesis examiner of Tarun Mahajan (2014EEY7542) for the thesis entitled 'Augmenting Gene Network Inference Using Meta-Analysis and Structural Priors' on 8th December 2017 at the Department of Electrical Engineering, IIT Delhi.

#### G. P. S. Raghava

- Role as Editor: Serving editor in reputed journals like Section Editor of Translational Medicine, Academic Editor of Plos One, Associate Editor of BMC Bioinformatics.
- Role as Reviewer: Reviewed number of manuscript for reputed journals.
- Number of Ph.D. thesis has been evaluated for reputed universities like ACSIR, IIT Delhi, JNU
- Number of invited lectures have been delivered in workshops/conferences.
- Serving as member of Task Force on "Theoretical and computational Biology" of DBT.

#### Juhi Ranjan

- IPSN (Tier-1 conference) Poster Chair
- IIT Delhi M.Tech Thesis committee member

### **Kaushik Kalyanaraman**

- Reviewer for Discrete and Computational Geometry
- Reviewer for SIGGRAPH 2018

### **Mayank Vatsa**

- Vice President, IEEE Biometrics Council (founded IEEE Transactions on Biometrics, Behavior, and Identity Science)
- Guest Editor, Special Issue on Deep Learning for Information Fusion, Journal of Information Fusion, Elsevier, 2017
- Associate Editor, IEEE Access
- Area Editor, Information Fusion, Elsevier
- Publicity Chair, IEEE International Conference on Automatic Face and Gesture Recognition, Lille, France, May 2019
- Doctoral Consortium Chair, IAPR International Conference on Biometrics, Greece, May 2019
- Area Chair, IEEE Conference on Winter Applications in Computer Vision, Lake Tahoe, USA March 2018
- Program Co-Chair, Disguised Faces in the Wild - Competition and Workshop at IEEE CVPR, Salt Lake City, June 2018
- Panelist, Workshop on Biometrics, CVPR , Hawaii, USA 2017
- TPC Member, IEEE Conference on Computer Vision and Pattern Recognition - 2018
- TPC Member, European Conference on Computer Vision - 2018
- TPC Member, British Machine Vision Conference, London 2017
- TPC Member, IEEE International Conference on Image Processing - 2017
- TPC Member, International Conference on Computer Vision - 2017
- TPC Member, IEEE/IAPR International Joint Conference on Biometrics – 2017
- Reviewer for several top journals
- Session Chair, Special Session on Computational Neuroscience at International Joint Conference
- Other Services in last year
  - Neural Network, Alaska, USA 2017
  - Tutorial on Domain Adaptation in Biometrics, International Conference on Computer Vision, Venice, France 2017
  - Tutorial on From Deep Unsupervised to Supervised Models for Face Analysis, IEEE Conference on Automatic Face and Gesture Recognition, Washington DC, USA , 2017
  - Tutorial on Deep Learning for Face Recognition, International Joint Conference on Neural Networks, Alaska, USA, 2017
  - First International Workshop on Disguised Faces in the Wild, Competition and Workshop at with IEEE International Conference on Computer Vision and Pattern Recognition, Salt Lake City, 2018
  - LivDet - Liveness Detection Competitions, with the International Joint Conference on Biometrics, 2017

### **Mohammad Hashmi**

- Reviewer for leading conferences APCAP, IMS, IMaRC, APMC, and ISCAS. Also reviewed papers for PIER Journals, IEEE Transaction on Instrumentation and Measurements, IEEE Microwave Magazine, IEEE Microwave Wireless Component Letters (MWCL), and Elsevier Journal (IEB) in the past twelve months.
- IEEE Delhi Chapter Standing Committee Member
- M.Tech. External Examiner, IIT Delhi, AMU, Jamia Millia, and Gautam Budhdha University.
- Workshop Organizer at IEEE APMC 2017 & Session chair at APMC 2017.
- PC Member: INDICON 2017, NCC 2018, SPIN 2018.
- Member of various committee in SSPL-DRDO as a Subject Matter Expert.



### **Ojaswa Sharma**

- Member of Technical Program Committee and Advisory Committee of International Conference on Computing, Analytics & Networks (ICAN 2017)
- Session chair at NCVPRIPG 2017 conference.
- Delivered a special session on Virtual Reality (VR) at the National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG, Indian flagship conference on graphics and vision) 2018.
- Served as a panelist on ‘Virtual Reality in Automotive Industry’ at the World Auto Forum on Information Technology (WAFit) 2018.
- Reviewer for top international conferences in AR/VR and visualization: IEEE VR, IEEE Vis, EuroVis, ISMAR.
- Reviewer for Indian conferences: NCAN, ICVGIP.

### **P.B. Sujit**

- Associate Editor for ICUAS 2018
- Editor - Journal of Intelligent Robotic Systems
- PC member – IJCAI
- Reviewer (journals) – IEEE transactions on Control System Technology, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Aerospace Electronics Systems, IEEE Transaction on Ocean Engineering, Journal of Intelligent Robotic Systems, Journal of Mechatronics, IEEE Transactions on Cybernetics
- Reviewer (conference) – IEEE ICRA, IROS, ICUAS, IFAC CAMS, ACC, CDC, IJCAI, IEEE HRI

### **Pravesh Biyani**

- Reviewer for IEEE Transactions, many IEEE conferences, TPC member in various Indian conferences.

### **Ponnuragam Kumaraguru**

- Government advisory roles / interactions (in last year)
  - Member of Project Review and Steering Group (PRSG). Centre of Excellence on Internet of Things (IoT). NASSCOM. Funded by Ministry of Electronics and Information Technology (MeitY). 2018 – 2020. Worth few crores of Rupees.
  - Member of committee on AI for CyberSecurity, Safety, Legal and Ethical issues. Ministry of Electronics and Information Technology (MeitY). Feb 2018 – present.
  - Member of Project Review and Steering Group (PRSG). Design and Development of opinion mining and sentiment analysis of social media content to assess security threat. Indian Institute of Technology, Guwahati (IITG). Funded by Department of Electronics and Information Technology (DeitY). 2016 – 2018.
  - Member of a Committee for implementing the Open Source Intelligence Solution at National Intelligence Grid (NATGRID), Ministry of Home Affairs (MHA), Government of India. March 2016 Present. Worth few crores of Rupees.
  - Member of a Steering Committee for developing Early Warning System (EWS). Serious Fraud Investigation Office, Ministry of Corporate Affairs, Government of India. Jan 2016 - Present. Worth few crores of Rupees.
  - Member of Project Management Review Committee. Analysis of IP Traffic over Satellite (SAMVAAD). Defence Research & Development Organization. 2015 – 2018. Worth few crores of Rupees.
  - Member of a Sub-Group, Micro Mission, National Police Mission setup by the Bureau of Police Research and Development (BPR&D), MHA, Government of India. Jan 2015 – Present.
- Board of Studies, B.Tech on Cybersecurity. Raksha Shakti University, Gujarat. Fall 2017 – Present

- Board of Studies , Faculty of Engineering and Technology, Indira Gandhi Delhi Technical University For Women (IGDTUW). March 2018 – Present
- External Program Curriculum Reviewer, Masters in Computer Applications (MCA) and M.Sc. Computer Science, Delhi University.
- External Masters thesis examiner. Jaypee Institute of Information Technology, Delhi. May 2017
- External B.Tech. thesis examiner. IGDTUW. May 2017.
- Program Committee Member WWW 2018
- Program Committee Member ICWSM 2018
- Program Committee Member CSCW 2018
- Program Committee Member Privacy Enhancing Technologies Symposium (PoETS) 2017, 2018
- Technical Program Co-Chair IEEE Intelligence and Security Informatics (ISI) 2018
- On Student Review Committee for a couple of Ph.D. students at IIT Delhi
- Co-Organizer for Security and Privacy Symposium. Attended by 100+ participants, including faculty / researchers, and students from all around India. 6 April, 2018.
- Co-Organizer Summer School on Privacy and Security in Online Social Media. 3 – 7 July, 2017. This was organised at IIIT Hyderabad.
- Co-organized Winter School on User Experience Design with Prof. Aman Parnami. Dec 4 - DEC 7, 2017. IIIT Delhi <https://iiitd.ac.in/uxd-winterschool2017/> See Figure 8
- Co-organized the Workshop on User Generated Content at IISc. 70+ participants.
- ACM Distinguished Speaker. April 2016 - Present

#### **Pushpendra Singh**

- Reviewer for CHI 2017 (Core A\*)
- Reviewer for IEEE Transactions on Mobile Computing
- Reviewer for IEEE Access
- TPC member of IEEE LCN (Core A)

#### **Pydi Ganga Mamba Bahubalindrani**

- Golden Reviewer of IEEE journal – Electron device letters
- Reviewer of IEEE transactions on circuits and systems
- Reviewer of ISCAS

#### **Rahul Purandare**

- Review board member of the topmost software engineering journal Transactions on Software Engineering (TSE).
- Co-organized the Winter School on Software Engineering (WSSE) focusing this year on Program Analysis at TRDDC along with Ravindra Naik (TRDDC), Dr. Amey Karkare (IIT-K), Dr. K. Raghavan (IISc), Dr. Subodh Sharma (IIT-D), and Dr. Sridhar Chimalakonda (IIT-T). This is a first winter school on software engineering where eminent national and international speakers were invited. It was attended by postgraduate students, faculty, and industry professionals. The school was conducted over six full days.
- PC member of several conferences including FormalISE'18, ISEC'18, COMPSAC'18, CICT'17.
- Reviewed papers for the proceedings of national academy of sciences and proposals for SERB (DST).
- Was a thesis examiner for a student from IISc advised by Dr. Aditya Kanade.

#### **Rajiv Raman**

- Review of papers for Discrete and Computational Geometry

#### **Rajiv Ratn Shah**

- General co-chair of Multimodal Representation, Retrieval, and Analysis of Multimedia Content (MR2AMC), 2018 in the first IEEE Conference on IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), 2018

- Registration co-chair of IEEE Symposium Series on Computational Intelligence 2018
- Program committee member of the 26th ACM International Conference on Multimedia (MM), 2018
- Program committee member of the 18th IEEE International Conference on Multimedia and Expo (ICME), 2018
- Area chair of the 3rd International Conference on Computer Vision & Image Processing (CVIP), 2018
- Program committee member of the 1st International Workshop on Text Analytics and Information Retrieval (TexAR) in IEEE/WIC/ACM International Conference on Web Intelligence 2018
- Area chair of the 2nd International Conference on Computer Vision & Image Processing (CVIP), 2017
- Session chair of the 26th ACM International Conference on Information and Knowledge Management (CIKM), 2017
- Program committee member of the 25th ACM International Conference on Multimedia (MM), 2017
- Program committee member of the 5th International Symposium on Language & Knowledge Engineering (LKE), 2017
- Program committee member of the 2nd Bibliometric-enhanced IR and NLP for Digital Libraries (BIRNDL'17) workshop @SIGIR 2017

### Richa Singh

- Associate Editor, Computer Vision and Image Understanding, January 2018 - Present
- Associate Editor, Pattern Recognition, 2017 - Present
- Lead Guest Editor, Special Issue on Deep Learning for Information Fusion, Journal of Information Fusion, Elsevier, 2017: Received 30 papers in the special issue
- Associate Editor, IEEE Access, 2016 - Present
- Associate Editor, EURASIP International Journal of Image and Video Processing, SpringerOpen, November 2013 - Present
- Editorial Board Member, Information Fusion, Elsevier, November 2011 – Present
- Member, IAPR Education Committee, Present
- Program Committee Co-Chair, IEEE International Conference on Automatic Face and Gesture Recognition, Lille, France, May 2019
- Publications Chair, International Workshop on Information Forensics and Security, Hong Kong, 2018
- Area Chair, IAPR International Conference on Pattern Recognition, China, August 2018
- Data and Competition Evaluation Chair, Disguised Faces in the Wild - Competition and Workshop at IEEE CVPR, Salt Lake City, June 2018
- Program Committee Co-Chair, IEEE International Workshop on Biometrics and Forensics, Alghero, Italy, June 2018
- Area Chair, IAPR International Conference on Biometrics, Queensland, Australia, February 2018
- Website Coordinator, IEEE Biometrics Council
- TPC Member, IEEE Conference on Computer Vision and Pattern Recognition - 2018
- TPC Member, European Conference on Computer Vision - 2018
- TPC Member, CVPR Workshop on Biometrics - 2018
- TPC Member, British Machine Vision Conference, London 2017
- TPC Member, IEEE International Conference on Image Processing - 2017
- TPC Member, International Conference on Computer Vision - 2017
- TPC Member, IEEE/IAPR International Joint Conference on Biometrics - 2017
- Reviewer for several journals
- Other Services in last year
- Session Chair, IEEE/IAPR International Joint Conference on Biometrics, Denver, USA, October, 2017
- Tutorial on Domain Adaptation in Biometrics, International Conference on Computer Vision, Venice, France 2017

- Tutorial on From Deep Unsupervised to Supervised Models for Face Analysis, IEEE Conference on Automatic Face and Gesture Recognition, Washington DC, USA , 2017
- Tutorial on Deep Learning for Face Recognition, International Joint Conference on Neural Networks, Alaska, USA, 2017
- First International Workshop on Disguised Faces in the Wild, Competition and Workshop at with IEEE International Conference on Computer Vision and Pattern Recognition, Salt Lake City, 2018
- LivDet - Liveness Detection Competitions, with the International Joint Conference on Biometrics, 2017

#### **Sanat K Biswas**

- Reviewer:
  - IEEE Transactions on Aerospace and Electronics Systems
  - Signal Processing
  - International Association of Geodesy Symposia
  - IEEE Conference on Decision and Control (CDC)

#### **Saket Anand**

- Reviewer for IEEE Transactions on Neural Networks and Learning Systems (NNLS)
- Reviewer for Elsevier's Pattern Recognition
- Reviewer for IEEE Access
- Reviewer for IET-Computer Vision, Special Issue on Animal Biometrics
- PC Member of DIFF-CVML 2018, co-located with CVPR 2018

#### **Sambuddho**

- Served as external M.Tech Thesis examiner for Mr. Md. Saood and Ms. Yamini Agarwal who were students of Dr. Vinay Riberio (IITD).  
Thesis titles – IOT for Home Automation (Md. Saood, IITD) – Advisor: Dr. Vinay Riberio  
Enhanced Autoencoder for Robust Classification and Detection of DDoS Attacks (Yamini Agarwal, IITD) – Advisor: Dr. Vinay Riberio

#### **Sanjit Krishnan Kaul**

- Reviewer for PIMRC, ISIT, IEEE Transactions on Information Theory, Mobihoc, IEEE Communications Magazine, IEEE WCNC, and etc.
- TPC of Network Traffic Measurement and Analysis Conference (TMA 2018)

#### **Sarthok Sircar**

- Conference co-organizer, SIAM student chapter, DTU, New-Delhi (April 18,19th, 2018)

#### **Shobha Sundar Ram**

- Associate Editor, IEEE Transactions of Aerospace and Electronics Systems
- Reviewer for IEEE Transactions on Antennas and Propagation, Transactions on Aerospace and Electronics Systems, IEEE Sensors, IEEE Access, Elsevier Infrared Physics and Technology.
- Reviewer for IEEE Radar Conference 2018
- M.Tech Thesis examiner for 3 thesis presentations at IIT Delhi

#### **Shriram Venkatraman**

- Ad-hoc Reviewer – Television and New Media
- Ad-hoc Reviewer – Sage Open

#### **Subhadip Raychaudhuri**

- Reviewed a paper titled “AAV vector-mediated expression of HLA-G reduces injury-induced corneal vascularization, immune cell infiltration, and fibrosis” for the journal Scientific Reports.

- Worked towards preparing a book chapter / book tentatively titled “Kinetic Monte Carlo simulations in systems biology” based on similarly titled course taught at IIT Delhi (Cambridge University Press India has earlier invited me to submit a book proposal on this topic). Previously published book chapter titled “Kinetic Monte Carlo Simulations in Systems Biology and Biophysics” (published by InTech) has 6 citations and 2110 downloads (intechopen.com)

#### **Sneh Saurabh**

- Web Chair, 32nd International Conference on VLSI Design (VLSID) 2019, To be held in NCR
- Editor: IETE Technical Review [Impact Factor: 1.304]
- TPC member of 2017 Conference on Information & Communication Technology (CICT-2017), ABV IITM Gwalior
- Reviewer for IEEE Transactions on Electron Devices
- External Examiner for M.Tech. Thesis at IIT Delhi

#### **Sujay Deb**

- Serving as Associate Editor of IET Computers & Digital Techniques
- Served as publicity chair of VLSI Design Conference 2017.
- Served as track chair of IEEE International Symposium on Nanoelectronic and Information Systems (iNIS) 2017.
- TPC member of VDAT 2018, iNIS 2018, GLSVLSI 2018, ISVLSI 2018.
- Reviewer of TC, TVLSI, TCAD, TACO, JETC, TMSCS, SUSCOM etc.

#### **Sumit J Darak**

- Technical program committee (TPC) member of various conferences including CICT-2017, ANTS 2017, ICACCI 2017, ICT 2017
- Reviewed articles from various journals including IEEE TSP, IEEE IoTs, IET Communications, JCIN, TVLSI, NASA, IEEE Access, IEEE Electronics Letter
- Reviewed articles from various conferences such as IEEE ISWCS 2017, IEEE ANTS 2017, IEEE ISCAS 2017, IEEE VDAT 2017.

#### **Tanmoy Chakraborty**

- PC Member of conferences
  - WWW 2018
  - AAAI 2018
  - PAKDD 2018
  - NAACL-HLT 2018
  - IEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2017)
  - CODS-COMAD 2018
  - Outlier Detection De-constructed workshop in KDD2018
  - COMPLEX NETWORKS 2018
  - TextGraphs in NAACL 2018
  - 6th International Workshop on Mining Scientific. Publications (WOSP) in LREC 2018
  - ParLearning 2018
  - International Conference on Information Technology and Applied Mathematics (ICITAM) 2017
  - International conference on communication, devices and computing 2017
  - Social networking workshop, COMSNETS 2018
  - 6th International Workshop on Mining Scientific. Publications (WOSP) in JCDL 2017
  - TextGraphs-11, ACL 2017
- Reviewer of journals
  - Knowledge Based Systems
  - ACM Computing Surveys

- IEEE Access
- Social Network Analysis and Mining (SNAM)
- Information Processing Letters
- Journal of Complex Networks
- Nature Scientific Reports
- ACM Transactions on Intelligent Systems and Technology (ACM TIST)
- Information Sciences
- Language Resources and Evaluation (LREV)
- IEEE Intelligent Systems
- Communication of the ACM (CACM)
- IEEE Transactions on Computational Social Systems (IEEE TCSS)
- Scientometrics
- Computers & Security
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- Guest Editor in journal Information Systems Frontiers (Special Issue on “Exploitation of Social Media for Emergency Relief and Preparedness”)
- Workshop Co-organizers:
  - Workshop on Exploitation of Social Media for Disaster Relief and Preparedness (SMERP-2) with WWW 2018
  - Workshop on Exploitation of Social Media for Disaster Relief and Preparedness (SMERP) with ECIR 2017
- Reviewers in several top-tier conferences and journals such as ACM Multimedia (2018, 2017), IEEE CIM (2018), ACL (2018), IEEE MIPR (2018), ACM CIKM (2017), IEEE ICME (2017), CVIP (2018, 2017), SIGIR (2017), LKE (2017), Springer MTAP (2018, 2017, 2016), IEEE Transactions on Multimedia (2018, 2017), IJBIDM (2017), Elsevier Neurocomputing (2016, 2017), etc.

#### **Venkata Ratnadeep Suri**

- Served as a reviewer for The Information Society Journal
- Served as a reviewer for the Association for Education in Journalism and Mass Communication (AEJMC) Conference, 2018.

#### **Vibhor Kumar**

- Served as chairman of Internal review board on ethical issue of projects. Reviewed ethical aspect of many proposals.
- Organised a workshop on Regulatory Genomics at IIIT Delhi.
- Participated in course design for new B.Tech. program in CSBS at IIIT Delhi.

#### **Vikram Goel**

- Reviewer: IEEE Transactions of Services
- Reviewer: Applied Intelligence Journal, Springer
- Reviewer: COMAD 2017, IOT4TD 2017, IC4S 2017, PABS 2017, ICISS 2017, IEEE IRI 201, ICDCIT 2017

#### **Vinayak S. Naik**

- A publicity co-chair of The 24th Annual International Conference on Mobile Computing and Networking (MobiCom2018) to be held on Oct 29 - Nov 2, 2017 in New Delhi, India
- A program committee member of the first annual ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS 2018) to be held on June 20-22, 2018 in Menlo Park, USA

#### **Vivek Ashok Bohara**

- Reviewer for IEEE Transaction on Wireless communication, IEEE Transaction on communication, IEEE Transaction on Vehicular Technology, IEEE Globecom etc.



- Technical program committee member for conferences such as IEEE PIMRC 2016, IEEE PIMRC 2017, ICACCI 2016 and IEEE Tensymp 2017.
- A program committee member of 19th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WOWMOM 2018) to be held on June 12-15, 2017 in Chania, Greece
- A program committee member of Networks track at The Twentyfourth National Conference on Communications (NCC 2018) to be held in IITH
- A reviewer for IEEE Transactions on Mobile Computing (TMC'18)
- A program committee member of the IEEE 19th International Symposium on A World of Wireless, Mobile and Multimedia Networks (WoWMoM), Chania, Greece, June 12-15, 2018
- A program committee member of the Workshop on Wild and Crazy Ideas on the interplay between IoT and Big Data (WACI'18), Bangalore, India on Jan 3, 2018
- A member of the organizing committee for Second Asian Students Symposium on Emerging Technologies (ASSET), Bangalore, India from Jan 8-9, 2018
- Publicity Co-Chair at The Tenth International Conference on COMMunication Systems and NETWORKS (COMSNETS), Bangalore, India from Jan 3-7, 2018

#### **Vivek Kumar**

- PC member IEEE IA3 workshop (<http://hpc.pnl.gov/IA3/IA3-2017/Organization.html>).
- Reviewer in HiPC Student Research Symposium 2017

#### **Bijoy Chand Chaterjee**

- TPC Members: IEEE RNDM 2015- 2018, IEEE ICC 2017-2018, IEEE GLOBECOM 2018.
- Conference reviewing: IEEE ICC, IEEE GLOBLOM, NCC, IEEE RNDM
- Journals reviewing: IEEE Transactions on Communications, IEEE/OSA Journal of Lightwave Technology, IEEE/OSA , Journal of Optical Communication and Networking, IEEE Communications Letters, Optical Fiber Technology– Elsevier, Optical Switching and Networking – Elsevier, Computer network – Elsevier, Telecommunication Systems – Springer, and Photonic Network Communications – Springer.

## Appendix I : Impact on Industry, Government and society

### Impact on Government and Society

#### **Abhijit Mitra**

- Enabled the design of Physical layer for High Capacity Backbone Optical Network for British Telecom UK. Nominated as a Junior Speaker for the Rank Prize Fund UK by British Telecom for contributions to optical fiber network.

#### **Chetan Arora**

- 3 separate projects worth 2.63 crores sanctioned by the DST ICPS.
- Invited by International Committee of Red Cross (ICRC) Delhi for Artificial Intelligence related policy discussion in warfare.
- Invitation to attend another workshop by ICRC on the same in Geneva.

#### **Debarka Sengupta**

- have been made part of the Brookings India Consortium to Analyse the NFHS4 data and thereby helping Govt. in making better health policies
- Developed Druid, a surveillance system for nosocomial diseases for AIIMS. This work has been done as part of the collaboration with Circle of Life Healthcare Pvt. Ltd.

#### **Donghoon Chang**

- In November 2017, Chang participated in Cyber security conference as an invited speaker. Met cyber security experts in various countries and organizations including UN.
- Visited four major universities in Korea to establish the MoU from the level of incubation centers.

#### **Ganesh Bagler**

- The computational gastronomy research from Complex Systems Laboratory, Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) was highlighted by the well-known food critic Vir Sanghvi in his Rude Food column: 'The Magic of Indian Spices', Hindustan Times Brunch, Sunday Edition, 22nd April 2018.
- The Computational Gastronomy research was highlighted in an article in The Jakarta Post. "The tastes of India: Spices give Indian food the edge" in The Jakarta Post by Vimmy Sinha (22 March 2018)

#### **G. P. S. Raghava**

- A web portal "Portal for Health Informatics (PHI)" has been developed to compile contribution of Indian Researchers/Academicians in the field of health informatics (See <http://webs.iiitd.edu.in/>). This web portal maintained wide range of servers, databases and software developed in the field of bioinformatics, chemoinformatics, immunoinformatics, clinical bioinformatics, health informatics, genomics, etc. The main purpose of this web portal is to provide help to biologist working in the field of vaccine development, drug designing, etc.

#### **Mayank Vatsa**

- Biometric databases created by my team have been downloaded by around 645 times (195 in the last year). Several researchers have used these databases in their research and papers.

#### **Ponnurangam Kumaraguru**

- Analytics platform for National Bomb Data Centre / National Security Guard (NSG), Delhi. Developed a platform from scratch and the tool is currently deployed in their Centre in Manesar near Delhi.
- AASMA: Advanced Application for Social Media Analytics. Fully developed at IIITD. Requested by state and federal government agencies in India, including armed forces, Government.

- Saftie / KillFie: KillFies, Saftie Facebook Chatbot <https://www.facebook.com/saftiebot> Saftie Android Application <https://play.google.com/store/apps/details?id=com.something.vedant.crowdsourcing> There
- TED talk around this topic; gave a TED talk on “Saving Lives: How Many Likes Is Your Life Worth?”
- Shri. Nitin Gadkari, Minister of Road Transport & Highways talks about being careful while taking and the video references work by IIIT Delhi at the bottom right of the video
- Was invited for a 1 hour program on Good Evening India on our national channel Doordarshan to talk about our KillFie Research.
- Keeping the theme of Saving Lives, have been working on Blue Whale issue also. have built a browser plugin that deducts if users are trying to request for playing the game or playing
- Backpack. A Learning Management System. The idea is a fall out from the course Designing Human Centered Systems. have registered a company Backpack Labs around this technology along with Apoorv Singh and Jayasi Mehr, students of IIITD.

### **Pushpendra Singh**

- My public health work is now increasingly being accepted at the government level. We are working with Maharashtra Govt, Haryana Govt, and Delhi Govt.
- In Delhi, DSHM (Delhi State Health Mission) is collaborating with us to develop the mobile based data collection tool for ASHA workers.
- have been chosen as General Co-Chair for ICTD (ICT for Development) conference which we will be hosting at Ahmedabad in January 2019. The ICTD conference is the flagship conference for ICTD work.
- I have also been chosen as TPC member for Buildsys Conference (Core Rank A) in recognition of my work in Energy analytics.

### **Rajiv Ratn Shah**

- Our research has a huge impact on society since many of our work analyze multimedia data on social media and other online platforms to address several very important problems such as suicidal ideation detection, hate speech detection, sentiment analysis, objectionable content detection, and other healthcare application on social media.
- Currently, our work has been acknowledged through several citations and will be accessible to other research community through open source in near future. Moreover, our work on automatic kidney assessment will help society by preventing the kidney disease from getting to the End Stage Renal Disease (ESRD) patients who are put on dialysis treatments due to the lack of a well-structured kidney donor registry.

### **Richa Singh**

- Biometric databases created by my team have been downloaded by around 645 times (195 in the last year). Several researchers have used these databases in their research and papers.

### **Saket Anand**

- Wildlife Institute of India (WII): WII’s tiger population census system incorporated our visual species identification module. The tool, named Camera Trap Analysis Tool (CaTrAT), is to be sent to state forests of India for automatically analyzing camera trap images during the 2018 tiger population census. A quantitative measure of the impact will only be available in the next AY, once the tool has been deployed and run.

### **Shriram Venkatraman**

- Sent a report on Inter-generational Gap and modern Technologies – Challenges and Opportunities to the Director to be sent to the CHANCELLOR of IIIT-Delhi– LG of New Delhi

### **Tanmoy Chakraborty**

- Invitation for Uttar Pradesh Investors Summit, organized by Govt. of Uttar Pradesh.

- My proposal on understanding collective behavior in online social networks was well received by DST-SERB and funded under ECR funding scheme.

### **Vinayak S. Naik**

- As a PI, I am involved with four other co-PIs in the consultancy work for Central Board of Excise and Customs (CBEC) is to help the Government of India to scale up the systems and networking for PAN India. The GST bill will bring taxes under CBEC's purview. Our work is to help CBEC define specifications of the system to incorporate GST into CBEC's system. The project is slated to cost ₹1500 crores. For the first time, the customs offices will use WiFi. We are now working on formally stress testing the new IT system.

### **Impact on Industry**

#### **Abhijit Mitra**

The work with British Telecom: UK strengthened the co-operation between UK and India based on which I have been given project by DST to design the backbone optical network for India. IIIT Delhi is also now a part of this work through DST Inspire project and BT Global Research and Innovation Program.

#### **Chetan Arora**

- Completed 2 consultancy projects from private industries last year.
- 3 papers from a consultancy project accepted at ICIP 2018.
- 1 papers from another consultancy project published at WACV 2018.
- The products developed during the completed projects being tested by the partners for market release.
- 1 consultancy project with private industry ongoing.
- The industrial partner with completed project interested in starting new projects.

#### **Debarka Sengupta**

- Developed SEER, in collaboration with Circle of Life Healthcare Pvt. Ltd. SEER comprises of analytics solutions to the most important problems in the healthcare industry: Length of Stay prediction, Bill amount prediction, Gross revenue prediction etc.
- We are currently engaging with MAX, Fortis and other premier hospitals for deploying the same.

#### **Donghoon Chang**

- During the last year, I and my cryptography group have actively collaborated with Transech (Indian start-up), Irisys (Korean SME), ETRI (Electronics and Telecommunications Research Institute, Korea) for the development of actual products which are supposed to be used in industry. Two graduated M.Tech. students are working in Irisys and two graduated B.Tech. students will work in Irisys as full-time from June 2018.

#### **Ganesh Bagler**

- FlavorDB: A database of flavor molecules. <http://cosylab.iiitd.edu.in/flavordb/> Statistics compiled from Google Analytics
  - Total number of unique users (till date): 200
  - Total number of sessions (till date): 329
  - Total number of page views (till date): 912
  - International Viewership and Usage (till date): India, France, United States, Switzerland, Germany, Netherlands, China, Czechia, United Kingdom, Indonesia.
  - The database has been accessed by culinary experts, food and fragrance chemistry professionals, and experts in beverages with multiple queries for industry collaborations.
  - Featured in the Digital World Biology blog (Bio Databases 2018: How do they taste?).

### **Ponnurangam Kumaraguru**

- Wombat Security Technologies acquired for USD 225 Million. My Ph.D. thesis was instrumental in spinning off Wombat in Pittsburgh during my graduate school life. Currently the company has 300+ full time employees <http://www.wombatsecurity.com/> Wombat has raised multi million dollars (USD) and the services are being used by government agencies in the US and other countries, and other industry organizations. On March 1, 2018 Wombat got acquired by Proofpoint NASDAQ: PFPT a large California based security company. See Figure 1 for the press release <https://www.proofpoint.com/us/newsroom/press-releases/proofpoint-completes-acquisitionwombat-security>

### **Rajiv Ratn Shah**

- Our research involves with several multimedia analytics projects on social media and other online platforms such as VideoLectures.net. Our works on tag recommendation and ranking will be very much useful for social media companies for an efficient searching, retrieval, and recommendation of multimedia content. Our works on automatic segmentation of videos are very useful in searching within video content. Moreover, our works on social media analysis are useful in fake news detection, hate speech detection, determining whether people have taken the medicines based on their twitter. I plan to open source many of my technologies in near future so that industry can get benefitted from this. Currently, our work has been acknowledged through several citations.

### **Saket Anand**

- Infosys Advanced Engineering Team, Mysore: Some of the tools we built for the Swarath, autonomous vehicle, are being used in the prototype autonomous golf cart being developed at Infosys Advanced Engineering Group, Mysore. A quantitative measure of impact is not available at this point in time.

### **Shobha Sundar Ram**

- Driver intention monitoring system using machine learning approaches, Siddanth Saxena (ECE M.Tech scholarly paper)
- Study Of Data-association Algorithms For Crossing Object Tracking By Automotive Radar In Presence Of Measurement Origin Uncertainty, Farah Jabin (ECE M.Tech thesis to be completed by July 2018)
- Pattern Recognition in Automotive Radar for Tunnel Detection, Garima Budhani (ECE M.Tech thesis to be completed by July 2018)
- Study of Nonlinear Bayesian Filtering Algorithms for Automotive Radar Tracking using Range-Rate Measurements. Vivek Ranjan (M. Tech ECE student)

### **Shriram Venkatraman**

- FACEBOOK – LONDON, MENLO PARK AND INDIAN TEAM – Invited as an Expert to help them forms processes to track and respond to global content complaint issues.
- Interviewed as an expert for an industry Podcast (Australia and New Zealand) on – Impact of Technology – specifically personal communication technologies for businesses

### **Tanmoy Chakraborty**

- [Hike Messenger] Last summer, I was invited by Hike Messenger, a social and technological company which provides cross-platform messaging and Voice over IP service, for possible collaboration. One of my students, Jaydeep Roy went there for a 3-month internship and implemented a social group detection algorithm which Hike has deployed into their system for efficient friend recommendation. This summer, two of my students, Aman Roy and Suyash Singh are going for a summer internship. Hike has verbally agreed to provide research grant after successful completion of their internship.

- [Flipkart] I received a research grant from Flipkart. Our team is building fake and collusive review/rating detection system which will be deployed into Flipkart's E-commerce platform.
- [Egregore lab] Egregore lab, an emerging startup in India came and discussed with me for possible collaboration to build technologies that can create trading strategies by analyzing sentiment of social-media and news. They have verbally agreed to release research grant. We are current in a process of designing the MOU.
- [InMobi Technology Services Pvt. Ltd.] We, Mayank, Richa, Angshul and I have discussed with InMobi Technology Services Pvt. Ltd. for a possible collaboration. They have agreed to start a collaboration on fraud detection in advertisement platform which would effectively be deployed into their platform. We are current in a process of designing the MOU.

**Vinayak S. Naik**

- Playing a role of Research Advisor to TCS CTO on the project of architecting a IoT platform since Jan 2017



## Appendix J : Students Achievements

S. No.	Name	Sports (individual outside college)	Technical (outside and intra college)	Cultural (outside and intra college)	Miscellaneous
1	Raghav Kukreti		Byld Hackathon for 1st Years : 3rd Position CodeOff [IIIT Delhi]: 2nd Position Design360 [ESYA'17] : Best UI HackDTU [Hackathon at DTU] : 4th Position 1st Position, INK. Tank XIV	Designed Odyssey's Website Designed various graphics for Odyssey including the Harry Sandhu poster	
2	Vanshit Gupta	Most Valuable player of the tournament(Cricket) at IIITM gwalior sports fest TWARAN			
3	Shaan Chopra	- Discus Throw: 1st Position at Spardha IIT BHU, 1st Position at Sangram IIT Roorkee. Also stood 4th at the Delhi State Championships in Discus Throw in the Women's category. - Shotput: 3rd Position at Spardha IIT BHU - Basketball: Reached Semi-finals in Spardha IIT BHU and Sangram IIT Roorkee - Tennis: Reached Semi-finals in Sangram IIT Roorkee	- Selected to attend ACM Summer School for ML and NLP at IIT KGP. - Received full funding to attend Women Techmaker's International Women's Day Event at Google, Bangalore.	- Summer Camp 2017 coordinator	

4	Divyanshu Talwar		1) Code-Off 2017 : First Runner-Up [All-India Hackathon with over 200 teams] 2) HackDTU : Top 10 of 200 teams		
5	Brihi Joshi		Rails Girls Summer of Code (RGSoc) Scholar, Invitation to attend dotAI conference in Paris (France), Academic Paper Publication in ASONAM 2018, Invitation to attend Google Cloud Summit 2018, Appointed Director of Delhi Operations for Women Who Code.	One of the top 100 students out of 1,200 applicants to be selected for the Berklee BIX Bootcamp - Vocal Intensive -- a vocal workshop organised by the prestigious Berklee School of Music, Boston MA, USA.	
6	Angel Walia		2nd Prize in Maruti Suzuki Colours of Youth Technovation Challenge		2nd prize in Taboo organised at Biswamil-Cultural Fest of OP Jindal - - (certificate not received as of now but is on its way)
7	Pulkit Madaan				1. College Topper : ICCE Climate Change Certificate Program conducted by NASA Climate Change, UNFCCC and World Bank Institute in association with Government of India 2. Selected for "The Physics of Life" 2018 edition : 6th Simons-NCBS Monsoon School, where only 42 candidates were selected from all over India.

8	Ankur Sharma		<p>1. Runner-up at The Mozilla-Hackerearth Hackathon organised by NIEC, Delhi</p> <p>2. Runner-up at HackData 2.0 Hackathon organised by SNU</p> <p>3. Have been invited to 6th Undergraduate Summer School at the Department of Computer Science and Automation, Indian Institute of Science Bangalore</p>		<p>Got selected for Google Summer of Code 2018 under The Mifos Initiative.</p>
9	Aseem		<p>1. Captain of the UAV-IIIT-Delhi Team and participated Internationally in the Worlds largest UAV competition - SUAS held at Webster Navy field in Maryland, USA. Won \$850 and got 13 International rank in Technical Journal Paper submission out of 69 other teams. AUVSI-SUAS is a UAV competition for performing specific missions through self designed aerial vehicle in a given frame of time.</p> <p>2. Member of the team which is shortlisted in the Top 40 out of 700 Nationally under the DST-Lockheed Martin-Tata Trusts India Innovation Growth Program (IIGP) 2.0 - University Challenge 2018.</p>		<p>1. Coordinator of Cyborg-Robotics Club of IIIT-Delhi and participated in many National Events like Boeing Aeromodelling Competition organised by IIT's, mini Cansat competition organised by DTU, Delhi.</p> <p>2. Safety Pilot of the UAV-IIITDi Team and Robotics Club.</p>

10	Aseem		<p>1. captain of the UAV-IIIT-Delhi Team and participated Internationally in the Worlds largest UAV competition - SUAS held at Webster Navy field in Maryland, USA. Won \$850 and got 13 International rank in Technical Journal Paper Submission out of 69 other teams. AUVSI-SUAS is a UAV Competition for performing specific missions through a self designed aerial vehicle in a given frame of time.</p> <p>2. Member of the Team which is shortlisted Nationally in the Top 40 out of 700 other teams under the DST-Lockheed Martin-Tata Trusts India Innovation Growth Program (IIGP) 2.0 - University Challenge 2018.</p>		<p>1. Coordinator of the Cyborg-Robotics Club of IIITD. Participated in many National competitions and won positions like 2nd in Cansat organised by DTU, qualified in Boeing Aeromodelling Competition organised by IIT's</p> <p>2. Safety Pilot of the UAV-IIIT-Delhi Team and Robotics Club.</p>
11	Arsh Verma	<p>IITBHU Sports fest: Best Player of the Tournament (Chess)</p> <p>IIT Roorkee Sports fest: Best Player of the tournament (Chess)</p> <p>(No supporting documents. Got a trophy as prizes in both events. Can be verified by the sports coordinators/sports council)</p>			

12	Riya Singh		2nd runner up, code off by women who code, Delhi	Finalist, Mood Indigo Poetry Slam 2017 2nd prize, Reinvent night (LitSoc competition) Featured twice at conversations of verse(as a featured poet)	
13	Taejas Gupta	1st position in Senior Boys Individual Poomsae, Taekwondo, at Spardha, the annual sports festival of IIT BHU			
14	Lavina Jain		Global rank 15 in Google Code Jam to IO for Women. Total participants ~ 900. It is an yearly competitive coding competition organised by Google where in top 150 participants get invited to Google IO - Google's annual developers fest.		

15	Rachit Jain			<ol style="list-style-type: none"> <li>1. Won Second Prize at Taboo, Biswalmil'17 : Cultural Fest of OP Jindal University</li> <li>2. Editorial Director and Member of the CME team at TEDxIIITD.</li> <li>3. Third Prize at TurnQuote- A turncoat based debating event held at Odyssey 2017, IIITD</li> <li>4. Member of MadToes, the Dance Society of IIITD; We participated at LSR Prelims and Performed at Shiv Nadar University, alongwith Odyssey 2017</li> <li>5. Was awarded the Teaching Excellence Award at Summer Camp 2018.</li> <li>6. Winner of The Fresher's Debate, organised by LitSoc, the Literature club at IIITD.</li> <li>7. Runner's up at REINVENT- A writing-recitation event, organised by LitSoc</li> <li>8. Elected as a Member of the Student Council for the current session 2018-2019.</li> <li>9. Part of the Odyssey Ambience team- Was responsible for much of the ideas</li> </ol>	<p>Admin and Active Participant of the B.Tech. Aspirants page on Facebook, where he regularly solve students doubts and expose them to the institute's wonderful culture, and help them to think more than just placements.hel, along with the other admins, strive to help the students their queries and doubts regarding the institute.</p>
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				<p>for decoration of the college, including inclusion of theme: A Fantasy Saga</p> <p>10. Very Active in college cultural events: Club activities and CC events. Created Rangoli in front of the new academic building in Diwali Celebrations.</p> <p>11. Volunteer for the event 16 Words to Go and Publicity Volunteer at Esya 2017.</p> <p>12. Cleared the Fresher's Interview and Performed at the Fresher's Celebration (1 out of the only 4 boys selected)</p>	
16	Shreyash Arya	First Position - Hoopalot Basketball Intramural - IIITD			

17	Swati Gaba	<p>Gold medal in Sparring(Taekwondo) - Spardha, IIT BHU</p> <p>Gold medal in Poomsae(Taekwondo) - Spardha, IIT BHU</p> <p>Bronze medal in 4*100m relay - Spardha, IIT BHU</p> <p>Gold medal in Sparring(Taekwondo) - Sangram, IIT Roorkee</p> <p>Bronze medal in Poomsae(Taekwondo) - Sangram, IIT Roorkee</p>			
18	Palaksh Pathak	<p>1. Second place, Squash - Spardha '17, IITBHU</p> <p>2. Second place, Football - Spardha '17, IITBHU</p>		1. Second Place - Photography Contest; Tathastu, JDMC	
19	Aman Mehra		<p>I. Internships :</p> <p>1. Successful completion of 8 week Summer Internship at TCS(Tata Consultancy Services), developing the backend of the public web portal of an NGO named Development Focus spanning May and June of 2018. The aim of the portal was to help the NGO accomplish its goal of providing education to the underprivileged.</p> <p>II. Hackathons :</p> <p>1. First place (out of 55 teams) at Angelhack Bangalore in June 2018. Selected for a 12 week accelerator program to build up our ed-tech idea into</p>	Quiz - Placed Second in the Research Showcase Tech Quiz at IIIT-Delhi in March 2018.	Self Enhancement - Spent time during the summer enhancing my swimming and piano skills.

			<p>a viable startup and pitch to investors in Silicon Valley, San Fransisco .</p> <p>2. Second Runners Up (out of 42 teams) at Dishathon in June 2018(By DishTv) Bangalore. Built a video e-commerce solution.</p> <p>3. Asian runners up at Zohackathon 2017-Delhi (By US Govt. and WWF) held in October 2017. Presented our winning pitch at US Embassy before the US Ambassador and ex-Environment Minister of India.</p> <p>4. First Place in Byld Hackathon v13 conducted in 2018.</p> <p>III. Self Learning :</p> <p>1. Machine Learning By Andrew Ng course on Coursera, successfully completed in Febuary 2018.</p> <p>2. Convolutional Neural Networks course of Deep Learning Specialization by deeplearning.ai on Coursera, successfully completed in March 2018.</p>		
20	Nikhil Sachdeva				Winner, Microsoft Office Specialist India Championship, 2017 (Track: PowerPoint 2013)
21	Aamir Tufail Ahmad	3rd place in sparring and 4th place in Poomase demonstration in Taekwondo at IIT BHU Sports Fest. Received Japan Karate Federation membership card.			
22	Rupal Jain		Rails Girls Summer of Code scholar 2018		

23	Anish		Runners Up Technovation 2018, Runners up Zoohackathon 2017, 2nd Runners up Dishathon 2018		
24	Mayank Sehwat	Football-Silver Medal(BHU 2017)			
25	Baani Leen Kaur Jolly		<p>Google Venkat Panchpakesan Memorial Scholarship Winner 2017 - One out of 6 selected from all over India ; Youngest winner of the scholarship - won it in the freshman year</p> <p>Google Women Techmakers Udacity Scholar - One out of 100 women who were awarded this scholarship globally</p> <p>Google Sumer of Code intern 2018 - Working as a software developer at Systems, Anita B.Org Institute working to create an inclusive coding environment.</p> <p>Facebook F8 Scholar 2018</p> <p>Udacity Data Science Scholar 2018</p> <p>Travel Grant and pass for Grace Hoppers Celebrations India 2017</p> <p>Travel Grant and pass for Google Developers Day 2017</p>		
26	Katyayani Singh		<p>Rails Girls Summer of Code 2017</p> <p>Google WTM Scholarship 2017</p> <p>Google Udacity Scholarship 2017</p> <p>Mitacs Globalink Research Intern 2018</p>		
27	Anubhav Jain		<p>1. Paper accepted at the 9th IEEE International Conference on Biometrics: Theory, Applications, and Systems (BTAS 2018).</p> <p>2. Secured internships at IIT Bombay, Threye interactive</p> <p>3. Called for doing signal processing work on radars at DRDO. Paper to be submitted in August.</p>	Organizer Verbattle	

28	Mukul Chhabra		<p>1.IIGP 2018- It is a national level competition organised by DST ,Lockheed martin and tata.Our 4 member team was selected among 700 applications to be in top 30 and we were called in the final round in iit bombay to give presentation of our proposed project,we were selected among top 10 out of top 30 (our rank was 2nd) and have got a 10 lakh rupees fund to make our project and also we will be given regular mentoring in iit bombay and iim Ahmedabad.</p> <p>2.I am vice captain of aurora-uav team iiit delhi and our team has won \$850 this year in auvsu international competitions held in united states.</p>		
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29	Dhruv Pargai	<p>2nd position as the captain of the College Football team at Spardha 2017 - IIT BHU's inter-college sports fest</p> <p>2nd position in Squash at Spardha 2017 - IIT BHU's sports fest</p> <p>2nd position in Delhi International Swimming Championship held in Talkatora stadium ( 3.8 km Men category )</p> <p>Two times 'Player of the match' award in RFYS 2017 Football Tournament Qualifier matches by scoring 6 individual goals in 2 matches making it to the list of top 10 goal scorers of the tournament.</p>		<p>Inter college music competitions:</p> <p>1st position in Classical Vocal Solo - Janki Devi memorial College</p> <p>1st position in Classical Vocal Solo - Maulana Azad Medical College</p> <p>1st position in Light Indian Solo - Dyal Singh College</p> <p>1st position in Semi-classical Solo - Ramanujan College</p> <p>1st position in Classical Vocal Solo - Sri Venkateswara College</p> <p>1st position in Bollywood Solo - Jesus and Mary College</p> <p>2nd position in Classical Vocal Solo - Dyal Singh College</p> <p>2nd position in the Voice of YWCA - Delhi state solo singing competition</p>	<p>Successfully completed the Five-week program at Berklee College of Music, Boston.</p> <p>Got acceptance for Contemporary Performance ( Production concentration ) Master's in Music program at Berklee College of Music, Valencia Campus 2018-2019 with a scholarship of 8000 USD</p> <p>Completed the 10 week Performance Program ( Fall 2017 ) at Global Music Institute, Greater Noida</p>
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INDRAPRASTHA INSTITUTE *of*  
INFORMATION TECHNOLOGY **DELHI**

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