

ANNUAL REPORT 2019-2020

August 2019 – July 2020



ENGINEERS WITH
SOCIAL RESPONSIBILITY

**Dhirubhai Ambani
Institute of Information and Communication Technology**

Near Indroda Circle, Gandhinagar, Gujarat, India 382 007.

Tel.: +91 79 3052 0000 | Fax: +91 79 3052 0010 | Web: www.daiict.ac.in



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Shri Dhirubhai Hirachand Ambani

(28th December, 1932 – 6th July, 2002)

Founder Chairman, Reliance Group
Founder Chairman, DA-IICT





Contents



Board of Governors	6
Director's Page	7
About the Institute	8
Academic Programs	10
Placements and Internships	16
Sixteenth Convocation	21
Research and Development	23
Workshops, Special Lectures and Visitors	27
Faculty Publications	29
Awards and Professional Activities	48
Faculty and Staff Updates	63
Student Activities and Achievements	65
Resource Centre	72
Infrastructure	74
Annexures	76

1. Management
2. Theses, Projects and Reports
3. Faculty
4. Staff

Board of Governors



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Shri Anil D. Ambani Chairman, Reliance ADA Group, Mumbai

Members

Prof. D. Narasimha Reddy Director, CR Rao Advanced Institute of Mathematics, Statistics and Computer Science, Hyderabad

Prof. K.S. Dasgupta Director, DA-IICT

Prof. Bimal Roy Head, PC Bose Centre for Cryptology and Security, Indian Statistical Institute, Kolkata

Smt. Anju Sharma Principal Secretary, Department of Higher and Technical Education, Government of Gujarat, Gandhinagar

Shri Hareet Shukla Secretary, Department of Science and Technology, Government of Gujarat, Gandhinagar

Shri Suresh Rangachar Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai

Shri Dharmendra Bhandari Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai

Shri Punit Garg Reliance Communications Limited, Mumbai

Shri Manikantan Iyer Reliance Communications Limited, Mumbai

Shri NK Mangla Reliance Communications Limited, Mumbai

Shri Gurdeep Singh Reliance Communications Limited, Mumbai

Prof. Suman K. Mitra Dean (Academic Programs), DA-IICT, Gandhinagar

Prof. Sanjeev Gupta Dean (Research & Development), DA-IICT, Gandhinagar

Secretary

Shri Soman Nair Executive Registrar, DA-IICT, Gandhinagar

Director's Page



This report covers a year of unprecedented challenges for our institution and for the world at large. The global pandemic disrupted the normal rhythm of our institutional life and compelled us to radically change the way we taught, learnt and researched in the face of constant uncertainty. Yet I am happy to state that most of the academic goals set by us in the previous year were met and new ones put in place.

Our faculty completed the work of developing curricula for two new programmes, MSc in Data Science and BTech (Mathematics and Computing). Both programmes were approved by the Board of Studies and the Academic Council and are now ready to be launched in 2020-21. These programmes will consolidate and expand our core competencies in ICT education and research.

I am also pleased to note that our faculty have continued to strengthen our research activities with project funding from state and national agencies. We have several ongoing projects funded by the Ministry of Electronics and Information Technology, GUJCOST, Government of Gujarat, SAC-ISRO, TIH IIT Bombay among others. The results of our research are being published regularly in leading peer-reviewed journals and conference proceedings.

Our graduates continue to draw some of the best recruiters in the industry. This validates the outstanding quality of education they receive here. Our regular curriculum reviews and new course offerings ensure that our undergraduate and graduate programmes are invigorated with new pedagogic and research inputs. We remain committed to our vision of being a premier research-led academic institute and aspire to be recognised as a Centre for Excellence by the state.

I take this opportunity to express my sincerest appreciation of the faculty, staff and students of DAIICT for displaying remarkable resilience and solidarity during the pandemic and making sure that the 'new normal' of online teaching and remote working did not stop us from achieving our academic goals. I also note with deep regret that we lost two of our finest faculty to the pandemic, the late Prof Suman Mitra and Prof. Asim Banerjee. We will remember their contributions to the Institute with much respect and gratitude.

Finally, I would like to thank the members of the Governing Body and the Reliance ADA Group for their guidance in managing the Institute and record my grateful appreciation of the State and Central Governments for their continuing support and commitment to our academic endeavours. The collective energy, passion and progressive vision that inspires us all are what make this Institution unique among its peers.

I am excited for the year that lies ahead and all that we can achieve together.

About the Institute

THE INSTITUTE

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar was founded in 2001 by the renowned visionary Industrialist, Shri Dhirubhai Hirachand Ambani with a vision 'to help build a knowledge-led society founded on intellectual competitiveness for global leadership.' DA-IICT is managed by a Board of Governors chaired by Shri Anil Ambani, Chairman, Reliance ADA Group with visionaries and leaders from academia, government and industry.

DA-IICT is established as a Society under the Societies Registration Act, 1860 and Bombay Public Trust Act 1950. An Act of the Gujarat State Legislature in 2003 conferred upon DA-IICT the status of a University. The University Grants Commission has included DA-IICT in the list of Universities maintained under Section 2(f) of the UGC Act, 1956. In 2009, DA-IICT became a member of the Association of Indian Universities (AIU).

DA-IICT is envisioned to be a leader in higher learning and research in Information and Communication Technology and allied domains.

To support this, right from the beginning, the Institute has attracted the best faculty with Doctorate from prominent institutions across the world having exceptional research credentials.

DA-IICT offers two undergraduate and six postgraduate programs including a doctoral program. The undergraduate programs are B.Tech in Information and Communication Technology (ICT) and B.Tech (Hons.) in ICT with Computational Science as minor.

The postgraduate programs are M.Tech (Information and Communication Technology), M.Tech (Computer Science) with specializations in Information Security and Data Sciences, M.Tech (Electronics and Communication Engineering) with specialization in Wireless Communication and Embedded Systems, M.Sc (Information Technology), M.Des (Communication Design) and Doctoral Program in Technology and Humanities. Launched from the academic year 2019-20, M.Tech (Computer Science) and M.Tech (Electronics and Communication Engineering) are jointly conducted with the Indian Institute of Technology, Jammu and C.R. Rao Advanced Institute of





Mathematics, Statistics and Computer Science, Hyderabad respectively.

It has been planned to design and launch an M.Sc Program in Data Science and a B.Tech Program in Mathematics and Computing from the Academic Year 2020-21.

The Alumni of the Institute consist of over 5500 ICT engineers, design professionals, agriculture and rural development professionals and doctoral scholars. They have carved a name for themselves in technical, managerial and research domains in major Indian and International technology corporations and institutions. They are spread across the world and have achieved numerous feats as technologists, managers, researchers and entrepreneurs.

DA-IICT designs and offer continuing education programs to upgrade the skills of researchers, academicians and professionals in industries, public and government organizations. These programs are knowledge sharing and they are in the forms of hands-on training.

The Institute houses a Government of India funded Incubation Center to promote innovation and entrepreneurship culture among the DA-IICT Community. The Government of Gujarat has been supporting and funding start-ups under the Incubation Center.

DA-IICT has developed collaborations with industry, teaching and research institutions in India and abroad for faculty exchange, joint research, and guidance of masters, doctoral and post-doctoral scholars.

DA-IICT is spread over 50 acres of land in Gandhinagar, the Capital City of Gujarat. The campus is carefully planned and designed. The full green coverage on the campus with trees, lawns, and bushes bearing exotic flowers surrounding the buildings and pathways instills environment awareness among students and enrich their learning. The landscape was planned and developed in a manner that the rainwater seeps into and recharges the campus wells. The recycled water is used to irrigate campus gardens and lawns. The campus is also an abode for various species of birds and many rare birds are spotted on the campus.



Academic Programs

The Institute offers eight academic programs -- two undergraduate and six post-graduate programs including a Doctoral Program. The feature of the academic programs is that they are interdisciplinary, and have an effective combination of core and elective courses in ICT, basic sciences, humanities, arts, design, social sciences, management and project-based flexible learning and internships in rural, industrial and research environments. In the case of M.Tech Programs, there are specializations and dissertation modules. In addition to foundational and elective courses, all the programs are

equipped with internships and projects. The curricula of the programs are periodically reviewed by the Curriculum Review Committees with external experts from academia and industry and vetted by the Board of Studies and finally approved by the Academic Council. The Review Committees take feedback from experts from academia, industry, alumni and employers on curriculum revision or induction to ensure that the curriculum is updated and will effectively prepare the students to be abreast with the latest technology and research skills required by their employers. The details of the academic programs offered are given in **Table 1**.

Table 1: Academic Programs

Sr. No.	Programs	Commencement	Duration (Years)	Annual Intake*
1	B.Tech (ICT)	2001	4	270
2	B.Tech (Honours) in ICT with minor in Computational Science	2013	4	70
3	M.Tech (ICT)	2002	2	80
4	M.Tech (CS) with specializations in Information Security and Data Sciences	2019	2	40
5	M.Tech (E&CE) with specialization in Wireless Communication and Embedded Systems	2019	2	20
6	M.Sc (Information Technology)	2002	2	120
7	M.Des (Communication Design)	2004	2	20
8	PhD	2002	3-5	10-20

* Inclusive of NRI/Foreign Students. Exclusive of supernumerary seats filled in by the Admission Committee for Professional Courses, Government of Gujarat.

ADMISSIONS FOR 2019-20 BATCHES

The preparations for 2019-20 admissions began in March 2019 with the release of advertisements in regional/national dailies covering the entire country. The admissions were also announced at the websites of the Institute and through posters, brochures and social networks. The process of online filling in applications was open from 12th April 2019. The admissions and counselling were carried out by using an online system.

The admissions to 50% seats of the B.Tech Programs were carried out by the Admission Committee for Professional Courses (ACPC), Government of Gujarat and the other 50% were managed by the Institute. The Indian Institute of Technology, Jammu, carried out the admissions to the M.Tech (CS) Program with specializations in Information Security and Data Sciences. The Institute handled the admissions to all other postgraduate programs.



Undergraduate Programs

B.Tech (ICT) and B.Tech (ICT) Honours with Computational Science as Minor

The approved seats for B.Tech (ICT) Program are 270 and for B.Tech (Hons.) in ICT with Computational Science as minor program 70 tallying 340 seats. Out of them, 170 were filled in by the Admissions Committee for Professional Courses, Government of Gujarat, following their rules and regulations on admissions. The applicants to these seats are Gujarat domiciled students. The admissions to the other 170 seats including 56 seats earmarked for Non-Resident

Indians, Foreign Nationals and Persons of Indian Origin were managed by the Institute.

The admissions to the Institute seats were based on the All India Rank of Joint Entrance Examination Main 2019 (JEE Main 2019). The admissions to the seats offered to Non-Resident Indians, Foreign Nationals and Persons of Indian Origin were carried out based on the SAT II or JEE Main score. The Institute follows the set guidelines for admission of reserved category students. The starting and closing JEE merit ranks of the students admitted are given in **Table 2**.

Table 2: JEE Merit Ranks of Students

Rank	Category	B.Tech (ICT)	B.Tech (Honours) (CS)
Best JEE Main Rank	All India (Gen)	2416	3057
Lowest JEE Main Rank	All India (Gen)	12372	7936

PG Admissions

M.Tech (ICT): For 2019-20 batch admission, the Institute reintroduced four specializations, namely, Communication and Signal Processing, Machine Learning, Software Systems and VLSI and Embedded Systems. The admissions to the program were based on a valid Graduate Aptitude Test in Engineering (GATE) score and in selected cases by an additional test and interview conducted by the Institute. Sixty-two students were admitted to the program.

M.Sc (IT): The students were selected through an entrance test conducted by the Institute at selected centers in the country. The final merit list was prepared based on the aggregate score in the test. One hundred and twenty students were admitted.

M.Des (Communication): The students admitted to the program were shortlisted through a Design Aptitude Test (DAT) conducted by the Institute. The final selection was based on the

combined scores attained in DAT, interview and the Statement of Purpose (SOP) submitted online along with the admission application. The candidates with a valid CEED score were directly called for the interview. Twenty-five applicants were called for an entrance test/interview and 12 were admitted to the program.

PhD: The admission to the program was through DA-ICT entrance test/CPI obtained in M.Tech Degree awarded by DA-ICT, CSIR/UGC-NET qualification, or GATE score. Out of 68 applicants, 36 candidates were called for an interview on clearing the admission test. Fifteen candidates were shortlisted for admission and 7 have joined the program.

Table 3 shows the number of students admitted at the end of the admission process.

ORIENTATION

The orientation for the undergraduate students was held from 31st July 2019 to 3rd August 2019

Table 3: Students Admitted to PG Program

Programs	Application Received	Admission Offered
MTech (ICT)	422	70
MTech (EC)	25	20
MSc (IT)	624	120
MDes (CD)	34	22
PhD	103	12

* The admission of MTech (CSE) specialization in Information Security and Data Science is handled by IIT Jammu.

and for post graduate students from 24-27 July 2019. The Program is designed to provide an overview of the whole realm of Institute life, from academics to extra-curricular and social activities to the newly admitted students and integrate them into the Institute community. The sessions conducted covered the genesis and mission of the Institute, academic policies and procedures, student activities, and other aspects of campus life. The senior student volunteers conducted special sessions on campus and hostel life. One of the sessions during the orientation was held for parents, and the parents met faculty, staff and senior students. The orientation acquainted the students and parents with the course structure, evaluation system, grading, academic regulations, campus and infrastructure facilities.

The uniqueness of the undergraduate orientation program was that a boot camp was organized with a variety of activities to prepare the students for the transition to academic life at the Institute.

FINANCIAL SUPPORT

The Institute provides financial support in the form of fellowships, scholarships and teaching and research assistantships to eligible students.

Reliance Merit Scholarships

Reliance ADA Group, as part of their Corporate Social Responsibility, has instituted ten merit scholarships in an academic year for students of the B.Tech (ICT) Program. The scholarship is equal to the full tuition fee for the duration in which the scholarship is awarded. During the academic year 2019-20, eighteen B.Tech students of all batches together have received the Scholarship.

DA-IICT Merit Scholarship

The Merit Scholarships are awarded to the top five students admitted to the B.Tech program having an All India Rank not exceeding 5000 in the JEE Main Examination. During the academic year 2019-20, in autumn semester fourteen and winter semester, fifteen students were awarded the Merit Scholarships.

DA-IICT Merit-cum-Means Scholarship

The Merit-Cum-Means Scholarships are awarded to five students in each semester based on their academic performance and whose parent(s)/guardian (s) annual income is up to Rs. 3.00 lakh. Twenty students have received the scholarship during the academic year 2019-20.

Assistantships

The Institute offers full-time teaching assistantships with monthly fellowship/scholarship to PhD Scholars and M.Tech (ICT) students. The eligible B.Tech (ICT) students are also offered half-time teaching assistantships in their final year studies. During the reporting year, 15 PhD Scholars, 60 M.Tech and 22 B.Tech students received assistantships.

TCS Research Fellowship

The TCS Foundation engaged in promoting and funding projects and/or programs, relating to Corporate Social Responsibility (CSR), has instituted Research Scholar Program at the Institute to promote scientific research in the area of technology. This prestigious program provides attractive doctoral fellowships and contingency grants to full-time students pursuing PhD programs in areas of Computer Engineering, Computer Science, Information Systems,



Information Technology and Software Engineering. Over and above fellowship, the Scholars are eligible to receive support for paper presentation in one International refereed conference, held outside India, and two National/International refereed conferences held in India, during the Scholar's tenure.

Ms. Jainisha Sankhavara and Mr. Prashant Mansukhbhai Domadiya, 2015-16 batch PhD Scholars, continued to be the recipients of the Fellowship in the academic year 2019-20.

TCS Students Award

The DA-IICT is one of the institutions selected by TCS for the 'TCS-100 Best' high-ranking engineering institute student award scheme. The 'TCS 100 Best' is to enhance student's attention towards academics through healthy competition.

Chief Minister Scholarship Scheme and Mukhyamantri Yuva Swavlamban Yojana (MYSY), Government of Gujarat

The Government of Gujarat has designated DA-IICT as one of the Institutions to guide the undergraduate students in the preparation and submission of applications for the Chief Minister Scholarship and MYSY. The Registrar's Office guides and assist students from DA-IICT as well as students from other Institutions to apply for the 'Mukhyamantri Yuva Swavlamban Yojana (MYSY).' The Scheme provides financial help to bright and needy undergraduate students whose parents' income is up to Rs.6.00 lakh. Three hundred twenty six B.Tech students have received the scholarship.

THESES

Master's Theses

The M.Tech (ICT) curriculum includes Software Systems, Machine Learning, VLSI and Embedded Systems and Communication and Signal Processing specialization tracks. After their second semester studies, the students pursue two semesters of research under the guidance of a faculty advisor and submit a master's thesis to obtain the degree specializing in the respective track. The students of MSc (IT), MSc (ICT-ARD) and M.Des (CD) programs work full time on projects during their fourth semester

at DA-IICT or at leading organizations. The list of theses and project reports completed during the year is given in Annexure 2.

INSTITUTIONAL COLLABORATION AND STUDENT EXCHANGE PROGRAMS

The Institute has signed Memorandums of Understanding with national and international institutions to promote and enhance academic and research interaction as well as collaboration. The MOUs which were in force during the reporting period are as follows:

- **Indian Navy:** To admit eligible candidates sponsored by the Navy for M. Tech and other advanced courses including PhD, joint research and development and training.
- **Space Application Centre, Indian Space Research Organisation:** To carry out joint activities between the two institutions which will include research projects; doctoral studies of SAC officers at DA-IICT, the internship of PG students at SAC, training of SAC officials, visit of faculty to SAC and SAC scientists to DA-IICT for research and academic pursuits, joint workshops and conferences.
- **Reliance Communications Limited:** To institute the Research Chair to lead research and education in Computational Science and setting up of a Computational Science Laboratory at DA-IICT.
- **Tata Consultancy Services:** To nominate suitable full-time PhD candidates of DA-IICT for the TCS Research Scholar Program.
- **eiTRA-eInfochips Institute of Training Research and Academics Limited, Ahmedabad:** To train and upgrade the skills of eiTRA employees, conduct lectures for academic programs offered by Ganpat University, provide consultancy and guidance for technological research and project execution, facilitate DA-IICT students to carry out their internship and project work at eiTRA-eInfochips and jointly offer continuing education programs.

- **Ericsson India Private Limited:** To impart training to the B Tech students who have completed their sixth semester of studies at DA-IICT and consider employment of the certified students with Ericsson India.
- **Ramakrishna Sarada Sevashram, Bastar:** To sponsor eligible candidates for PhD studies at DA-IICT, develop and support joint research programs and conduct specialized courses.
- **University of Antwerp, Belgium:** To exchange faculty, students and for scientific co-operation.
- **Indian Institute of Technology, Gandhinagar:** To collaborate on teaching and research and exchange of scientific and academic personnel.
- **International Crops Research Institute for the Semi-Arid Tropics, Hyderabad:** To participate in teaching, training and research; explore external funding opportunities for research, exchange and host students and scholars for research and degree programmes by each other and exchange scientific materials and publications.
- **Institut Supérieur D'Electronique De Paris, France:** For exchange of faculty, students and joint research.
- **University of Dayton, USA:** To develop academic exchange and co-operation in teaching and research for the advancement and dissemination of learning.
- **University of Evora (Universidade de Evora), Portugal:** For academic exchange, collaboration in teaching, research and exchange of scientific materials and publications, for advancement and dissemination of learning. Under the provisions of the MoU, DA-IICT is one of the Asian University Partners with the University of Evora in the Erasmus Mundus Fellowship Program of the European Commission.
- **University of Hildesheim (Stiftung Universität Hildesheim), Hildesheim, Germany:** For academic and research collaboration, exchange of faculty, staff and students and exchange of academic information, scholarly information, materials and publications.
- **University of Swaziland (UoS), Swaziland:** For academic exchange, research and faculty development of UoS for the advancement and dissemination of learning.
- **Indian Statistical Institute:** For the visit of faculty to participate in joint teaching, research, and conferences; visit of students to each other Institutes for short term courses, internships or mini-projects; prepare, as necessary, additional working programs detailing specific norms and contents of co-operation and to exchange scientific materials and publications.
- **INFLIBNET Centre, Inter-University Centre of the University Grants Commission:** To participate in the digitization of theses and dissertations and building-up of a digital repository and to promote, share and host DA-IICT's electronic theses and dissertations in 'Shodhganga.'
- **Entrepreneurial Development Institute of India:** To collaborate in mutually selected projects to share expertise for tackling problems relating to ICT, entrepreneurship, socio-economic development etc. involving the exchange of personnel, organization of joint conferences, teaching and training programs.
- **Springer Science+Business Media Singapore Pte Ltd:** To publish jointly books and individual titles authored by faculty, researchers and doctoral scholars of DA-IICT following Springer's norms of copyrights and editing and market them worldwide through Springer's network.



- **ICICI Bank:** To participate in the ICICI Trinity Program. The Program encourages and promotes students' talent to bringing forth new ideas and innovations which can be applied in the banking/finance industry and help in their commercialization. The Program supports final year UG/PG students of five students team. In the case of PhD Scholars, a single Scholar can seek support.
- **Bennett University, Noida:** To collaborate with Leadingindia.ai, one of the largest nationwide initiatives on skilling and research in Deep Learning and Artificial Intelligence Technologies. This project has the potential to change the landscape of Artificial Intelligence research in India.
- **Indian Institute of Technology, Jammu:** For academic and research collaboration, particularly, to design and offer teaching programs leading to Degrees, guide

students on internships, thesis and jointly engage in research, organize conferences, workshops, seminars and other dissemination activities and exchange of faculty, staff and students.

- **Universiti Teknologi Mara, Malaysia:** To jointly engage in research, exchange of students for periods of study and/or research, joint guidance of students on projects and theses, exchange of faculty and staff and organize joint seminars, conferences and meetings on research issues.
- **National Digital Library of India:** To harvest the institute's doctoral theses metadata for NDLI for its national project to integrate existing digitized and digital contents across educational and cultural institutions/bodies to facilitate its global dissemination.

Placements and Internship

PLACEMENTS

DA-IICT has been one of the most preferred institutes by companies looking to add bright young talent to their workforce. A good number of students have been recruited with attractive packages by leading companies like Microsoft, Amazon, Zomato, GoldmanSachs, LinkedIn, Sprinklr, Flock, OYO, Phillips, etc. The 2019-20 placement season saw recruiters from various domains of industries offering job profiles like Software Engineer, R&D Engineer, Business Technology Analyst, Data Scientist, Site Reliability Engineer, ASIC Design Engineer, Business Intelligence Consultants etc. More than 135 companies participated in campus placement for the batch graduating in 2019-20. At the same time, 20 (twenty) companies visited DA-IICT for offering a summer internship to the

pre-final year students through the campus placement process. Some of them were BNY Mellon Technology(Only for women), Optum (a United Health Group Company), Media.net, Morgan Stanley, Deutsche Bank (DBOI Global Services Private Ltd.), MAQ Software etc. Apart from the regular placement activities, the placement cell initiated the process of tying up a group of current students with alumni from the institute to mentor the students and help them be better prepared for the campus placement process. The cell also started with assessments and interview preparation for pre-final year students to help them perform better in the campus placement process to get internships and final job offers in the companies that participate in the campus placement process.

Table 4: Placement Status

Placement 2019-20	B.Tech	M.Tech	M.ScIT	M.Des
Students opting for campus placement (each batch)	249	74	114	5
Students opting out of campus placement (each batch)	45	7	3	0
Total	294	81	117	5

Details	B.Tech	M.Tech	M.ScIT	M.Des
Total Jobs offered	208	52	72	1

The students are equipped with the knowledge imparted by the esteemed faculty at DA-IICT through the curriculum that is dynamically updated in line with the changes that are taking place in the areas of Information and Communication Technology. They take advantage of the multiple initiatives and participate and do well in contests at national and global levels. These help them find employment opportunities in the increasingly diverse domains offered by the spectrum of recruiters visiting DA-IICT Gandhinagar.

The average annual salary package was Rs. 12.8 lakh. The highest salary package touched Rs. 43 lakh per annum.

RURAL INTERNSHIPS

Rural Internship is a mandatory requirement of the B.Tech curriculum. The objective is to expose students to the social and economic realities of rural lives; sensitize them to vulnerabilities the rural people face; and facilitate them to appreciate constraints and opportunities for the development of rural India. A Rural internship is for four weeks at the end of their Third Semester during December vacation. A three-member Rural Internship Committee appointed by the Director is responsible for the Rural Internship.

The BTech 2018 Batch comprised of 322 students. They were placed in 8 States with 30 Non-Governmental Organizations. The Rural Internship period was from December 01 to December 28. Details appear in **Table 5**.



Rural Internships

Table 5: Non-Governmental organisations hosted students for Rural Internship

Sr. No.	Name of the Organisation	State	No. of Students
1	Ajeet Rural Development Foundation	Gujarat	7
2	Akshaya Patra	Gujarat	3
3	ApnaGhar Ashram	Gujarat	5
4	Aryasamaj, Visavadar	Gujarat	10
5	Blind People's Association	Gujarat	15
6	Bolbala Charitable trust	Gujarat	10
7	Edu care India	Gujarat	15
8	ESI Sughad	Gujarat	18
9	GKSM Trust Kamrej	Gujarat	32
10	Gramin Sewa Ashram Himachal	Himachal Pradesh	13
11	HiFEED Dehradun	Uttarakhand	16
12	Incredible Himachal Pradesh	Himachal Pradesh	4
13	Ishwar Gram Vikas Trust, Patan	Gujarat	18
14	J.V Naria, Jamnagar	Gujarat	7
15	Kasturba Sevashram	Gujarat	7
16	Parvatiya Jan Kalyan Sansthan	Gujarat	12
17	People's Welfare Society, Junagadh	Gujarat	10
18	PNR Society	Gujarat	13
19	Pratibha foundation	Gujarat	12
20	Rajasthan Mahila Kalyan Mandal Sanstha, Ajmer	Rajasthan	9
21	Seven Sisters Development Assistance (SeSTA)	Assam	7
22	Shiv Shiksha Samiti, Ranoli, Tonk	Rajasthan	2
23	Shree Mateshwari Vikas Seva Samiti	Rajasthan	3
24	SUTRA	Himachal Pradesh	15
25	Tagore Society for Rural Development, West Bengal	West Bengal	9
26	Tara Sansthan, Udaipur	Rajasthan	14
27	UETS, AP	Andhra Pradesh	5
28	Vanvasi Kalyan Ashram, Ahmedabad	Gujarat	10
29	VRTI, Bhavnagar	Gujarat	6
30	Yuva Unstoppable	Gujarat	15

RESEARCH/INDUSTRIAL INTERNSHIPS

At the end of the sixth semester, the students of the B.Tech program (Batch 2017) undertake the research or industrial internship of six to eight weeks during the summer vacation. A research internship can be done either at DA-ICT or at other academic or R&D institutions under the supervision of a faculty or scientist. The objective of this internship is to expose the students to cutting edge research at an undergraduate level. An industrial internship can be done at industrial companies. The industrial internship's purpose is to familiarize the students with the corporate environment and team-driven development works.

The B.Tech 2017 batch students took internships across Industry, Research and Development

Laboratories, and National Academic Institutions (including DA-ICT), Microsoft, Amazon, Morgan Stanley, Sprinklr, LinkedIn, Deutsche Bank and a few startups and new companies. Different institutions such as the Indian Institutes of Technology, Indian Institutes of Management, National Institutes of Technology, and ISRO are some of the academic/research institutions where the students did their research internships. A total of 382 students undertook internships, out of which 61 were summer internships, and 321 were industrial internships. On completion of internships, the students made their presentations. It was observed that through research/industrial internships, they could get excellent exposure to implementing their knowledge on ICT in various problem-solving or industrial applications.

Table 6 : Organisations hosted students for Industrial Internships

Sr. No.	Name of the Organisations/Institution	No. of Students
1	Acies Consulting LLP	17
2	Acko Technology & Services Pvt. Ltd.	3
3	Almaconnect	1
4	Almashine	2
5	Amadeus	3
6	Amazon	20
7	AssetTrackr Pvt. Ltd.	2
8	Awaaz De Infosystems Pvt. Ltd.	2
9	RAx Labs Inc.	2
10	Cadence Design Systems	1
11	Capgemini	4
12	Capillary Technologies	4
13	Cloudera	4
14	COVIAM Technology & Services Pvt. Ltd.	10
15	EmpowerED	1
16	Endurance International Group	2
17	ezDI Solutions (India) LLP	1
18	FactSet System India Pvt. Ltd.	1
19	Fintech Global Center	3
20	HashedIn Technologies	3
21	Fractal Analytics	3
22	Futures First Info Services Pvt. Ltd.	1
23	GE Digital	3
24	Goldman Sachs	1
25	Gridle	5
26	Grofers	2
27	HashedIn Technologies	2
28	Infocusp Innovations Pvt. Ltd.	3
29	InfoObjects Software Pvt. Ltd.	3
30	Innovaccer Analytics Pvt. Ltd.	3
31	Innovify	10
32	Juniper Networks India Pvt. Ltd.	3
33	KPIT Technologies	6
34	Kristal.ai	4
35	Kuliza Technologies Pvt. Ltd.	2
36	Magenta Connect Pvt. Ltd.	5
37	MAQ Software	12
38	Mercer Mettl	2
39	Microsoft India Pvt. Ltd.	4
40	MindTickle Interactive Media Pvt. Ltd.	2
41	Morgan Stanley	2
42	Nagarro Software Pvt. Ltd.	3
43	Nestaway Technologies Pvt. Ltd.	2
44	Nutanix India Technologies Pvt. Ltd.	2
45	Ontic Technologies	5
46	Opshub Technologies Pvt. Ltd.	5
47	Optimized Solutions Pvt. Ltd.	5
48	OYO (Oravel Stays Private Limited)	11

Sr. No.	Name of the Organisations/Institution	No. of Students
49	Pay1 (MindsArray Technologies Pvt. Ltd.)	4
50	Philips India Limited	5
51	Proptiger	7
52	Qualcomm - Only for Women	1
53	Quikr India Pvt. Ltd.	3
54	Rishabh Software	4
55	S&P Global	2
56	Samsung R & D	5
57	Searce Logistics LLP	5
58	Si2 Technologies	1
59	SiFive	2
60	Silverleaf Capital Services Pvt. Ltd.	3
61	Skillwin Technology Pvt. Ltd. (Octro Inc.)	3
62	Sprinklr India Pvt. Ltd.	20
63	Sublime Data Systems	2
64	Synopsys India Pvt. Ltd. (Only Internship)	1

65	Synoptek	4
66	Tekion India Pvt. Ltd.	12
67	Treebo Hotels	5
68	Truebil.com (Paix Technology Pvt. Ltd)	2
69	TruSource Technology Pvt. Ltd.	8
70	VADICT Innovations Pvt. Ltd.	4
71	Verse Innovation Private Limited,	1
72	VISA	1
73	Veratech Intelligence Pvt. Ltd.	2
74	Voicezen India Private Limited	5
75	Vuclip India Pvt. Ltd.	8
76	Zapr Media Labs	2
77	ZETA	1
78	ZS Associates (Data Science Challenge - 2019)	1

Table 7. Organisations hosted students for Summer Internships (off-campus through Placement Cell) - 61

Sr. No.	Name of the Organisations/Institution	No. of Students
1	Microsoft	13
2	Sprinklr	7
3	Amazon	14
4	Morgan Stanley	4
5	LinkedIn	2
6	Goldman Sachs	6
7	Deutsche Bank	8
8	Innovaccer Analytics	1
9	Headout	1
10	Kristal.ai	3
11	Opshub	2

Sixteenth Convocation

The sixteenth annual convocation of the Institute was held on 18th January 2020. The Degrees were awarded to the students of the fifteenth batch of B.Tech (ICT), the third batch of B.Tech (Honours) in ICT with a minor in Computational Science, the sixteenth batch of M.Tech (ICT) and M.Sc (IT), the twelfth batch of M. Des (CD) and 8 PhD Scholars numbering 475 students. The following students were awarded President's Gold Medal for scholastic performance:

Sr. No.	Name	Program
1	Shubham D Annadate	B.Tech (ICT)
2	Agam A Shah	B.Tech (Honours) ICT with Minor CS
3	Dimple J Shah	M.Tech (ICT)
4	Archan C Ranade	M.Sc (IT)

The Chief Guest Dr. VK Saraswat, a Member of NITI Aayog began his convocation lecture by congratulating graduating students for their excellent performance and for achieving the

coveted and cherished degrees. Dr. Saraswat also congratulated esteemed teachers, and mentors for sharing their valuable knowledge and for moulding and training the young minds in different disciplines.

Dr. Saraswat shared the vision of Digital India for Innovative Growth. He elaborated on the digital revolution and the challenges of the analysis and processing of data for possible economic and social gains. Dr. Saraswat outlined the six identified elements and indicators of digitisation matrices.

According to Dr. Saraswat, an increase of digitisation of 10% points triggers 0.50% to 0.62% gain in the per capita GDP. While sharing some interesting IT statistics, Dr. Saraswat explained the factors that can affect Internet growth in our country. Further Dr. Saraswat enlisted key achievements of the Indian government in the digital space which has benefitted a large population. He brought out the different levels of digital adoption across various businesses and stressed the need for the creation of a nationwide



digital infrastructure encompassing AI, Big Data and IoT for the infusion of technological intelligence.

Dr. Saraswat predicted that technologies like 5G Network, Cloud Computing, Big Data Analytics, Internet of Things (IoT), BlockChain, Artificial Intelligence, 3D Printing / Additive Manufacturing, Robotics Process Automation (RPA) are likely to transform the digitisation, telecom and industrial landscape considerably. He urged Industry and Academia to help in transforming the digital economy of India. He suggested academia to provide skill training in

disruptive technologies and design suitable curricula for all levels. Dr. Saraswat envisioned the doubling of GDP level and the creation of new job markets by 2025 by adopting digital applications. Dr. Saraswat called for the development of indigenous telecom equipment where academia and industry need to play a major role by promoting start-ups and incubating new technology at a significant scale.

Finally, Dr. Saraswat concluded his lecture with a call to innovate and produce high-end technology and system engineers to contribute to the inclusive growth of India through Digital India Mission.



Winner of President's Gold Medal



Dr. V. K. Saraswat, The Chief Guest



Research and Development (Sponsored Projects and Entrepreneurship)

DA-ICT has been a research-led University since its inception in 2001. Ever since it was founded, the Institute has had a vibrant research environment. This has brought dynamism to all academic activities. It stands for a confluence of several interrelated disciplines, from technology and basic sciences to humanities and social sciences catering to both academia and industry. The Institute aims to encourage basic, applied and developing research conducted both by students and members of faculty alike. The Institute's encouragement clearly reflects in the policies the Institute has formulated for research activities and professional development. Although the needs of faculty are as diverse as the disciplines they represent, they, however, share the common goal of building their capacities to generate new ideas and ways of understanding society.

DA-ICT's infrastructure, ranging from various well-equipped laboratories, specialized equipment, campus-wide networking, high-speed internet access and subscription to hundreds of print and online journals matches the general expectations of inter-disciplinary research. The faculty is also encouraged to seek out the latest opportunities for research

collaboration and funding. Partnerships with the industry are a priority. Besides, all efforts to participate in bilateral, international and multi-institutional research grants aimed at solving critical problems will be duly supported. In this challenging fiscal climate, when the traditional individual research grant has become increasingly competitive, multi-institutional grants can be an important source of funding for research

The faculty, students, and research staff are active in research in several academic disciplines, including but not limited to the following: computer science, electronics and communication, mathematics, physics, agriculture and rural development, humanities, and social sciences. They have been regularly publishing their research work in leading refereed journals and conferences. Over the last decade, a large number of sponsored projects have been initiated by faculty, including international projects.

SPONSORED PROJECTS

In the year 2019-20, the Institute received grants for nine new sponsored projects.

Table 8: New Projects

Title of the Sponsored Project	Sponsoring Agency	Investigators
IoT Enabled 2-D Nanomaterial Leaf Wetness Microsensor on Flexible Substrate for Integrated Plant Disease Management	DST-SERB	Prof. Vinay S Palaparth
Adaptive Beam Forming for Mitigation of Interference and Jamming at the Ground Terminal of Global Navigational Satellite Systems (GNSS)	ISRO-DoS	Prof. Sanjeev Gupta Prof. Yash Vasavada
Design of a Novel and Ultra-Low Power All Digital Front-End Acquisition with Configurable Time-to-Digital Converter and Integrated Application Specific Processor for Detection of Myocardial Infarctions	DST-SERB	Prof. Biswajit Mishra
SAR Polarimetric Image Classification using Wishart Mixture Model and Convolution Neural Networks	ISRO-DoS	Prof. Suman K Mitra
Archival Vector DNA Data Storage (Indo-German Project)	DST-DAAD	Prof. Manish K Gupta
Satellite Network Simulator (SNS) with ULPC and ACM Features	ISRO-DoS	Prof. Bhaskar Chaudhary

Title of the Sponsored Project	Sponsoring Agency	Investigators
Design and simulation of Physical layer and Medium Access Control (IMAC) Layer Functionalities of Future Mobile Satellite Systems	ISRO-DoS	Prof. Rajib Lochan Das Prof. Yash Vasavada
Design and Field Training Testing of an Energy Autonomous Internet of Things Enabled Cattle Estrus Detection Device Targeted for Resource Constrained Regions	DST	Prof. Biswajit Mishra Prof. PS Kalyan Sashidhar
DST-FIST (Level 1) Grant of INR 57 lakhs for Infrastructure Development to strengthen the research facilities	DST-FIST (2019)	Prof. Suman Mitra Prof. Sanjeev Gupta Prof. Bhaskar Chaudhary Prof. Yash Vasavada Prof. Manjunath V Joshi Prof. Hemant Patil Prof. Deepak Ghodgaonkar Prof. Rajib Lochan Das

Faculty continued work on 13 on-going sponsored projects.

Table 9: On-going Projects

Title of the Sponsored Project	Sponsoring Agency	Investigators
Using Mobile Sensing Mechanism to Access Smart Phone Addiction and Its Negative Impact on Students	ICSSR	Prof. Alka Parikh Prof. P.S. Kalyan Sasidhar
Teachers Association for Research Excellence (TARE)	DST-SERB	Prof. V. Sunitha
Design and Simulation of Beamforming Algorithms and Baseband Technologies for SATCOM	ISRO-DoS	Prof. Yash Vasavada
Multiscale and Simulation of Complex Plasma Dynamics during High Power Milimeter Wave Breakdown	DST-SERB	Prof. Bhaskar Chaudhary
Development of Microwave Absorbers (Carbonyl Iron filled Silicon Rubber Sheets) in 1 to 8 GHz range	ISRO-DoS	Prof. Deepak Ghodgaonkar Prof. Sanjeev Gupta
Desertification and Land Degradation: Monitoring, Vulnerability Assessment and Combating Plans	ISRO-DoS	Prof. Ranendu Ghosh Prof. Suman Mitra
Imprint - A platform for Crosslingual and Multilingual Event Monitoring in Indian Languages	MHRD	Prof. Prasenjit Majumder Prof. Suman Mitra
Detection of Heavy Metal Pollution in Vegetation and Characterization of Soil Clay Minerals using AVIRIS-NG Data	ISRO/DoS	Prof. Ranendu Ghosh Prof. P.S. Kalyan Sasidhar
Kinetic Modelling of Large size Negative Ion Sources for Fusion Application using Emerging Parallel Processing Computer Architectures	BRNS	Prof. Bhaskar Chaudhury Prof. Mukesh Tiwari
Expansion of Technology Incubation and Development of Entrepreneurs (TIDE) in the areas of Electronics and ICT	DIT	Dean (R&D)
Nodal Institute for Start-ups	Industries Commissionerate Govt. of Gujarat	Dean (R&D)
Student Start-up and Innovation	Govt. of Gujarat	Dean (R&D)
Setting up of Anchor Institute by DA-IICT	CED (Govt of Gujarat)	Prof. Amit Bhatt

CONSULTANCY PROJECTS

In the year 2019-20, the faculty took 4 consultancy projects.

Table 10: Consultancy Projects

Consulting Area	Organization	Faculty
Development of Dew Map of Gujarat	GEDA, Govt. of Gujarat	Prof. Anil K. Roy
Optical Character Recognition (OCR) Algorithms to Enhance the Accuracy of Numeric Data Recognition by the Machine	Factset Systems India Pvt. Ltd., Hyderabad	Prof. Manjunath V Joshi
Building of Prototype of Financial News Recommender and Summarizer System	Vista Intelligence Pvt. Ltd., Kolkata	Prof. Prasenjit Majumder
Cotton Crop Yield Estimation	Amnex Infotechnologies Pvt.Ltd., Ahmedabad	Prof. Ranendu Ghosh

CONFERENCES / SEMINARS / SUMMER SCHOOLS ORGANISED

In the year 2019-20, DA-IICT organised 5 conferences/seminars/summer schools

Table 11: Conferences organised

Title	Dates	Sponsors
“Swadheenta” – a combination of two flagship events of DCEI - Hack Infinity 2.0, and “Indradhanush”- Entrepreneurship Workshop for Women	7-9 February 2020	DCEI (DA-IICT Centre for Entrepreneurship and Innovation), DA-IICT
9th International Conference on Security, Privacy and Applied Cryptography Engineering (SPACE-2019)	3-7 December 2019	DA-IICT, DRDO
Symposium on Technology and Applications of Microwave Remote Sensing and Antennas (Microwave Day)	12 October 2019	DA-IICT, IEEE-AP/MTT Chapter of Gujarat Section, Jyoti Electronics
i.Fest’19	11 October 2019	DA-IICT IEEE SB
National Seminar on Nanoscience and Nanoelectronics	28 September 2019	DA-IICT, IEEE Nanotechnology Council Chapter of Gujarat Section

DA-IICT Centre for Entrepreneurship and Incubation (DCEI)

DA-IICT Centre for Entrepreneurship and Incubation was established in 2011 to promote innovation and entrepreneurship culture among the community. DCEI is supported by the Ministry of Electronics and Information Technology, Government of India to nurture and develop a business idea based on latest and emerging technology. DCEI has also been recognized by the Government of Gujarat as a Nodal Institution to promote and nurture entrepreneurship among young technologists. The DCEI has incubated the following start-ups since its inception:

1. AlmaConnect Solutions Private Limited - created a network for educational institutions and tracks their alumni members.

2. Playpower Labs Private Limited - developed game curriculum for school students and data analytics for companies involved in the field of education.

3. Appbin Labs Private Limited - successfully developed a product 'Developer Hub' which provides complete database services for rapid application development.

4. Kamkaaj Solutions Private Limited - engaged in developing a job aggregator that aggregates jobs that are posted on different job boards/ portals and empowers job-seekers with the features of searching and analyzing jobs.

5. SB Edu Analytics Consultancy Private Limited - developed an education analytics engine for Student Interest and Performance Pattern (SIPP) and commercialize a set of educational institutes/schools data management and communication web-based system which has analytics engine at its core.

6. Innoruptiontech Solution Private Limited – a hyper local job market place for blue collar and entry level segment.

7. Corygbee Private Limited – a faculty-led startup, is an online research collaboration

platform for researchers, students, and research funding agencies.

8. Yoctosehns Technologies Private Limited - a faculty-led startup, through monitoring of cattle at a low cost. It helps in estrus detection with a simple user interface.

Following is the list of new proposals accepted and supported under SSIP in the year 2019-20:

1. Urban Naps - Sleeping Pod.
2. Neuro-Track-3D.
3. Avadhuta Antennaz Solutions.

Following is the list of proposals earlier that continued to receive support under SSIP in the year 2019-20:

1. Generic Approach Based Accident Detection and Notification System for Motor Vehicles.
2. Smart Travel Bag.
3. Energy Harvesting Using IOT.
4. Generic Approach based Accident Detection and Notification System for Motor-vehicles.

DA-IICT Centre for Entrepreneurship and Incubation (DCEI) conducts various activities throughout the year through its Student Executive Council. Some of these activities include 10x Challenge, Hackathon, Women in Entrepreneurship Programs (WEP), Entrepreneur's Talks, Guest Lectures and Workshops.

DCEI (7-9 February 2020) organized "Swadheenta", a fruitful combination of two flagship events of DCEI: Hack Infinity 2.0, and "Indradhanush"- Entrepreneurship workshop for Women, with the aim of giving rise to new entrepreneurial ventures.

Workshops, Special Lectures and Visitors

SEMINARS/CONFERENCES/WORKSHOPS ORGANIZED

The Institute regularly organizes conferences, seminars, and workshops for promoting

interactions with wider academic and research communities. Below is a listing of the conferences and workshops organised during 2019-20:

Table 12: Conference, Seminar, Workshop Organised

Title	Dates	Sponsors
Bamboo Shots for Engineering Design Workshop	13 September 2019	On-campus students event
MSTC Python Workshop	18 September 2019	On-campus students event
Workshop on Website Designing.	21-22 September 2019	On-campus students event
3D Printing Workshop	3-4 October 2019	On-campus students event

VISITORS AND SPECIAL LECTURES

The Institute welcomes visitors from various organizations. Their visits help the faculty and students to explore collaboration, funding and

professional development opportunities. It regularly invites speakers from academic institutions and industry experts to deliver special lectures. Below is a list of visitors during 2019-20:



Visit by Shri Jay Anmol Ambani



Visit by the official of McMaster Innovation Park, Canada

Table 13: Visitors

Visitor and Affiliation	Date
Jay Anmol Ambani	14 November 2019
Sarah Boggan, Marketing & Public Relation Coordinator, McMaster Innovation Park, Canada	18 November 2019
Jeena George, Deleegue Commerciale adjointe, Govt. du Canada McMaster Innovation Park, Canada	18 November 2019
Karen Mossman, Vice President, Research McMaster Innovation Park, Canada	18 November 2019
Bhavesh Manglani and Swapnil Khadelwal Samsung Research and Development Institute, Bengaluru	20 January 2020

Table 14: Special Lectures

Title	Date	Details
'Machine learning: theory and practice'- A lecture by Shri Ankur Varma, (B.Tech Alumni 2013)	22 January 2020	The speaker emphasised on the relevance of computational science and how it can be used to solve problems.
World Environment Day Celebrations (virtual mode)	4 June 2020	Keynote address was delivered by Sunita Narain, the Director-General of the Centre for Science and Environment (CSE)

**Engineering Workshop at DA-IICT**

Faculty Publications

Publications reflect faculty and staff interests and their research initiatives. The publications have appeared primarily in peer-reviewed conferences and journals. The majority of publications have student co-authors indicating a strong faculty commitment to train and mentor both postgraduate and undergraduate students in research.

Books

1. Colin Boyd, **Anish Mathuria**, and Douglas Stebila, *Protocols for Authentication and Key Establishment*, 2nd ed. (Information Security & Cryptography Series). Heidelberg, Germany: Springer-Verlag, 2020. ISBN: 9783662581452. doi: 10.1007/978-3-662-58146-9.

Edited Books

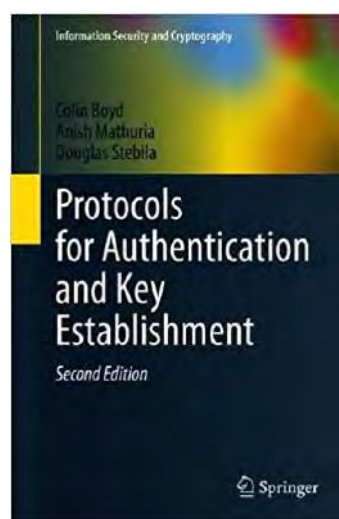
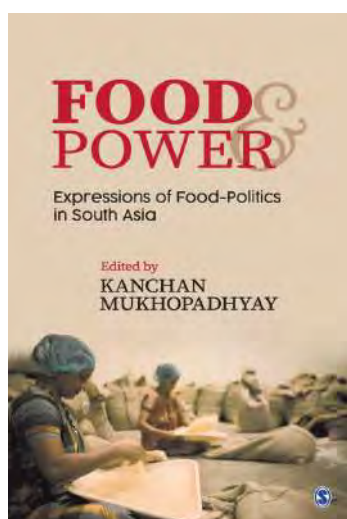
1. **Hemant A. Patil** and Amy Neustein (Eds.), **BAND Voice Technologies for Reconstruction and Enhancement**. DeGruyter, New York. vol. 6, Feb. 2020.

Chapters in Book

1. Vaghela M., **Sasidhar K.** and Parikh A., "An Experimental Study of Mobile Phone Impact on College Students" in *ICT Systems and Sustainability: Advances in Intelligent Systems and Computing 2020*, vol. 1077, Tuba M., Akashe S., Joshi A. Eds., Singapore: Springer, pp. 225-234, 29 Feb. 2020. DOI: 10.1007/978-981-15-0936-0_23.

During the reporting year, the faculty published one book, edited one volume, and contributed thirty three chapters in books and one hundred sixteen papers in journals, conferences, four technical papers, along with two patents.

2. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Introduction to Authentication and Key Establishment," in *Protocols for Authentication and Key Establishment*. Information Security and Cryptography. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 1-52, doi: 10.1007/978-3-662-58146-9_1, ISBN: 9783662581452
3. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Protocols Using Shared Key Cryptography," in *Protocols for Authentication and Key Establishment*. Information Security and Cryptography. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 95-134, doi: 10.1007/978-3-662-58146-9_3, ISBN: 9783662581452
4. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Authentication and Key Transport Using Public Key Cryptography," in *Protocols for Authentication and Key Establishment*. Information Security and Cryptography. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer,



- Berlin, Heidelberg, , 2020, pp. 135-164, doi: 10.1007/978-3-662-58146-9_4, ISBN: 9783662581452
5. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Authentication and Key Transport Using Public Key Cryptography," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 135-164, doi: 10.1007/978-3-662-58146-9_4, ISBN: 9783662581452
 6. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Transport Layer Security Protocol," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 241-288, doi: 10.1007/978-3-662-58146-9_6, ISBN: 9783662581452
 7. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Identity-Based Key Agreement," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 289-327, doi: 10.1007/978-3-662-58146-9_7, ISBN: 9783662581452
 8. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Group Key Establishment," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 389-440, doi: 10.1007/978-3-662-58146-9_9, ISBN: 9783662581452
 9. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Password-Based Protocols," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 329-387, doi: 10.1007/978-3-662-58146-9_8, ISBN: 9783662581452
 10. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Key Agreement Protocols," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 165-240, doi: 10.1007/978-3-662-58146-9_5, ISBN: 9783662581452
 11. Colin Boyd, **Anish Mathuria** and Douglas Stebila, "Computational Security Models," in *Protocols for Authentication and Key Establishment. Information Security and Cryptography*. By Colin Boyd, **Anish Mathuria**, Douglas Stebila, Springer, Berlin, Heidelberg, , 2020, pp. 53-94, doi: 10.1007/978-3-662-58146-9_2, ISBN: 9783662581452
 12. Hardik Gajera, **Manik Lal Das** and Viral Shah, "Blockchain-powered healthcare insurance system," in Tanwar, Sudeep; Tyagi, Sudhanshu; Kumar, Neeraj (ed.): 'Security and Privacy of Electronic Healthcare Records: Concepts, paradigms and solutions' (Healthcare Technologies, 2019), IET Digital Library, , 2020, pp. 369-387, doi: 10.1049/PBHE020E_ch16, ISBN: 9781785618994
 13. Nidhi Desai and **Manik Lal Das**, "Privacy-Preserving Scheme Against Inference Attack in Social Networks," in Singh P., Pawłowski W., Tanwar S., Kumar N., Rodrigues J., Obaidat M. (eds) *Proceedings of First International Conference on Computing, Communications, and Cyber-Security (IC4S 2019). Lecture Notes in Networks and Systems*, vol 121. Springer, Singapore., 2020, pp. 819-830, doi: 10.1007/978-981-15-3369-3_60, ISBN: 9789811533693
 14. Srikumar Sastry, Arnav Saha and **Ranendu Ghosh**, "Modeling the Dynamics of Carbon Dioxide Over an Educational Institute," in Fong S., Dey N., Joshi A. (eds) *ICT Analysis and Applications. Lecture Notes in*



- Networks and Systems*, vol 93. Springer, Singapore., 2020, pp. 65-75, doi: 10.1007/978-981-15-0630-7_7, ISBN: 9789811506307
15. Archana Nigam and **Sanjay Srivastava**, "ODDMS: Online Distributed Dynamic Meeting Scheduler," in Fong S., Dey N., Joshi A. (eds) *ICT Analysis and Applications. Lecture Notes in Networks and Systems*, vol 93. Springer, Singapore., 2020, pp. 199-208, doi: 10.1007/978-981-15-0630-7_19, ISBN: 9789811506307
 16. **Vishvajit Pandya**, "Entering the Field" in *The Secret Lives of Anthropologists: Lessons from the Field*, B.L. Hewlett Eds., New York: Routledge, pp. 23-36, 2020, ISBN: 9781138501867
 17. **Vishvajit Pandya and Madhumita Mazumdar** "Feeding the Jarawas" in *Food and Power: Expressions of Food-Politics in South Asia*, Kanchan Mukhopadhyay Eds., New Delhi: Sage Publications, 2020, pp. 141-167, DOI: 10.4135/9789353886059.n8, ISBN: 9789353883768
 18. Ankur Sharma, Rasika Dhavse, **Yash Agrawal** and **Rutu Parekh**, "Design of prominent single-precision 32-bit floating point adder using single electron transistor operating at room temperature," in *International Conference on Advances in VLSI and Embedded Systems (AVES-2019)*, Patel Z., Gupta S., Kumar Y. B. N. eds., lecture notes on electrical engineering, vol. 676. Springer, Singapore. SVNIT, India. DOI: 10.1007/978-981-15-6229-7_16
 19. **Yash Agrawal**, Rajeevan Chandel; Mekala Girish Kumar and **Rutu Parekh**, "Prospective current mode approach for on-chip interconnects in integrated circuit designs," in Dhiman, Rohit; Chandel, Rajeevan (ed.): '*VLSI and Post-CMOS Electronics. Volume 2: Devices, circuits and interconnects*' (*Materials, Circuits & Devices*, 2019), IET Digital Library, 2019, pp. 173-200, doi: 10.1049/PBCS073G_ch9, ISBN: 9781839530548
 20. Krishna Teja, Umang Patel, Parthkumar Patel, **Yash Agrawal** and **Rutu Parekh**, "Smart Soldier Health Monitoring System Incorporating Embedded Electronics," in *International Conference on Advances in VLSI and Embedded Systems (AVES-2019)*, Patel Z., Gupta S., Kumar Y. B. N. eds., *Lecture Notes on Electrical Engineering*, vol. 676. Springer, Singapore. SVNIT, India. DOI: 10.1007/978-981-15-6229-7_18
 21. Raj Shah, **Rutu Parekh** and Rasika Dhavse, "Island Engineering of Single-Electron Transistor for Room Temperature Operation," *International Conference on Advances in VLSI and Embedded Systems (AVES-2019)*, Springer *Lecture Notes on Electrical Engineering* SVNIT, India. DOI: 10.1007/978-981-15-6229-7_23
 22. Takshashila Pathade, **Yash Agrawal, Rutu Parekh** and Mekala Girish Kumar, "Prospective Incorporation of Booster in Carbon Interconnects for High Speed Integrated Circuits," in *International Conference on Advances in VLSI and Embedded Systems (AVES-2019)*, Patel Z., Gupta S., Kumar Y. B. N. eds., *Lecture Notes on Electrical Engineering*, vol. 676. Springer, Singapore. SVNIT, India. DOI: 10.1007/978-981-15-6229-7_22
 23. Ajita Misra, **Yash Agrawal, Vinay Palaparthi** and **Rutu Parekh**, "Variability Analysis of On-Chip Interconnect System Using Prospective Neural Network," in *International Conference on Advances in VLSI and Embedded Systems (AVES-2019)*, Patel Z., Gupta S., Kumar Y. B. N. eds., *Lecture Notes on Electrical Engineering*, vol. 676. Springer, Singapore. SVNIT, India. DOI: 10.1007/978-981-15-6229-7_21
 24. Kamalesh Kalirathinam, Hari Rathod, **Yash Agrawal** and **Rutu Parekh**, "Real-Time

- Crowd Detection and Surveillance System Using an Arduino Based Flight Controller for Quadcopters." in *International Conference on Innovation in Modern Science and Technology*, pp. 872-879. Springer, Cham, 2019. DOI: 10.1007/978-3-030-42363-6_100
25. **N. K. Sahu**, C. Ouayl and R. N. Mohapatra, "Variational Inequalities in Semi-inner Product Spaces," in Daras, N. J. and Rassias, T. M. Eds., *Computational Mathematics and Variational Analysis*, vol. 159. Cham, Springer, 2020. DOI: 10.1007/978-3-030-44625-3_23
 26. Girish Kumar Mekala, **Yash Agrawal**, Rajeevan Chandel, Ashwani Kumar, "Performance Analysis of Mixed-Wall CNT Interconnects using Colliding Bodies Optimization Technique," Balwinder Raj, Mamta Khosla and Amandeep Singh, *Major Applications of Carbon Nanotube Field Effect Transistors (CNTFET)*, IGI Global Book, Hershey, USA, 2020. DOI: 10.4018/978-1-7998-1393-4.ch009
 27. M. Girish, R. Dhiman, **Y. Agrawal**, and A. Chandel, "Prospective Graphene Based Through Silicon Vias in Three Dimensional Integrated Circuits," Chapter 11, in *IET VLSI and Post-CMOS Electronics. Volume 2: Devices, circuits and interconnects*, Sep. 2019. DOI: 10.1049/PBCS073G_ch11
 28. Kamlesh K., H. Rathod, **Y. Agrawal**, and **R. Parekh**, "Real time crowd detection and surveillance system using an Arduino based flight controller for quadcopters," in *Learning and Analytics in Intelligent System (LAIS)*, Siliguri, West Bengal, India. 20–21 Sep. 2019. DOI: 10.1007/978-3-030-42363-6_100
 29. **Ahmad Kumar** and Sher Singh Rajput, "Low-voltage analog signal processing" in *VLSI and Post-CMOS Electronics: Design, modelling and simulation*, 1, pp. 1, 2019. DOI: 10.1049/PBCS073F_ch1
 30. Nirmesh J. Shah and **Hemant A. Patil**, "Non-audible murmur to audible speech conversion," in *Voice Technologies for Reconstruction and Enhancement*, DeGruyter, New York, vol. 6, pp. 125-150, Feb. 2020.
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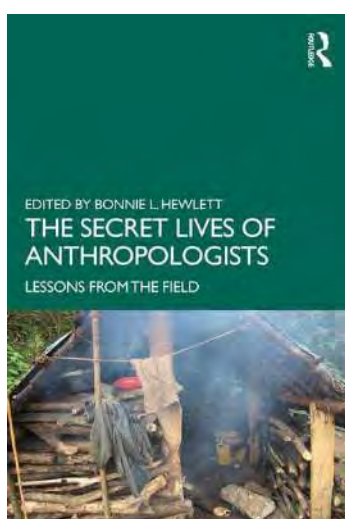
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Technical papers

1. **Saurabh Tiwari**, Sheikh Umar Farooq, Paramvir Singh, and Santosh Singh Rathore, "A Report on the Third Workshop on Emerging Software Engineering Education WESEE 2020," in 13th Innovations in Software Engineering Conference (ISEC 2020), ACM, Article No. 20, Feb. 27, 2020, India. DOI: 10.1145/3385032.3385054
2. **Saurabh Tiwari** and Jitendra Singh Thakur, "A Report on Students Software Project Contest co-located with ISEC 2020," in 13th Innovations in Software Engineering Conference (ISEC 2020), ACM, Article No. 25, Feb. 29, 2020, India. DOI: 10.1145/3385032.3385657



3. Naitik Parekh, Aarushi Dhami and **Yash Vasavada**, "Annual Technical Report and System Design" Document for ISRO Research Project : Satellite on the Move, Feb. 2020
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Newspaper Articles

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Patents

1. **Sanjeev Gupta**, Hardik Patel, Pankaj Chaudhary, and **Deepak Ghodgaonkar**, "Customizable Multi-Functional Anten Modules with Embedded Platforms and TV for Smart Automotive Applications," Patent Filed Application No.: TEMP/E-1/34005/2019 dated Aug. 8, 2019, Controller General of Patents, Designs & TradeMarks, Intellectual Property India, Mumbai, Govt. of India."
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Awards and Professional Activities

The faculty and staff continued to be actively involved in international, national, state and local level professional activities and made significant contributions at all levels. They also received

HONORARY WORK/POSITIONS HELD ON PROFESSIONAL BODIES

Alka Parikh

- Board of Trustees, Utthan, Ahmedabad

Aditya Tatu

- Member, Technical Advisory Committee - Science, Technology and Innovation, GUJCOST

Anil Kumar Roy

- VP-Technical Operations 2020-2021, IEEE Sensors Council
- Chair 2019-2020, Conference Publications Committee, An IEEE TAB/PSPB Committee
- Member, Research Advisory Board, Galgotias University, U.P., January 2020
- Member, Technical Committee for Climate Change Impact Studies and Related Projects, Climate Change Department, Govt. of Gujarat, September 2019
- Member, Academic Council, Marwadi University, Rajkot, October 2019
- Member, Committee on the Robotics Gallery, Gujarat Council of Science City, August 2019

Anish Mathuria

- Member, Faculty Selection Committee, Indian Institute of Information Technology Vadodara (IIIT-V)



fellowships and presented a large number of invited talks all over the country and abroad. Below is a listing of the major recognitions and activities of the faculty and staff of the Institute:

Anjan Kumar Ghosh

- Member, Executive Committee, Optical Society of India

Bhaskar Chaudhury

- Member of Plasma Science Society of India (PSSI).
- Member of Indian Science Congress Association (ISCA).
- Honorary Member, DMP (Data for Modeling plasmas).
- Member of Division of Plasma Physics-Association of Asia Pacific Physical Societies.
- Member, Doctoral Committees, HBNI, Mumbai
- Member, International Low-Temperature Plasma Community
- Member, Evaluation Committee for development of MDADSS for Lalbhai Dalphatbhai Institute of Indology, Ahmedabad.
- Thesis Examiner, HBNI, Mumbai
- Reviewer for Research Grant Proposals, DAE-BRNS

Deepak Ghodgaonkar

- Fellow, The Institution of Engineers, Malaysia Life Fellow, Institution of Electronics and Telecommunication Engineers, India
- Senior Member, Institute of Electrical and Electronics Engineers, USA
- External Examiner-Ph. D. thesis of AMIZADILLAH BINTI MD NORIMI, Faculty of Science, University Putra Malaysia (UPM), Malaysia, June 2020
- External Examiner-Ph. D. thesis of Musfirah Hilmi, Faculty of Electrical Engineering, University Teknologi, MARA, Shah Alam, Selangor, Malaysia, June 2020

Hemant A. Patil

- Member, Project Review Steering Group, Ministry of Electronics and Information Technology (MeitY)'s consortia projects, Government of India

- Member, Academic Advisory Committee Board, Chhotubhai Gopalbhai Patel Institute of Technology, Bardoli, Gujarat
- Member, Board of Studies, G.H. Rasoni Institute of Engineering & Management, Jalgaon, Maharashtra
- Member, Research Progress Committee, Nirma University, Ahmedabad
- Member, External expert, IQAC, Nirma University, Ahmedabad
- Member, International Speech Communication Association
- Member, Asia-Pacific Signal and Information Processing Association
- Member, IEEE
- Member, IEEE Signal Processing Society
- Affiliate member, IEEE Speech and Language Technical Committee
- Member, IEEE Circuits and Systems Society, USA
- Member, International Association for Engineers
- Life member, System Society of India

Kalyan Sasidhar

- Member, Institute of Electrical and Electronics Engineers (IEEE)
- External Committee Member PhD Research Advisory Committee, Nirma University

K. S. Dasgupta

- Expert Member, Annual Review meeting, Community Science Centres Programs & Activities in Gujarat, Gujarat Council on Science and Technology

Manik Lal Das

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
- Life Member, Cryptology Research Society of India
- Chair, IEEE Gujarat Section
- Member, IEEE India Council

Manish K Gupta

- Member, Technical Advisory Committee, Gujarat State Biotechnology, Mission (GSBTM), Department of Science and Technology, Government of Gujarat
- Chairman, Screening Committee for Gujarat Government Nodal Institute, for start-ups at DA-IICT, Gandhinagar
- Member, Due-Diligence & Project Mentoring of Indo-Spain Industrial, R&D Project of Global Innovation & Technology Alliance, (GITA), A joint venture of Technology Development Board, Department of Science and Technology and Confederation of Indian Industry
- Member, Executive Council, Academy of Discrete Mathematics and Applications, (ADMA)
- Member, Gujarat State Level Implementation Committee for Startup/Innovation, Industries Commissionerate, Govt. of Gujarat

Manish Khare

- Member, Institute of Electrical and Electronics Engineers (IEEE)
- Member, IEEE Signal Processing Society



Rutu Parekh

- CHAIR, IEEE NTC CHAPTER, GUJARAT SECTION, INDIA

Sanjeev Gupta

- Co-ordinator for cooperation with SAC under the MoU for cooperation in research and academic activities, Space Applications Centre, ISRO, Department of Space, Govt. of India, Ahmedabad
- Member of the Advisory Committee of Directorate of Research and Innovation, Nirma University, Ahmedabad
- Member of the Faculty of Doctoral Studies and Research, Nirma University, Ahmedabad
- Member of the Board of Studies (BOS) of Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat
- Member of the Board of Studies (BOS) for SATCOM (Satellite Communications) Course conducted by Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP – affiliated to the United Nations), IIRS Campus, Dehradun (Headquarters) & SAC Campus, Ahmedabad
- Member of Board of Studies (BOS), Indus University, Ahmedabad
- Member of Board of Studies (BOS), LDRP Institute of Technology and Research, Kadi Sarva Vishwavidyalaya, Gandhinagar
- Member of Academic Council of CU Shah University, Wadhwan City, Surendranagar District, Gujarat
- Member of Research Promotion Committee (RPC), Nirma University, Ahmedabad.
- Member of Industry Advisory Board (EC



Department), LD College of Engineering Ahmedabad w.e.f. 22 February 2020

- External Expert Member of Doctoral Research Committee for selection of faculty and PhD supervisors, Gujarat Technological University (GTU), Ahmedabad
- External Expert Member for selection of faculty at Institute of Technology, Nirma University, Ahmedabad

Saurabh Tiwari

- Member, Association for Computing Machinery (ACM)

Srimanta Mandal

- Member, IEEE
- Member, The IEEE Signal Processing Society
- Executive member, The IEEE Signal Processing Society Gujarat Chapter

Suman Kumar Mitra

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
- Member, Association for Computing Machinery (ACM)
- Life member, Indian Science Congress Association (ISCA)
- Life member, Indian Unit of Pattern Recognition and Artificial Intelligence (IUPRAI): An affiliated body of the International Association of Pattern Recognition (IAPR)
- Member, Information Retrieval Society of India (IRSI)

Sunitha Vadivel Murugan

- Academic Expert Member, Board of Studies, Department of Mathematics, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat.
- Expert Member, Research Advisory Committee, Department of Information Technology, Nirma University, Ahmedabad, Gujarat.
- Expert Member, Research Progress Committee, Department of Mathematics, SRM University, Kattankulathur, Tamil Nadu
- Professional Member, Association for Computing Machinery (ACM)
- Life Member, Academy of Discrete Mathematics and Applications (ADMA)

Tapas Kumar Maiti

- Member, IEEE – Institute of Electrical and Electronics Engineers
- Member, IEEE Technical Committee on Multi-Robot Systems (TC MRS)
- Member, IAAM – International Association of Advanced Materials
- Life Member, IEI – The Institute of Engineers (India)

FELLOWSHIPS/VISITING SCHOLARSHIPS

Yash Agrawal

- Received the Travel Grant for Research Visit and prospective collaboration with Technical University of Munich (TUM), Germany

JOURNAL EDITORSHIP

Anish Mathuria

- Associate Editor, Sadhana, Indian Academy of Sciences

Bhaskar Chaudhury

- Co-Editors, Bhaskar Chaudhury (DA-IICT, India), Matthias Ehrhardt (U. Wuppertal, Germany) and Vrushali Bokil (Oregon State University, USA), Journal of Computational Science, Title- Finite Difference Methods: Recent Developments and Applications in Computational Science, Special Issue in Elsevier

Hemant A. Patil

- Member, Editorial Board, Engineering Letters, International Association of Engineers
- Guest Co-Editor, Special Issue on State-of-the-art Handcrafted Feature Extraction for Speech and Voice Analysis, 2020

Manik Lal Das

- Associate Editor, IEEE Transactions on Dependable and Secure Computing, IEEE

Manish K Gupta

- Associate Editor, Journal of Applied Mathematics and Computation, Springer
- Associate Editor, AIMS Electronics and Electrical Engineering, AIMS Press

Manish Khare

- Member, Editorial Board, Journal of Advanced Computing and Communication Technologies (JACOTECH), Fifth Direction IT Consulting Pvt. Ltd.

Prasenjit Majumder

- Associate editor, ACM Transactions on Asian and Low-Resource Language Information Processing, Association for Computing Machinery (ACM)
- Issue editor, SN Computer Science Journal, Springer Nature

Rutu Parekh

- Editorial Board Member, SCIREA Journal of Electrical Engineering, SCIREA
- Editorial board member, Journal of Recent Advances in Electronics and Communication Engineering (JRAECE), Unique Pub International (UPI)

Sanjeev Gupta

- Member, Editorial Board, International Journal on Science and Technology
- Member, Editorial Board, International Journal of Engineering and Technology Management

Suman Kumar Mitra

- Associate Editor, International Journal on Image and Graphics (IJIG), World Scientific Press
- Associate Editor, IET Image Processing, IET

Yash Agrawal

- Member, Editorial Board, Journal of Electronic Research and Application (JERA), Bio-Byword Scientific Publishing, Sydney, Australia



- Member, Editorial Board, Frontiers of Mechatronical Engineering (FME), EnPress Publisher, CA, USA
- Member, Editorial Board, Signal and Information Processing, Whoice Publishing Pte. Ltd. Singapore

REVIEWING OF BOOK/JOURNAL/CONFERENCE PAPERS

Book/Book Chapter Reviewing

- **Manish K Gupta** CR 146751 (Book), Oct 2019. ACM Computing Reviews
- **Manish K Gupta** CR 146932 (Book), March 2020 ACM Computing Reviews
- **Yash Agrawal** Post-CMOS Gigascale Integration, Institution of Engineering and Technology (IET)

Conference Paper Reviewing

Hemant Patil

- INTERSPEECH 2020
- ICASSP 2020
- SPCOM 2020, IISc Bengaluru, July 2020.
- INTERSPEECH 2019, Graz, Austria, Sept. 14-19, 2019.
- ICASSP 2019

Journal Paper Reviewing

Abhishek Jindal

- IEEE Transactions on Information Forensics and Security
- IEEE Transactions on Vehicular Technology
- IEEE Communications Letter
- IEEE Wireless Communications Letters
- Frontiers In Communications and Networks

Aditya Tatu

- IEEE Transactions on Signal Processing, March 2020

Anil Kumar Roy

- IEEE Sensors Journal
- IEEE Internet of Things Journal

Anish Mathuria

- International Journal of Information Security, Springer

Anjan K Ghosh

- Applied Optics, Optical Society of America, 2019
- Journal of the Optical Society of America, A, Optical Society of America, 2019-2020
- Optical Engineering, SPIE, 2020
- Sensors and Actuators, Elsevier, 2020
- IEEE Sensors Journal, IEEE
- IET Optoelectronics, IET

Arnab Kumar Ray

- Journal of Applied Fluid Mechanics, 2019
- Journal of Applied Mathematics and Computing, Springer, 2020

Bakul Gohel

- Journal of Neuroscience Method, Elsevier, 2020

Bhaskar Chaudhury

- IEEE Transactions on Plasma Science
- Journal of Applied Physics. (American Institute of Physics Journal)
- Journal of Parallel and Distributed Computing
- Physics of Plasmas (American Institute of Physics Journal)
- Plasma Sources Science and Technology (Institute of Physics, UK Journal)

Deepak Ghodgaonkar

- IEEE Transactions on Instrumentation and Measurement, IEEE
- IEEE Transactions on Microwave Theory and Techniques, IEEE
- IEEE Transactions on Antennas and Propagation, IEEE

Hemant A. Patil

- IEEE Transactions on Information Forensics and Security, IEEE
- Computer Speech and Language, Elsevier

Jaideep Mulherkar

- Quantum Information processing, Springer
- Advanced Quantum Technologies, Wiley

Kalyan Sasidhar

- IEEE Transactions in Measurement and Instrumentation, IEEE

**Manik Lal Das**

- IEEE Transactions on Services and Computing
- IEEE Systems Journal, IEEE
- IEEE Transactions on Cloud Computing, IEEE

Manish K Gupta

- IEEE/ACM Transactions on Computational Biology and Bioinformatics, IEEE, January 2020

Manish Khare

- Pattern Recognition Letters, Elsevier
- IEEE Signal Processing Letters
- IEEE Transaction on Image Processing
- KSII Transactions on Internet and Information Systems
- The Imaging Science Journal, Maney Online Publication
- SPIE Electronic Imaging Journal, SPIE.
- IET Image Processing, IET Publication.
- Information Sciences, Elsevier.
- Journal of Healthcare Engineering, Hindawi.
- Signal Image and Video Processing, Springer.
- IET Computer Vision, IET Publication.
- Journal of Medical Imaging and Health Informatics, American Scientific Publisher
- Computational Intelligence
- International Journal on Computational Vision and Robotics, Interscience Publication

Minal Bhise

- Knowledge and Information Systems KAIS, Springer, 2019

Mukesh Tiwari

- Force chain structure in a rod-withdrawn granular layer: Modern Physics Letters B
- Travel time analysis in the Chinese coupled aviation and high-speed rail network: Chaos, Solitons and Fractals
- Nonlinear wave dynamics of disperse granular layer stimulated by the inwards moving piston: Granular Matter

Nabin Kumar Sahu

- Journal of Applied Mathematics and Computing, Springer
- Asian European Journal of Mathematics, World Scientific

- International Journal of Mathematics and Mathematical Sciences, February 2020

Pankaj Kumar

- MDPI Technologies-720828, 3D Micro Hand Gesture Recognition using Deep Learning Algorithm, Norah Alnaim, Maysam Abbod, January 2020
- MDPI Technologies-671846, An interactive Real-time cutting technique for 3D Models in Mixed Reality, Paolo Caligiana, Alfredo Liverani, Alessandro Ceruti, Gian Maria Santi, Giampiero Donnici, Francesco Osti, December 2019

Puneet Bhateja

- Mobile Networks and Applications, Springer

Rajib Lochan Das

- IEEE/ACM Transaction on Audio, Speech and Language Processing, 2020

Sanjeev Gupta

- Journal of Electromagnetic Waves and Applications, Taylor & Francis
- Progress in Electromagnetic Research (PIER), The Electromagnetics Academy
- International Journal of Applied Electromagnetics and Mechanics, IOS Press
- IET Circuits, Devices and Systems Journal, IET Publishing
- Indian Journal of Physics, Springer Science+Business Media
- Journal of the Indian Institute of Science, Springer
- Journal of Biomedical Research, Nanjing Medical University
- Iranian Journal of Electrical and Computer Engineering, Iranian Research Institute for Electrical Engineering
- International Journal on Science and Technology
- ICTACT Journal of Communication Technology, ICTACT
- ADIT Journal of Engineering, A. D. Patel Institute of Technology

Saurabh Tiwari

- IEEE Access – Multidisciplinary open access journal, reviewed papers related to

Software/System Testing, 2019

- IET Software Journal, reviewing papers related to MBT and Agile methodologies, 2019
- Software and Systems Modeling, (SoSyM), reviewing papers related to Modeling, Methodologies and automation, 2020

Srimanta Mandal

- IEEE Transactions on Image Processing, IEEE, 2019-2020
- IEEE Transactions on Cybernetics, IEEE, 2019-2020
- IEEE Signal Processing Letter, IEEE, 2020
- Signal Processing: An International Journal, Elsevier, 2019
- Neurocomputing, Elsevier, 2019
- IEEE Computational Intelligence Magazine, IEEE, 2020
- The Journal of the Optical Society of America, The Optical Society, 2019-2020

Tapas Kumar Maiti

- Journal of Intelligent & Robotic Systems, Springer, 2020
- IEEE/ASME Transactions on Mechatronics, IEEE

Yash Agrawal

- IEEE Transactions on Electromagnetic Compatibility, IEEE
- IEEE Transactions on Nanotechnology, IEEE
- IEEE Transactions on Electron Device, IEEE
- IET Circuits, Devices and Systems IET Publishing
- IET Electronics Letters IET Publishing
- IET Micro and Nano Letters IET Publishing
- IET Microwaves, Antennas and Propagation IET Publishing
- IET Power Electronics IET Publishing
- IEEE Access Journal
- IEEE Journal of Electron Devices Society
- IET Circuits, Devices and Systems
- IET Electronics Letters
- IET Micro and Nano Letters
- IET Microwaves, Antennas and Propagation
- IET Generation, Transmission and Distribution
- World Scientific Journal of Circuits, Systems, and Computers, World Scientific
- International Journal of Circuit Theory and

Applications, John Wiley & Sons Ltd

- International Journal of Numerical Modelling of Electronic Networks, Devices and Fields, John Wiley & Sons Ltd
- COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Emerald Publishing Ltd
- Microelectronics Journal, Elsevier
- Microelectronics Reliability, Elsevier.
- Emerald COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering
- Elsevier Super lattices and Microstructures
- Elsevier Alexandria Engineering Journal
- Elsevier Microelectronics Journal
- Elsevier Microelectronics Reliability
- American Scientific Pub., Nanoelectronics and Optoelectronics
- Springer, Nuclear Science and Techniques

Yash Vasavada

IEEE Transactions on Communications, 2020

CONFERENCE PAPER REVIEWING

Deepak Ghodgaonkar

- IEEE Indian Conference on Antennas and Propagation, INCAP 2019, Ahmedabad, Gujarat, India 19-22 December 2019.
- IEEE India Council International Conference, INDICON 2019, Rajkot, Gujarat, India, 13-15 December 2019.

Hemant Patil

- INTERSPEECH 2020
- ICASSP 2020
- SPCOM 2020, IISc Bengaluru, July 2020.
- INTERSPEECH 2019, Graz, Austria, Sept. 14-19, 2019.
- ICASSP 2019

Kalyan Sasidhar

- IEEE India Council International Conference, INDICON 2019, Rajkot, Gujarat, 13-15 December 2019.
- IEEE 8th International Conference on Advances in Computing, Communications and Informatics, ICACCI 2019,



Thiruvananthapuram, India, 18-21 December 2019.

- Advancement in Communication, Electronics, Computer and Automation Technology, ACECAT 2020, Ahmedabad, Gujarat, 18-19 December 2020

Manik Lal Das

- ISEA ASIA Security & Privacy Conference, Guwahati, India, 27 February – 1 March 2020.
- International Conference on Distributed Computing and Internet Technologies (ICDCIT'20), Bhubaneswar, India, 9 -12, January 2020.

Saurabh Tiwari

- 13th Innovations in Software Engineering Conference, ISEC 2020, IIITDM Jabalpur, India, 27-29 February 2020.

Tapas Kumar Maiti

- Bulletin of Electrical Engineering and Informatics, 2020

Yash Agrawal

- 16th IEEE India Council International Conference, INDICON 2019, Rajkot, India, 13-15 December 2019.
- 8th International Conference on Pattern Recognition and Machine Intelligence, PReMI 2019, Tezpur, India, 17-20 December 2019.
- 5th IEEE International Conference on Electronics, Computing and Communication Technologies, CONNECT 2019, Bangalore, India, 26-27 July 2019.

INVITED LECTURES/TALKS/COURSES

Abhishek Jindal

- Invited talk, Recent Trends in Signal Processing, Postgraduate course of CSSTE-AP on Satellite Communications (SATCOM-12), Space Application Centre (SAC), Ahmedabad, 23 October 2019.

Aditya Tatu

- Workshop on Mathematics for Signal & Image Processing, Graph Signal Processing, PSG College of Technology, Coimbatore, March 2020.

Ahmad Kumar

- Deep Learning Algorithms, Tools and Technologies, CVR College of Engineering, Hyderabad, May 2020
- Artificial Intelligence Essentials, Indian Naval Ship (INS) Valsura, Jamnagar, Gujarat, November 2019
- Information retrieval, Indian Naval Ship (INS) Valsura, Jamnagar, Gujarat, November 2019
- Jury Panel in INAC-4 ISSE National Conference at SAC ISRO, Ahmedabad, September 2019

Anil Kumar Roy

- Bidding for an IEEE Flagship Conference: A Primer, 2019 IEEE Region 10 Conference, Leadership Programme, Goa, India, 17-18 August 2019.
- Voice over Powerpoint, Conference Content Innovation, IEEE Convene 2019, Washington DC, 2 August 2019

Arnav Kumar Ray

- Evolution and Instability of Bondi Accretion, Indian Association for the Cultivation of Science, School of Physical Sciences, Kolkata, India, 20 December 2019.

Deepak Ghodgaonkar

- Delivered Invited Lectures, Microwave Nondestructive Testing (MNDT) of Composite Materials and Structures using Free-Space Measurement System, Advanced Systems Laboratory (ASL), DRDO, Hyderabad, 12 March 2020.

Hemant Patil

- Spoofing Attacks for Automatic Speaker Verification (ASV), Nirma University, Ahmedabad, February 2020.
- Spoofing Attacks for Automatic Speaker Verification (ASV), Chhotubhai Gopalbhai Patel Institute of Technology, UT, Bardoli, Gujarat, India February 2020.
- Generative Adversarial Networks (GANs) for Speech Technology, Srimad Rajchandra Institute of Management and Computer Application (SRIMCA), Bardoli, Gujarat, India. February 2020.

- Generative Adversarial Networks (GANs) for Speech Technology, R. N. G. Patel Institute of Technology (RNGPIT), Bardoli, Gujarat, India. February 2020.
- Spoofing Attacks for Automatic Speaker Verification (ASV), Silver Oak College of Engineering, Ahmedabad, Gujarat, India. **March 2020.**

Madhumita Mazumdar

- Course- Philosophy of Research, 2019 Visiting Faculty, PhD Programme, NID Ahmedabad, December 2019.

Manik Lal Das

- Blockchain Technology and Applications. BITS Pilani, Pilani, India, 10 November 2019.

Manish K Gupta

- Who Wants to Be a Millionaire?, DST Inspire Science Camp, Bhatinda, Punjab, 27 December 2019
- The Magic of D" Series of two Public Lectures, King Abdulaziz University, Saudi Arabia, 23 October 2019

Manish Khare

- Delivered an invited talk on Introduction of Image Processing and Computer Vision, in National Workshop on Image Processing and Computer Vision, Ganpat University - U.V. Patel College of Engineering, Mehsana, Gujarat, 19-22 February 2020.
- Delivered an invited talk on Object Identification, Workshop on Big Data Analytics and Artificial Intelligence, INS Valsura, Jamnagar, Gujarat, 27-30 November 2019

Nabin Kumar Sahu

- An Insight into the frames in Hilbert C*-modules, SSN University, Chennai, Tamil Nadu, 24 December 2019.

Pankaj Kumar

- A session on visual object recognition, AICTE sponsored FDP on Deep Vision, Charusat University, Gujarat, December 2019.

Rutu Parekh

- Keynote speaker at International Conference

on Advances in VLSI and Embedded Systems (AVES-2019), SVNIT, Surat, 20-21 December 2019.

- Expert talk on, Scope of Research in nanoelectronics, National Seminar on nanoscience and nanoelectronics, IEEE NTC Chapter of Gujarat Section, DAIICT, Gandhinagar, Gujarat, 28 September 2019.

Sanjeev Gupta

- Fundamentals of Electromagnetics, Nirma University, Ahmedabad, Gujarat, 5 September 2019.
- Basics of Antennas, Nirma University, Ahmedabad, Gujarat, 9 January 2020.

Shweta Garg

- Journey of a Woman Artist, the School of Humanities and Social Sciences, IIT Mandi, March 2020

Sunitha Vadivel Murugan

- 6th India Taiwan Conference on Discrete Mathematics, IIT (BHU), Varanasi, 15-18 November 2019

Tapas Kumar Maiti

- Robotics and Artificial Intelligence, Workshop on Artificial Intelligence and Big Data Analytics, INS Valsura, Jamnagar, Gujarat, 27-30 November 2019

Yash Vasavada

- An Overview of Satellite Air Interface Standards, CSSTEAP (Centre for Space Science and Technology Education in Asia and the Pacific), December 2019

CONFERENCE/WORKSHOP SESSION CHAIR (CONFERENCES/WORKSHOP PARTICIPATION)

Alka Parikh

- "Did Agriculture benefit with LPG Policies?", panellist for Panel Discussion on Impact of LPG on Different Sectors. International Conference on Liberalization, Globalization and Privatization: three decades of Experience in India. Organized by



Gandhigram Rural Institute, Gandhigram,
Tamil Nadu. 14-15 February 2020.

Amit Mankodi

- International conference in High Performance Big Data and Intelligent Systems (HPBD&IS 2020), Beijing, Beijing, China, 23 May 2020
- 11th International Conference on Computing, Communication and Networking Technologies (ICCCNT 2020), Kharagpur, West Bengal, India, 1-3 July 2020
- IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2020), Bangalore, Karnataka, India, 2-4 July 2020
- 19th International Symposium on Parallel and Distributed Computing (ISPDC 2020), Warsaw, Poland, 6-8 July 2020

Anil Kumar Roy

- IEEE SENSORS 2019, Montreal, QC, Canada, 27-30 October 2019
- INDICON 2019, Rajkot, Gujarat, 13-15 December 2019

Anjan K Ghosh

- SPIE Optics and Photonics Conference, San Diego, California, United States, 11 - 15 August 2019

Bakul Gohel

- Comprehensive Online Certificate Course on IPR, FICCI-IP Education Centre (IPEC), New Delhi

Bhaskar Chaudhury

- 72nd Annual Gaseous Electronics Conference, College Station, Texas, USA, 28 October – 1 November 2019
- The 7th International Conference on Big Data Analytics (BDA2019), Ahmedabad University, Gujarat, India, 17-20 December 2019

Deepak Ghodgaonkar

- IEEE Indian Conference on Antennas and Propagation (INCAP), Ahmedabad, Gujarat, India, 19-22 December 2019

Gagan Garg

- 9th International Conference on Security,

Privacy and Applied Cryptographic Engineering (SPACE 2019), Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, 3-7 December 2019

Hemant Patil

- IEEE Automatic Speech Recognition and Understanding (ASRU) Workshop, Singapore, Dec. 14-18, 2019.
- Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA-ASC), Lanzhou, China, Nov. 18-21, 2019.
- INTERSPEECH 2019, Graz, Austria, Sept. 14-19, 2019.
- ISCA Speech Synthesis Workshop (SSW), Vienna, Austria, Sept. 20-21, 2019.

Madhumita Mazumdar

- Workshop on Building STS Pedagogies in India, Department of Humanities and Social Sciences, IIT Delhi, 15 July 2020

Nabin Kumar Sahu

- International Conference on Mathematical Analysis and Computing (ICMAC-2019), SSN University, Chennai, 23-24 December 2019

Rajib Lochan Das

- International Conference on Signal Processing and Communications (SPCOM 2020), Bangalore, India, 19-24 July 2020

Rutu Parekh

- 5th International Conference on Microelectronics, Computing & Communication Systems (MCCS-2020), ARTTC, BSNL, Ranchi, 11-12 July 2020

Saurabh Tiwari

- 13th Innovation in Software Engineering Conference (ISEC 2020), IIIT Jabalpur, India, 27-29 February 2020,
- 35th ACM/SIGAPP Symposium On Applied Computing (SAC 2020), Brno, Czech Republic, 30 March-3 April 2020
- 2nd Software Engineering Research in India (SERI 2020), IIIT Hyderabad, India, 9-11 July 2020

Supantha Pandit

- 13th Annual International Conference on Combinatorial Optimization and Applications (COCOA 2019), Xiamen, Fujian, China, 13-15 December 2019

Yash Agrawal

- Artificial Intelligence: Devices to Circuits under the aegis of Electronics and ICT Academy, IIT Roorkee, Uttarakhand, 9-13 January 2020

CO-ORDINATED: Conferences/Workshops/Seminars/Training Programs**Manik Lal Das**

- General Chair, 2019 IEEE 16th India Council International Conference (INDICON'19), Rajkot, Gujarat, 13-15 December 2019

Manish Khare

- Organized Special session, 12th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2020), Phuket, Thailand, 23-25 March 2020

Rutu Parekh

- Organized National Seminar on Nanoscience and Nanoelectronics, DAICT, Gandhinagar, Gujarat Section UNDER IEEE nanotechnology Council, Gujarat Section, India (CH10811) in collaboration with IEEE Gujarat Section, 28 September 2019

Saurabh Tiwari

- WESEE 2020, 3rd edition of the Workshop on 'Emerging Software Engineering Education by Saurabh Tiwari (DA-IICT), Umar Farooq (Univ of Kashmir), Paramvir Singh (Univ of Auckland), and Santosh Singh Rathore (IIIT Gwalior), 27 February 2020, at IIIT Jabalpur, Co-located with 13th Innovations in Software Engineering Conference, ISEC 2020, IIIT Jabalpur, India 27-29 February 2020

Yash Agrawal

- Conducted Poster Session under Young Researchers' Forum in 9th International Conference on Security, Privacy and Applied Cryptographic Engineering (SPACE), December 2019

CONFERENCE PROGRAM COMMITTEE**Abhishek Jindal**

- Member, Organizing Committee, 9th International Conference on Security, Privacy and Applied Cryptographic Engineering (SPACE 2019), DAICT, Gandhinagar, 3 - 7, December 2019

Anil Kumar Roy

- IEEE SENSORS 2019, Montreal, Canada, 800+ Participants 27-30 October 2019
- INDICON 2019, Rajkot, Gujarat, 400+ Participants 13-15 December 2019

Bhaskar Chaudhury

- IEEE International Conference on High Performance Big Data and Intelligent Systems (HPBD&IS), Shenzhen, Chi (2020), May 2020.

Deepak Ghodgaonkar

- Member, Technical Program Committee, IEEE Indian Conference on Antennas and Propagation (INCAP), Ahmedabad, Gujarat, India, 19-22 December 2019.
- Track Chair, RF, Microwave & Wireless Communication, IEEE India Council International Conference (INDICON 2019), Rajkot, Gujarat, India, 13-15 December 2019

Hemant Patil

- Technical Program Committee (TPC), Member, International. Conference on Speech and Computer (SPECOM), Istanbul, Turkey, August 20-25, 2019.

Manik Lal Das

- Program Committee member, ISEA ASIA Security & Privacy Conference, Guwahati, India, 27 February – 1 March 2020.
- Program Committee member, International Conference on Distributed Computing and Internet Technologies (ICDCIT'20), Bhubaneswar, India, 9-12 January 2020

Manish Khare

- Program Committee, 12th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2020), Phuket, Thailand, 23-26 March 2020



- Publicity Co-Chair, International Conference on Evolving Technologies for Computing, Communication and Smart World (ETCCS 2020), CDAC, Noida, India, 31 January – 01 February 2020
- Technical Review Committee, International Conference on Cutting-edge Technologies in Engineering (Icon-CuTE 2019), Lucknow, India, 14-16 November 2019

Rutu Parekh

- International Conference on Advances in VLSI and Embedded Systems (AVES-2019), SVNIT, Surat, 20-21 December 2019

Srimanta Mandal

- Program committee member, International Conference on Pattern Recognition and Machine Intelligence (PReMI 2019), Tezpur University (TU), Tezpur, India, 17-20 December 2019

Tapas Kumar Maiti

- Technical Committee Member, 11th International Conference on Mechatronics and Manufacturing (ICMM 2020), Tokyo, Japan, 10-12 January 2020
- Technical Committee Member, International Symposium on Devices, Circuits and Systems (ISDCS 2020), Howrah, India, 4-6 March 2020

Yash Agrawal

- Organizing Committee, 9th International Conference on Security, Privacy and Applied Cryptographic Engineering (SPACE 2019), Gandhinagar, 3-7, December 2019

SPONSORED RESEARCH PROJECTS

Abhishek Jindal

- Investigator, System Design for Ground-Based Beam Former, Sponsor: ISRO under RESPOND scheme

Alka Parikh

- Principal Investigator, Using Mobile Sensing mechanism to assess smartphone usage among college students, Sponsor: ICSSR

Anjan Ghosh

- Principal Investigator, Development of object detection techniques from degraded complex video sequences due to dynamic variation of scenes by different atmospheric conditions for security & surveillance. Sponsor: DRDO

Bhaskar Chaudhury

- Principal Investigator, Satellite Network Simulator with ULPC and ACM features. Sponsor: SRO- Indian Space Research Organization, India
- Principal Investigator, Kinetic Modeling of Large size Negative Ion Sources for Fusion Application using Emerging Parallel Processing Computer Architectures, Sponsor: DAE-BRNS
- Principal Investigator, Development of geomagnetism based indoor navigation system using smartphones, Sponsor: DST NRDMS
- Principal Investigator, Satellite Network Simulator with ULPC and ACM Features, Sponsor: SAC-ISRO

Deepak Ghodgaonkar

- Principal Investigator, Development of Microwave Absorbers (Carbonyl Iron filled Silicon Rubber Sheets) in 1 to 8 GHz Range, Sponsor: SAC-ISRO

Kalyan Sasidhar

- Principal Investigator, Using Mobile Sensing mechanism to assess smartphone usage among college students, Sponsor: ICSSR
- Principal Investigator, Development of geomagnetism based indoor navigation system using smartphones, Sponsor: DST-NRDMS

Manik Lal Das

- Principal Scientific Advisor, Speech to Speech Machine Translation (SSMT): Pilot System, Sponsor: Govt Of India

Manish K Gupta

- Principal Investigator, Archival D Data Storage, Sponsor: DST-DAAD (Indo-German)

Mukesh Tiwari

- Principal Investigator, Kinetic Modeling of Large size Negative Ion Sources for Fusion Application using Emerging Parallel Processing Computer Architectures, Sponsor: DAE-BRNS

Prasenjit Majumder

- Principal Investigator, Speech to Speech Machine Translation (SSMT): Pilot System. Sponsor: Govt Of India

Rajib Lochan Das

- Principal Investigator, Design and simulation of Physical layer and Medium Access Control (MAC) Layer Functionalities of Future Mobile Satellite Systems, Sponsor: ISRO
- Principal Investigator, Adaptive beam forming for mitigation of interference and jamming at the ground terminal of global navigational satellite systems (GNSS), Sponsor: ISRO
- Principal Investigator, Design and Simulation of Beamforming Algorithms and Baseband Technologies for SATCOM On the Move (SOTM) Networks
- Principal Investigator, Design and Simulation of Physical Layer and MAC Layer Functionalities of Future Mobile Satellite Systems, Sponsor: ISRO

Sanjeev Gupta

- Principal Investigator, Adaptive beam forming for mitigation of interference and jamming at the ground terminal of global navigational satellite systems (GNSS), Sponsor: ISRO

Saurabh Tiwari

- Principal Investigator, UCMA: A Toolset to Automatically Analyze Functional Requirements Specified in the Use Cases, Sponsor: DST-SERB

Suman K Mitra

- Principal Investigator, SAR Polarimetric image classification using Wishart Mixture Model and Convolution Neural Networks. Sponsor: ISRO

Sunitha Vadivel Murugan

- Principal Investigator, Design and

development of graph algorithms for control of complex networks. Sponsor: DST-SERB

Vinay S. Palaparthi

- Principal Investigator, IoT Enabled, 2-D Nanomaterial Leaf Wetness Micro-Sensor On Flexible Substrate for Integrated Plant Disease Management, Sponsor: DST-SERB
- Principal Investigator, IoT Enabled, Smart Micro-Sensor for Integrated Plant Disease Management. Sponsor: DST_GUJCOST

Yash Vasavada

- Principal Investigator, Design and Simulation of Beamforming Algorithms and Baseband Technologies for SATCOM On the Move (SOTM) Networks, Sponsor: SAC-ISRO
- Principal Investigator, System Design for Ground Based Beamformer, Sponsor: SAC-ISRO

VISIT TO INSTITUTES/INDUSTRIES**Arnab Kumar Ray**

- Indian Association for the Cultivation of Science, Kolkata for research collaboration and seminar, December 2019

Hemant Patil

- Institute of Infocom Research (I2R) Singapore December 2019
- Department of ECE, National Institute of Singapore December 2019
- Northwest Minzu University, Wenjin Building, Lecture Hall November 2019
- Sabbatical Leave at Samsung Research Institute (SRI), Bengaluru, India, May-Aug. 2019.

Manish K. Gupta

- Visiting Professor, Fraunhofer Institute for Cell Therapy and Immunology (IZI), Germany, December 2019
- Visiting Professor, King Abdulaziz University, Saudi Arabia, September-October 2019

Sanjeev Gupta

- PhD-RPS review of PhD Students, Institute of Plasma Research (IPR), Department of Atomic Energy, Govt. of India, Ahmedabad,

August 1, 2019.

- External Expert as Member of Selection Committee for selection of Assistant Professors (EC Department), Nirma University, Ahmedabad, August 20, 2019.
- Meeting of Doctoral Research Committee (DRC) for scrutiny of applications for PhD Supervisors in the discipline of EC Engineering, Gujarat Technological University (GTU), Ahmedabad, August 23, 2019.
- Board of Studies (BoS) Meeting (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, August 31, 2019.
- Invited Lecture on “Fundamentals of Electromagnetics” at Nirma University, Ahmedabad, September 5, 2019.
- 38th Meeting of Faculty of Doctoral Studies and Research, Nirma University, Ahmedabad, September 17, 2019.
- FIST Proposal presentation at DST, Delhi, September 28, 2019.
- 5th Advisory Committee Meeting of Faculty of Directorate of Research and Innovation, Nirma University, Ahmedabad, October 22, 2019.
- PhD Synopsis Approval Meeting (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, November 30, 2019.
- PhD Thesis Examination (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, December 2, 2019.
- Panel Member of Research Proposal Presentation Evaluation Committee of EC Engineering for PhD admission, Gujarat Technological University (GTU), Ahmedabad, December 5, 2019.
- External Expert of IPR Promotion Interview Committee of Scientists, Institute of Plasma Research (IPR), Department of Atomic Energy, Govt. of India, Ahmedabad, December 9, 2019.
- External Examiner for PhD Thesis progress review, PDPU, Gandhinagar, December 10, 2019.
- External Examiner for ME Thesis progress review, Gujarat Technological University

(GTU), Ahmedabad, December 12, 2019.

- External Expert of SAC Promotion Interview Committee (Scientist-SC to Scientist-SD), Space Applications Centre (SAC), Department of Space, Govt. of India, Ahmedabad, December 17, 2019.
- External Examiner for PhD Thesis progress review, Gujarat Technological University (GTU), Ahmedabad, December 18, 2019.
- Session Chair, 2nd Indian Conference on Antennas and Propagation (InCAP-2019), jointly organized by ISRO, IEEE-AP/MTT chapters and IETE, Ahmedabad, December 19-22, 2019.
- PhD Thesis Examination (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, December 23, 2019.
- Syllabus Review Committee Meeting and Invited Lecture on “Basics of Antennas” at Nirma University, Ahmedabad, January 9, 2020.
- Annual PhD Progress Review Meeting, Institute of Plasma Research (IPR), Department of Atomic Energy, Govt. of India, Ahmedabad, February 4, 2020.
- Doctoral Research Committee (DRC) Meeting for EC Department, Gujarat Technological University (GTU), Ahmedabad, February 15, 2020.
- PhD Synopsis Meeting (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, February 22, 2020.
- 39th Meeting (online) of Faculty of Doctoral Studies and Research, Nirma University, Ahmedabad, May 2, 2020.
- Panel Member of Research Proposal Presentation Evaluation Committee Meeting (online) of EC Engineering for PhD admission, Gujarat Technological University (GTU), Ahmedabad, June 3, 2020.
- Doctoral Progress Committee Meeting (online), PDPU, Gandhinagar, June 3, 2020.
- Doctoral Advisory Committee Meeting (online) of three PhD Scholars (EC Department), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, June 26, 2020.
- Board of Studies (EC Department) Meeting

(online), Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, July 4, 2020.

- Interview (online) of candidates for selection to PhD program, Nirma University, Ahmedabad, July 30, 2020.

CONSULTANCY WORK

Hemant Patil

- Samsung Research Institute (SRI), Bengaluru, May-Aug. 2019

AWARDS/HONOURS

Saurabh Tiwari

- Awarded Full Travel Grant support by SERB International Travel Support (ITS) Scheme to attend and present ACM SAC (35th Symposium on Applied Computing) 2020 Conference, Brno, Czech Republic, 30 March – 3 April 2020.

Manish Khare

- Received Full Travel grant from DST, New Delhi to attend 20th International Conference on Image Analysis and Processing (ICIAP 2019), Trento, Italy, 9–13 September 2019.

Anil Kumar Roy

- IEEE India Council Section Chair Lifetime Achievement Award 2019, awarded by IEEE President-Elect Prof. Toshio Fukuda during INDICON 2019, December 2019.

Yash Agrawal

- Received Best Paper Award for the paper entitled "Automated e-circuit designing and characterization using prominent neural network," Proc. IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), MNIT Bhopal, pp. 1-5, 22-23 February 2020

COLLABORATIVE ACTIVITIES FOR RESEARCH

Manish K Gupta

- Visiting Professor for 2 weeks, Fraunhofer Institute for Cell Therapy and Immunology (IZI), Germany, December 2019
- Visiting Professor for 3 weeks, King Abdulaziz University, Saudi Arabia, September-October 2019
- Visit of Dr David M Smith and his student under DST-DAAD project for 2 weeks, February 2020

ANY OTHER SIGNIFICANT CONTRIBUTIONS

Bakul Gohel

- Incubated a startup "NeuroTrack3D" at IIPH, Gandhinagar, under the IIPHG-NIDHI-Technology Business Incubator (TBI) scheme

Manish K Gupta

- Resource Person for content validation of different exhibits, info-graphics at Regional Science Museum (RSM) Bhuj, Gujcost, Government of Gujarat, 2019-present
- External PhD Thesis Examiner/Reviewer for:
 - King Abdula Aziz University, Saudi Arabia, July 2020
 - Panjab University, May 2020
 - IIT Madras, November and December 2019



Faculty and Staff Updates

FACULTY

The faculty consisted of regular faculty, adjunct faculty on full time on a semester basis and visiting faculty who taught specialized courses in all Programs. The list of faculty is given in at Annexure 3.

New Faculty

The following faculty have joined the Institute during 2019-20:

1. Avik Hati joined as Assistant Professor, on 15 September 2020
2. Madhukant Sharma joined as Assistant Professor, on 08 June 2020
3. Shefali Jha joined as Assistant Professor, on 01 October 2020

Faculty Resignation

1. Avijit Dutta, Assistant Professor, on 04 December 2019
2. Asim Banerjee, Professor, Death on 10 July 2020 due to COVID-19

STAFF

New Staff

1. Aakansha Pandey joined as Library Apprentice Trainee, on 01 August 2019
2. Dhawal Kumar joined as Library Apprentice Trainee, on 01 August 2019
3. Khushwant Mewara joined as Library Apprentice Trainee, on 01 August 2019
4. Nilofar Ahmed Sayed joined as Library Apprentice Trainee, on 05 August 2019
5. Aakansha Pandey joined as Library Assistant, on 01 August 2020

Project Staff:

1. Viral Dave joined as Junior Research Fellow, on 05 September 2017 continues
2. Swati Priya joined as Junior Research Fellow, on 01 February 2018 continues
3. Megha Pandya joined as Junior Research Fellow, on 02 April 2018 continues
4. Naitik Parekh joined as Junior Research Fellow, on 01 February 2019 continues
5. Aarushi Dhami joined as Junior Research Fellow, on 01 February 2019 continues

6. Vishwa Vardiwale, joined as Junior Research Fellow, on 12 April 2019 continues
7. Pratik Ghosh joined as Junior Research Fellow, on 01 May 2019 continues
8. Bhargav Dave joined as Junior Research Fellow, on 01 August 2019 continues
9. Surupendu Gangopadhyay joined as Junior Research Fellow, on 01 January 2020 continues
10. Rohit Kumar Singh joined as Junior Research Fellow, on 13 August 2020
11. Bhavesh Singh joined as Junior Research Fellow, on 08 January 2021 continues
12. Riya Saini joined as Junior Research Fellow, on 04 January 2021 continues
13. Purva Thaker joined as Junior Research Fellow on 24 February 2020 continues
14. Komal Kumari joined as Junior Research Fellow on 04 August 2020 continues
15. Kamlesh Patle joined as Junior Research Fellow on 03 March 2020 continues
16. Naimishi Gupta joined as Junior Research Fellow on 15 July 2019 continues
17. Tilak Nanavati joined as Junior Research Fellow on 15 July 2019
18. Nilamben M Chaudhari joined as Junior Research Fellow, on 10 August 2020
19. Rupal Budhbhatti joined as Research Assistant, on 28 September 2020 continues
20. Purvi Patel joined as Junior Research Fellow, on 13 August 2020 continues
21. Yasha Mehta joined as Junior Research Fellow, on 01 October 2019 continues
22. K Sesha Sai Anudeep joined as Junior Research Fellow, on 04 December 2019 continues
23. Joel Fernandez joined as Junior Research Fellow, on 04 December 2019 continues
24. Vishrut Jetly joined as Student Internship 01 February 2020 to 31 March 2020
25. Sparsh joined as Student Internship 01 August to 31 December 2020
26. Vedant joined as Student Scholarship 01 August to 31 December 2020
27. Miral Shah joined as Senior Research Fellow 22 March 2016 to 31 March 2020

Staff Resignation

1. Aakansha Pandey Library Apprentice Trainee, on 31 July 2020

2. Dhawal Kumar Library Apprentice Trainee, on 31 July 2020
3. Khushwant Mewara Library Apprentice Trainee, on 31 July 2020
4. Nilofar Ahmed Sayed Library Apprentice Trainee, on 31 July 2020
5. Rahul Vashisth Junior Research Fellow, on 31 July 2020
6. Avik Ganguli Research Assistant, on 02 March 2020
7. Tanvi Lakkad Junior Research Fellow, on 31 October 2020
8. Purvi Koringa Junior Research Fellow, on 31 August 2020
9. Miral Shah Junior Research Fellow, on 30 November 2019
10. Tilak Nanavati Junior Research Fellow, on 14 June 2020
11. Rohit Kumar Singh Junior Research Fellow, on 31 October 2020



Book Exhibition at DA-IICT

Student Activities and Achievements

The students plan, organize and enjoy a rich array of activities on campus encompassing cultural, social, and educational contents through student's bodies and clubs. They range from music concerts, theaters, folk and classical dances to coding, educational and professional competitions. The Student Body Government (SBG), an elected body of the students consisting of 7 Committees and some 15 Student Clubs provides leadership to these activities. The Institute of Electrical and Electronics Engineers

(IEEE) Student Branch at DA-IICT constantly promotes the opportunities that exist in the field of electronics and electrical engineering among students through various educational programs. These activities provide a variety of engagement opportunities to students on the campus and what is learned through organizing and managing these activities inculcates leadership qualities and communication skills in them, which directly correlate with skills and attributes that employers are seeking of our graduates

STUDENT ACTIVITIES

Cultural Committee

Cultural Weekend (23-25 August)

The cultural weekend was specially organized for the freshers to make them feel comfortable on the campus and make new friends. The 3-day long event had Cafeteria day, Student Activity Centre (SAC) day and Open Air Theater (OAT) day. Cafeteria day had a Treasure Hunt organized for the freshers. The SAC day saw some fun events like tug of war, spin and kick and boom with your bum. Finally, on OAT day housie, painting, rangoli, sketching competitions and karaoke night were conducted.

Eid (12 August)

The celebration of all festivals is the specialty of the Cultural Committee. Eid was celebrated by distributing sweets among the student community.



Janmashtami (24 August)

Janmashtami, the birthday of Lord Krishna, was celebrated with great enthusiasm. The students participated in 'Matki-Fod,' regarded as one of the most celebrated festivals at DA-IICT.

Ganesh Chaturthi (2-8 September)

Ganesh Chaturthi was celebrated for three days on campus. The students concluded the celebration with idol immersion.

Teachers Day (5 September)

The invites for the Teachers Day were hand-made by the first-year students. The freshers dedicated to the faculty the musical performance, drama, dance act, stand up comedy and pieces of poetry followed by a mesmerizing music performance by Prof Kalyan Sasidhar. The students also honoured their teachers by presenting them with mementos.



Rangmanch- Drama night (5 September)

The drama night had three categories: Stage play, Mime and Felicity. One stage play and nine mime performance were staged. Students from all batches participated with great enthusiasm.

Tarang 2019 : Garba Night (3 October)

Navratri festival is celebrated to worship the nine forms of Goddess Durga, the Goddess of Power. The campus had its share of celebrations on the 5th day of the festival. The students from other Institutions also participated. A group of over 1000 students played Garba in traditional attire and also danced to the beats of the DJ.

Ramleela (8 October)

The victory of Lord Ram over Ravan was celebrated through a dramatic enactment of the story of the victory of good over evil. The play was specifically directed by sophomores and the actors were mostly the freshers. It served as a good confidence booster for freshers. Ravan Dahan, the burning of the effigy of Ravan, the demon King was carried out after Ramleela.

Maniere - The Fashion Night (14 October)

Maniere acts as a window for the fashion enthusiasts to showcase their skills as costume designers, thinkers, presenters and show stoppers. Displaying creative and inspiring concepts through fashion designing, ramp walks is the USP of Maniere. The students, individually and as groups presented traditional and modern attire designs before the audience.

Diwali (28 October)

Diwali, the most celebrated festival, encountered a semester break for the students. The students

who stayed back on campus celebrated Diwali in a customary manner.

Raaga and Rhyme (13-14 November)

Raaga and Rhyme is a music and rhyme competition where students from all batches participated. It included solo, duet, instrumental and group performances of Indian and Western music category.

Lohri (13 January)

Lohri is a popular Punjabi folk-festival celebrated in the northern regions of the country. It marks the end of the winter season and welcoming the longer days and the Sun's journey to the northern hemisphere. The students gathered at the venue in large numbers, enjoyed the warmth of the bonfire and each other's companionship.

Makarsankranti (14 January)

Makar Sankranti or Uttarayan refers both to a specific solar day in reverence to deity Surya (sun) that is observed in January every year. It marks the first day of Sun's transit into the Makara (Capricorn), marking the end of the month with the winter solstice and the start of longer days. Being the first festival after the winter vacation, students enthusiastically flew kites.

Republic Day (26 January)

71st Republic day was celebrated with patriotic fervour. The Director, KS Dasgupta hoisted the national flag and greeted the gathered people.

Sports Committee**Inter-hostel wing Tournaments (August - October 2019)**

The Sports Committee organized Inter-hostel wing tournaments. The main aim of the tournament was to drive the interest of students towards sports for their overall development. The tournaments included Badminton, Table Tennis, Volleyball, Basketball, Chess, Cricket and Football. A captain was selected for each hostel wing to make teams. The PG students who do not live in hostels participated by forming their own teams. The tournament was conducted at the beginning of the semester so that the new batches could showcase their talent and meet the seniors of similar talent.





Concours 2019: Annual Sports Festival – (7-10 November)

Concours is recognized as one of the biggest sports festivals conducted by a University in Gujarat. Students from various Universities, Institutes, and colleges took part in the festival. Sports included were Badminton, Table Tennis, Volleyball, Basketball, Chess, Cricket and Football. Students from Pandit Deendayal Petroleum University, Gandhinagar, took away the overall championship trophy.

Hostel Management Committee Cleanliness Drive

With the participation of inmates, Hostel Management Committee (HMC) worked as an interface between the administration and hostel inmates in keeping the hostels clean and to encourage cleanliness etiquette among hostels. The HMC members visited rooms, floors and evaluated them based on various parameters. The rooms and the floors with the highest marks were shortlisted and awarded on the final day.

Annual Festival Committee Youth Run

The students organized the Youth Run, under the umbrella of the techno-cultural festival of Synapse to demonstrate their support for programs that lead to the betterment of society. It is a great display of what they are passionate about. The Youth Run 2019 was held on 29 September 2019 highlighting the initiatives of Gandhinagar Municipal Corporation and UNICEF such as Saahi Poshan Desh Roshan.

Synapse 2020 (February 20-23)

Synapse is the annual techno-cultural fest of the students. It is the celebration of culture, technology and life. It is a time when the student community comes forward to show its intensity, passion and enthusiasm -- be it through participating or organizing artistic, cultural and technology events. In the year 2020 the festival was held during 20-23 February. The festival ended with the celebrity night by Shri Amit Trivedi, the talented playback icon singer. He mesmerized the audience with his extraordinarily melodious voice and entertained the audience with his mimicry skills.

Press Club

Intra-DA Spell Bee was organized (23 September) with 50 students entering the contest. Dushyant Pathak bagged 1st place and Dhruv Charan was declared Runner up.

5 editions (87 to 91) of campus magazine, Entelechy were released during the year (2019-20)

DA-IICT Theatres Group

Gender Sensitization Play (3 August 2019)

The sensitization play was performed specially for freshers to sensitize them about gender discrimination going on around them. The event started with a brief speech on gender and sex by the Conveners of the Gender Cell Jhanvi Chauhan and Arnab Gupta, followed by a play written by Prof. Shweta Garg. The play had five segments covering topics such as female abuse and homosexuality. The response from the audience was overwhelming. Freshers were further divided into groups of about ten along with a mentor of the senior class and discussions were held. It ended with a healthy discussion leading to better interaction of the freshers with the seniors.

Orientation Street Play and Mime (8 August 2019)

The Orientation Street Play and Mime were performed for the freshers to make them aware of the theatrical events of DA-IICT and to welcome the new faces to be a part of our DTG family.

Teachers Day Play (10 September 2019)

The first Open Theatre event of the autumn semester is the chance for the freshers to showcase their talents. According to Theatre Group, a play is performed by first-year students



that are directed by second-year students. This year's play was a treat like a few third-year and fourth-year students made special appearances. The play was quite gripping as the story revolved around DA-IICT, carrying a few punches that cracked up the audience.

Outstation Street Play and Stage Play (30 October - 6 November 2019)

The DA-IICT Theatres Group went for an outstation competition in BITS Goa's cultural fest "Waves" to compete with teams from different colleges all over India. The club performed outstandingly well and had a great experience.

Synapse Mime, Street Play and Stage Play (20-23 February 2020)

The DA-IICT Theatre Group performed in 2020 Synapse in all three categories (Mime, Street and Stage play). The club performed extremely well which was well indicated as the Mime group finished joint 1st, 2nd position was obtained in Stage play and 3rd in Street play.

Electronics Hobby Centre

EHC's Orientation for B.Tech and M.Tech 1st-year students (27 August 2019)

Demonstrated some of the projects done, i.e. bluetooth controlled bot, CNC plotter etc.

Session (18 September 2019)

Introduction to Arduino board and other microcontrollers.

Session (1 October 2019)

"Dimming an LED" and "Creating your own Heart Beat Sensor".



SSIP Hackathon (26 - 27 February 2020)

First year students participated in a Hackathon organized by SSIP, Gujarat in Mehsana.

A Polo Forest Trip (16 February 2020)

Programming Club activities

- Utsav Rajpara got selected in the final of Topcoder Collegiate Contest-19. Only 10 college students from India were selected in the final round.
- 4 teams qualified in ACM-ICPC 2019-20 regionals.
- 14 teams qualified in ACM-ICPC 2019-20 regionals.
- 10 teams (highest from any single college)
- qualified in Amritapuri regionals in ACM-ICPC 2019-20
- The Team Sizzling_Brownie (Deep Savani, Dhruval Suthar, Rutvik Kothari) came 10th in Amritapuri and Kanpur regional in ACM-ICPC 2019-20
- The Team Byte_me (Jaykishan Parmar, Preet Sardhara, Tanik Pansuriya) came 7th in the Kharagpur region and 15th in the Amritapuri region in ACM-ICPC 2019-20.
- The Team Sizzling_Brownie (Deep Savani, Dhruval Suthar, Rutvik Kothari) came 14th in Asia-west regional contest in ACM-ICPC 2019-20.
- Utsav Rajpara, Hiren Vaghela and Hitesh pardasani, from BTech 2016 batch, qualified for the final round of TCS codevita 2019-20. Only 50 participants from India were selected for this round.
- Tanik Pansuriya from Btech 2016 secured 1st rank in GS Quantify 2020.
- Utsav Rajpara secured 9th rank (in India) in Code Kaze conducted by Coding Ninja.

Developer Student Club

The following events were organised:

- DSC Orientation and HTML/CSS Hands-on Session (13 August 2019),
- Web Development for Beginners Session (25 September),
- GSoC, Outreachy and OSS, (9 October), Django Girls Event (13 October 2019)
- Git & GitHub Hands On session (16 January 2020)



- GSoC session by DA alumni, Rajat Talesara, (6 February 2020) and
- Session on Web Scraping, (11 February 2020)

i.Fest '19 – 11 October 2019

A 3 day annual technical fest involving over 20 technical, non-technical and fun events conducted during 9-12 October with over 2000 registrations. Theme of i.Fest'19 was Evanescence i.e. disappearing of uncertainty. Every year students from all over India participate and almost from all colleges in Gujarat. i.Fest excels in the tech community and helps the techies come forward and boost industry interaction via various sessions and workshops. Along with events, a few renowned and influential people join us for the talks during the fest. This included Mr. Dhananjay Kumar - Microsoft MVP Award winner, Founder of Geeks97, Mrs. Prachi Durge - Android team lead at AVDEV Solutions Pvt LTD, Mr. Tanuj Vishnoi - Software Engineer at JP Morgan, Ex Nvidia engineer, Mr. Keval Langalia – Mobile engineer at JioSavan, Mr. Siddhant Agrawal, Trainer Django Girls Organisation

The Debate Club participated in HLCC MUN 2019 with the following results:

- Rushabh Gajab, Special Mentions
- Harin Jani, High Commendation
- Bhargav Dave, High Commendation

Students also participated in Contention'19 (October 2019), Asian Parliamentary Debate-ILS, Pune (January 2019), a MUN in COEP, Pune (December 2019), IITGn Parliamentary Debate 2020 (January 2020, 14 representatives)

Khelaiya Club

- Salsa Garba workshop (24 September)
- Basic and Advanced Garba workshop (24 September)
- Participated in Waves fest of BITS Goa (2 November)
- Represented DA-IICT in SPM, PDP (24 January 2020) and in BLITHCHRON, IIT Gandhinagar (2 February 2020)

Music Club

- Shivam Pandita 2nd Position at IIT

Gandhinagar solo singing competition (February 2020)

- Shivam Pandita 1st Position, at Nirma University solo singing category (February 2020).
- Indian Rock Band 2nd position, at the Nirma University (February 2020).
- Biswaranjan Padhy won the Rhapsody in the Synapse under solo singing category (February 2020).
- Dhruvil Bhatt and Biswaranjan Padhy won the Rhapsody in the Synapse under duet singing category (February 2020).
- Krupa Joshi 3rd position and Shivam Pandita 2nd position at the Synapse in Raaga category
- Represented DA-IICT at the BITS Goa in the category of Silence Of The Amps and Indian Rock 2019.
- Indian Rock team performed at the IIT Gandhinagar (February 2020)

Music Club also organised Acoustic Night during Concours (10 November 2019) and during Convocation (24 January 2020)

Radio Club

The following shows and recordings were made:

- Importance of College fests
- Mayanagri: 3 episodes
- Tech Updates
- Desh ki Baatein
- The Unusual places of India
- A talk on Kabir Singh

Quiz Club (Headrush) activities:

- Giga Quiz Summer Semester (14 November 2019) with about 50 participants
- SciTech Quiz at IQuiz IFest (13 October 2019) with 200 participants
- 3 Quizzes conducted at Synapse (21 February 2020)
- A Literature Quiz in association with Shailee,
- A General Quiz hosted by Kushan Patel
- A SciBizTech Quiz presented by Headrush with overall participation at about 250

Headrush Achievements

Headrush has won several accolades:

- 6 students represented DA-IICT in Mood

Indigo 2019 at IIT Bombay, with two students, Kritika Gupta and Bhargav Dave (4th position) in the SciTech Quiz

- 14 students represented DA-IICT at Ahmedabad Quiz Fest 2019 with 3 students, Anish Deshpande, Bhargav Dave and Dhruv Charan taking (4th position) in the MELA quiz
- Bhargav Dave and Dhruv Charan won the Pop Ki Kamai - Ahmedabad edition - 2020 at IIM Ahmedabad
- Dhruv Charan and Bhargav Dave (1st and 2nd position respectively) in Magister General Quiz 2020 at the state level
- Anish Deshpande, Bhargav Dave and Dhruv Charan (3rd position) in the General Quiz at Chaos, IIM Ahmedabad
- Dhruv Charan and Anish Deshpande (2nd position) in the Literature Quiz at Synapse 2020.
- Ajinkya Matsawar and Bhargav Dave (3rd position) in the Open General Quiz by Mind Ripple at PDPU
- Bhargav Dave (2nd position) in the Astronomy quiz by Mind Ripple at PDPU
- Dhruv Charan and Bhargav Dave finished in the top 8 of the general quiz at IMNU
- Dhruv Charan and Chahak Mehta (2nd position) in the MELA quiz at Synapse 2019
- Parth Dadhanania and Dhruv Charan (2nd position) in the iQuiz 2019
- Dhruv Charan won the memes and internet culture quiz 2019 at Ahmedabad Quiz Club
- 4 students represented DA-IICT at Spectrum 2020, NIFT. Mit Vasani and Sayan Mukherjee won the general quiz and Anish Deshpande and Bhargav Dave (2nd position).

Cubing Club

The workshop introduced DA-IICT students to speed cubing and also to teach them beginner's method to solve a 3x3 Rubik's cube. 50 students participated in the event.

A Session on **WCA** (World Cube Association) **Rules and Regulations** was held on 20 February 2020 prior to Synocubix 2020 to familiarize the volunteers with the World Cube Association recognized competition's rules and regulations.

i.Cube was organized under the annual

technical fest of DA-IICT, **i.fest'19** on 19 October 2019. The event was an unofficial WCA competition with 5 events.

Rubiks' Cube Mosaics 2019-20 was organised and 6 mosaics were created.

STUDENT ACHIEVEMENTS

The sports contingent participated in the sports festival of Khel Mahakumbh organised by the Sports Authority of Gujarat (September 2019). The results are as follows for District level:

- Football Boys, Runners up
- Basketball Girls, Runners up
- Lawn Tennis Girls, Runners up
- Boxing Girls, Winner

State Level:- Siddhi Patel selected In Boxing And Won Bronze Medal In Senior State Open Boxing Championship.

The sports contingent participated in the sports festival of **PDPU 'Petrocup 2020'** (February, 2020). The results are as follows:

- Football Girls, Runners up
- Lawn Tennis Boys, Semi Finalist
- Volleyball Girls, Semi Finalist

Sports contingent performed excellently in **The Sports Festival of GNLU- 'Justice League 2020' (February 2020)**. The results are the following:

- Badminton Boys, Semi Finalist
- Badminton Girls, Runners up
- Carrom – Runners up
- Lawn Tennis Girls Second Runners up
- Lawn Tennis Boys, Semi Finalists
- Volleyball Boys, Runners up
- Athletic 400 meters, Runners up
- Athletic 1500 meters, 4th position

The sports contingent participated in the **Concourse National Sports Festival** (January 2020).

The results are as follows:

- Lawn Tennis Girls, Runners up
- Lawn Tennis Boys, Runners up
- Volleyball Girls, Runners up
- Volleyball Boys, Semi Finalists

- Football Boys, Round of 16 stage
- Basketball Boys, Semi Finalists
- Basketball Girls, Quarter finalists
- Cricket, Semi Finalists
- Badminton Girls, Semi Finalists

The sports contingent participated in the **EDI Equipo National Sports Festival** (January 2020)

The results are as follows:

- Volleyball Boys, Runners up
- Football Boys, Runners up
- Basketball Boys, Semi Finalists

Seminar on Importance of Sports on One's Mental and Physical Health was organised by the Sports Club for the first time in the history of DA-IICT on 20 August 2019. The focus of this seminar was to create awareness among the freshers and clear the myths related to sports. The committee honoured three exceptional

persons for their work in their respective fields - Wing Commander K K Nair, Wing Commander of the IAF (Indian Air Force) and Joint Director at Regional Centre ECHS (Ex-servicemen Contributory Health Scheme), Dr. Jagbir Singh, a renowned international mind trainer, fitness expert and yoga expert and Ms Khushbu Nasit, a nutritionist and the owner of FitSoul Nutrition Club.

Ms. Khushbu Nasit, enlightened the students about the human body's food requirements. Mr. Jagbir Singh continued to awe the students with his mind tricks and tips to control the subconscious mind, and engaged the students with some activities that players and non-players could use to calm their minds to get out of a stressful situation. Mr. K K Nair, concluded the seminar by giving a brief idea about how sports has evolved and how the sports culture can be promoted in India.



Winners of Youth Run

Resource Centre

The year 2019-20 brought many learnings for the Resource Centre (RC). The numerous user engagement activities managed during the first half, had to be curtailed in their physical form during the COVID period. The user services, however, remained largely unaffected as the majority of the resources were made available in e-format. The RC was kept open even during the COVID time with the help of the RC staff who stayed put at the DAIICT campus.

The new batches of Under-Graduate and Post-Graduate students were given RC orientation followed by a personal visit to the various sections of the RC. The students were explained the library rules, the arrangement of books and journals, the online book catalogue, the various electronic resources such as books, journals and databases which they could access and many other privileges.

RC also organized a familiarisation session of Grammarly – an online text editing and improvement tool. All the queries were answered satisfactorily by the Grammarly representative.

Managing the RC during the COVID pandemic

Due to the complete lockdown, the RC users were unable to physically come to the library, hence the relevant national and global news were shared with the RC users on electronic media on a daily basis.

All the subscribed electronic resources were made remotely available to all the users since March 2020.

The new batches of undergraduate and postgraduate students were given an online orientation session explaining the useful resources and services of the library. Both the sessions were interactive and well-attended.

During the COVID, the following online sessions were organized for the RC users:

- How to Choose a Right Journal for Publishing your Research? - WILEY, 9 July 2020
- Understanding Research Ethics and Integrity

in Academia- WILEY, 21 July 2020

- Peer Review: The Backbone of the Publishing Process - WILEY, 30 July 2020

People Management

The new batch of library apprentice trainees for 2019-20 was selected through a written test and a personal interview. Out of 182 applicants, 55 appeared for the written test and 18 candidates were shortlisted for the interview. Finally, 4 candidates were selected to work as Library Trainees.

The library apprentice trainees were given a detailed orientation about the library history, operations, tools and services. They were introduced to the key operational aspects such as issue/return, interlibrary loan, library users reference service, RC helpdesk, RC website updates, new books addition, thematic day books display, managing faculty publications, data compilation for the various ranking agencies etc.

Different topics were given to each of the library trainees to collect relevant information and share it with the group as a learning exercise and to enhance their soft skills.

The two library trainees have cleared the NET and have qualified as JRF.

Shri Mukesh Shrimali, the Library attendant, moves to 2nd year of MA from Gujarat University.

Shri Shashikumara, Assistant Librarian, continues to pursue his PhD from the Central University of Gujarat.

Invitations and Participations

Shri Manish Mankad, Librarian

- Participated in a discussion on 'The impact of libraries on the scholastic world' organized by the American Centre Library, Ahmedabad.
- Gave a 90-minute video lecture on 'Soft skills for the professionals' as a resource person on invitation of the UGC HRDC of Gujarat University for the Refresher Course in Library and Information Science on Building a Next-Generation Academic Libraries:

Perseverance and Transformation for the working library professionals.

- Delivered a guest speaker e-lecture 'Changing role of library support staff' for the 12th State-level Annual Refresher Course for the Library support staff organized by Ramniranjan Jhunjhunwala College, University of Mumbai

Shashikumara AA, Assistant Librarian attended a one-day workshop organised by INFLIBNET Center, Gandhinagar, Gujarat on "Indian Research Information Network System (IRINS): Adaption and promotion"

The RC staff attended the following webinars:

- Delivering Seamless Library Services And Data-Driven Decisions in a Post-COVID World., Springshare, IIM-Bangalore, 20 July 2020
- Designing Sustainably Agile and Resilient Libraries for the Post Covid-19 World- ADINET, 28 July 2020

Events organized by RC

Organised a Quarterly workshop 'Impact of Information Communication Technology in Compact Libraries' at DA-IICT under the auspices of ADINET and DA-IICT. The event was inaugurated by the Director and was attended by 45 library professionals from Gujarat.

Library apprentice trainees delivered the following presentations under the theme of 'ICT and 21st Century Athenaeum' for this workshop:

- Aakansha Pandey "Competencies and Skills"

- Nilofar Syed "Challenges and Solutions"
- Khushwant Mewara "New Trends and Technologies"

A book exhibition was organised as a part of SPACE Conference on 4th and 5th December, 2019 that elicited an encouraging response

New additions to the RC

Collection Type	Added during 2019-20	Total as of 31 July 2020
Books	406	32434
E-books	1514	15640
CDs/DVDs & AV Collection	0	4037
Theses & Dissertations	94	853
Bound Volumes of Journals	0	2940

Visitors to the Resource Centre

- Dr. Mallikarjun Angadi, Librarian NIT, Surathkal
- Dr. H. Anil Kumar, Head Librarian IIM-Ahmedabad
- Shri Kishore Ingle, Librarian, TCS, Pune
- Ms Tejas, Librarian, TCS Gandhinagar
- Shri Jitendra Parmar, Librarian, Shree Narayan College of Commerce, Ahmedabad
- DLIS PG students, SP University Vallabh Vidyanagar
- DLIS PG students, HNGU, Patan
- Dr. Chadrashekhara M, Prof and Chairman, Dept of LIS, Univ of Mysore.



ADINET Quarterly Seminar at DA-IICT, 25 January 2020

Infrastructure

ICT INFRASTRUCTURE

The Information and Communication Technology (ICT) Committee work towards the mission to provide the best possible computing facilities for the faculty research and student learning. During the reporting year, the Institute has invested Rs. 1.08 crore for purchasing and upgrading existing ICT infrastructure including hardware software upgrade and acquiring new hardware and software.

DA-IICT has modern eco-friendly, fully networked campus through high-end intelligent CISCO switch with 10G support, and with 1Gbps internet bandwidth. The campus LAN infrastructure with 1Gbps optical fiber cable connectivity between various buildings. The students on the campus have access to high speed Wi-Fi network. This helps them access online class lectures and assignments posted by teachers and the instructions issued by the institute. This wireless network setup has 120 access points spread over various campus locations.

There are around 1290 Desktop PCs for lab, staff and faculty use including 65 laptops deployed for exclusive use of faculty and staff members.

DA-IICT has its own datacenter with 33 servers and with 10G switch for server farm to provide various IT services. The Institute has deployed Moodle open source software online learning management for course content hosting and submission of assignments.

The Institute has also deployed Network Attached Storage (NAS) of EMC make to provide

storage space for Post Graduate students and Doctoral Scholars.

The Institute has already deployed High Performance Computing (HPC) Cluster to meet the computing requirements of the B.Tech (ICT) Computational Science Program. Another setup of four High end computing Servers are also deployed for research Scholars. For efficient use of these servers, provisions were made for off-campus access for faculty and PhD students via VPN whenever required.

The Institute has subscribed to campus-wide license of the popular scientific software like MATLAB, LabVIEW, Netsim Academic with tools. This is important since most of the virtual instruments have gone through major changes. The Cadence Electronic Design Automation Suite License was renewed and upgraded. To facilitate the design activities of M.Des (Communication Design) students, 27 licenses of Adobe CCT were subscribed to. The licenses of Turnitin, anti-plagiarism software and campus software agreement were renewed.

The Institute has purchased 35 higher-end desktop Pcs for the use of computer labs. The Institute has also procured 15 higher-end laptops for the use of faculty members.

In major infrastructure development activity undertaken, the Institute has subscribed to campus-wide license of 500 users of Grammarly premium edition. The Institute has also upgraded Firewall with to support large number of users with better features and for better performance.



The Institute also deployed GSuite for education cloud solutions for online classes, assignment submission and for online exam.

LABORATORY INFRASTRUCTURE

During the reporting year, Rs. 3,036,067.18 were spent for procurement of various electronic equipments as well as electronic components for the laboratories.

CAMPUS INFRASTRUCTURE

The institute planned new infrastructure projects and completed the renovation of existing infrastructure facilities on the campus. The key projects are as follows:

- Installation of Fixed Fire Fighting System
- Laying of water supply line.
- Installation of Firefighting Equipments like Fire Extinguishers, Hose Reels, Hydrant Points,

Hose Boxes with Hose Pipes etc.

- Fixing of Fire Safety Signage.
- 30HP New Bore well (Between LT Parking and New Hostel Building) :
- Laying of Drinking water supply line for LT, CEP, LAB and RC Buildings to supply the Drinking water from Central RO Plant :
- New FRP Weather Shed opposite to Food Court 3 for 48 Dining Seats
- Supply and Installation of Faculty Office Furniture (for 10 Rooms)
- Replacements of existing old water cooled type package AC units with new Air cooled type AC units : Lab 007, 008, 107, 108, 109, 207, 208.
- Replacements of existing old 1.5 TR split AC units with new split AC units in Lab 203 and 213
- Increase the seating capacity of Open Air Theater from 970 to 1045



Annexure 1

MANAGEMENT**Academic Council**

Prof. K.S. Dasgupta, Chairman	Director, DA-IICT, Gandhinagar
Shri K. Narayan, Member	Management Consultant, Reliance Group, Mumbai
Prof. Surendra Prasad, Member	Professor, IIT Delhi, New Delhi
Prof. David Koilpillai, Member	Professor, IIT Madras, Chennai
Shri Tapan Misra, Member	Director, Space Application Centre, Indian Space Research Organisation, Ahmedabad
Shri Suresh Rangachar, Member	President, Reliance Communications Limited, Mumbai
Prof. Sanjeev Gupta, Member	Dean (Research & Development), DA-IICT, Gandhinagar
Prof. Suman K Mitra, Member	Dean (Academic Programs), DA-IICT, Gandhinagar
Prof. Naresh Jotwani, Member	Professor, DA-IICT, Gandhinagar
Prof. Sanjay Srivastava, Member	Professor, DA-IICT, Gandhinagar
Prof. Binita Desai, Member	Professor, DA-IICT, Gandhinagar
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar

Finance Committee

Prof. K.S. Dasgupta, Chairman	Director, DA-IICT, Gandhinagar
Shri Suresh Rangachar, Member	Trustee, Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai
Shri Shrenik Vaishnav, Member	Vice President & Head (Consolidation), Reliance Communications Limited, Mumbai
Prof. Suman K. Mitra, Member	Dean (Academic Programs), DA-IICT, Gandhinagar
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar

Board of Studies

Prof. Suman K Mitra, Chairman	Dean (Academic Programs), DA-IICT, Gandhinagar
Prof. Manik Lal Das, Convenor	Convenor, Post-Graduate Programs, DA-IICT, Gandhinagar
Prof. Sanjeev Gupta, Member	Dean (Research & Development), DA-IICT, Gandhinagar
Prof. Ranendu Ghosh, Member	Dean (Students), DA-IICT, Gandhinagar
Prof. Asim Banerjee, Member	Convenor, Placement Committee, DA-IICT, Gandhinagar
Prof. Anil K Roy, Member	DA-IICT, Gandhinagar
Prof. Hemant Patil, Member	DA-IICT, Gandhinagar



Prof. P M Jat, Member	Coordinator, M.Sc (IT) Program, DA-IICT, Gandhinagar
Prof. Vishvajit Pandya, Member	Coordinator, M.Des (CD) Program, DA-IICT, Gandhinagar
Prof. Biswajit Mishra, Member	DA-IICT, Gandhinagar
Prof. Shweta Garg, Member	DA-IICT, Gandhinagar
Prof. Pratik Shah, Member	Indian Institute of Information and Communication Technology Vadodara, Gandhinagar (Alumnus of DA-IICT)
Shri Hasit Kaji, Member	Tata Consultancy Services (Industry Representative)
Dr. Sumitesh Sarkar, Member	Space Application Centre, Indian Space Research Organisation (Nominated by the Academic Council)
Prof. Sanjay Chaudhary, Member	Professor and Head (Research), Institute of Engineering and Technology (IET), Ahmedabad University, Ahmedabad (Nominated by the Academic Council)

Internal Quality Assurance Cell

Prof. K.S. Dasgupta	Director, DA-IICT - Chairman IQAC
Prof. Suman K Mitra	Dean (Academic Programs), DA-IICT - Director IQAC
Shri Suresh Rangachar	Reliance Communications – Management Member
Prof. Sanjeev Gupta	Dean (Research & Development), DA-IICT – Faculty Member
Prof. Ranendu Ghosh	Dean (Students), DA-IICT – Faculty Member
Prof. Sanjay Srivastava	Alumni Board, DA-IICT – Faculty Member
Prof. Asim Banerjee	Convenor, Placement Committee, DA-IICT – Faculty Member
Shri Soman Nair	Executive Registrar, DA-IICT – Administrative Member
Shri Hasendrasinh Jhala	Head, HR, DA-IICT – Administrative Member
Shri Chirag Jain	TCS, Gandhinagar – Member from Employer
Shri Parikh Samarth Sanjay	Student, DA-IICT – Student Member
Shri Makwana Bhargav Maheshkumar	Student, DA-IICT – Student Member
Shri Swapnil Khandelwal	Alumnus, DA-IICT – Alumni Member
Ms. Anupama Panchal	Alumnus, DA-IICT – Alumni Member

INSTITUTE OFFICIALS

Director

Prof. K S Dasgupta

Deans

Academic Programs

Prof. Suman K Mitra

Research and Development

Prof. Sanjeev Gupta

Students

Prof. Ranendu Ghosh

Executive Registrar

Shri Soman Nair

Head-HR and Administration

Shri Hasendrasinh Jhala

Librarian

Shri Manish Mankad

Internal Committees

Undergraduate Committee

Prof. V Sunitha, Convenor
Prof. Bharani Kollipara, Member
Prof. Mukesh Tiwari, Member
Prof. Manoj Raut, Member
Prof. Yash Agarwal, Member
Prof. Priyanka Singh, Member
Prof. Srimanta Mandal, Member

Postgraduate Committee

Prof. Manik Lal Das, Convenor
Prof. Vishvajit Pandya, Member
Prof. Minal Bhise, Member
Prof. Aditya Tatu, Member
Prof. Arnab Roy, Member
Prof. Yash Vasavada, Member
Prof. Saurabh Tiwari, Member

Academic Audit Committee for BTech Electives

Prof. Sanjay Srivastava, Convenor
Prof. V Sunitha, UG Convenor, Member
Prof. Vishvajit Pandya, Member
Prof. Biswajit Mishra, Member
Prof. P M Jat, Member, Member

International Collaborative Academic Program Committee

Prof. Anish Mathuria, Convenor
Dean-AP (ex-officio), Member
Prof. Anjan Ghosh, Member
Prof. Prasenjit Majumder, Member

Laboratory Committee

Dean (Academic Programs) (ex-officio), Convenor
PG Convenor (ex-officio) Member
UG Convenor (ex-officio) Member
Prof. Abhishek Jindal Member
Lab Superintendent (ex-officio Invitee)

Research Promotion Committee

Prof. Anjan Ghosh Convenor
Prof. Biswajit Mishra, Member
Prof. Deepak Ghodgaonkar, Member
Prof. Hemant A Patil, Member
Prof. Bhaskar Chaudhury, Member

ICT Committee

Dean (R&D) (Ex-Officio), Chair
Prof. Bhaskar Chaudhury, Convenor
Prof. P M Jat Member
Prof. Rajib Lochan Das, Member
Prof. Tapas K Maiti, Member
Executive Registrar (ex-officio), Member
Manager (IT & Systems) (ex-officio), Member

Placement Committee

Prof. Asim Banerjee, Convener
Prof. Rutu Parikh, Member
Prof. Supantha Pandit, Member
Prof. Yash Agarwal, Member
Prof. Vinay Palaparthi, Member
Prof. Alhad Kumar, Member
Placement Officer (ex-officio)

Resource Centre Committee

Prof. Prasenjit Majumder, Convenor
Prof. Gautam Dutta, Member
Prof. Madhumita Mazumdar, Member
Prof. Avijit Dutta, Member
Shri Soman Nair, Executive Registrar, Member (ex-officio)
Shri Manish Mankad, Librarian, Member (ex-officio)

Web Committee

Prof. Bharani Kollipara, Convener
Prof. Puneet Bhateja, Member
Prof. Pankaj Kumar, Member
Prof. Manish Khare, Member
Prof. Alhad Kumar, Member



CEP Committee

Prof. Amit Bhatt, Convenor
Prof. Binita Desai, Member
Prof. Rahul Muthu, Member
Prof. Gagan Garg, Member
Prof. Shruti Bhilare, Member
CEP Officer (ex-officio), Member

Annual Report Committee

Shri Soman Nair, Executive Registrar, Convenor
Prof. Suman K. Mitra Dean (Academic Programs), Member
Prof. Sanjeev Gupta, Dean (R & D), Member
Prof. Ranendu Ghosh, Dean (Students), Member
Convenor, Placement Committee, (ex-officio), Member
Prof. Anish Mathuria, Member
Prof. Shweta Garg, Member
Shri Manish Mankad, (Librarian), Member

Social Media Committee

Prof. Shweta Garg, Convenor
Social Media Officer (ex-officio), Member

Disciplinary Action Committee

Prof. Ranendu Ghosh, Dean (Students), Chair
Warden, HOR-Men, (ex-officio), Member
Warden, HOR-Women, (ex-officio), Member
Dy. Registrar, (ex-officio), Member
Student Representatives – two students (to be nominated)

Gender Cell

Convenor
Prof. Binita Desai
Members
Dean (Academic Programs), (ex-officio)
Warden, HOR-Women, (ex-officio)
Ms. Geeta Mehta
One representative from NGO
One Lawyer
One doctor
Student Representatives – two nominated students

Student Activities Council

Prof. Ranendu Ghosh, Dean (Students), (Chair)
Prof. Rahul Muthu, Convenor (Sports Committee)
Prof. Nabin K. Sahu, Co-convenor (Cultural Committee)
Prof. Jaideep Mulherkar, Convener (Synapse Committee)

International Student Cell

Prof. Anjan Ghosh, Convenor
Prof. Suman K. Mitra, Dean (Academic Programs), Member
Shri Soman Nair, Executive Registrar, Member
Prof. V. Sunitha, Convenor (UGC), Member
Prof. Yash Vasavada, Member
Rural Internship Committee
Prof. Alka Parikh, Convenor
Prof. P. Kalyan Sasidhar, Member
Prof. Vinay Palaparthi, Member

NIRF Committee

Prof. Bhaskar Chaudhury, Convenor
Shri Jalpesh Pandya, Assistant Registrar, Member
Shri Prasanna Kumar, Assistant Librarian, Member
Shri Shashikumara AA, Assistant Librarian, Member

NIRF Sub-Committee

Prof. Suman K Mitra, Dean (Academic Programs), Convenor
Prof. Sanjeev Gupta, Dean (R&D), Member (ex-officio)
Prof. Ranendu Ghosh, Dean (Students), Member (ex-officio)
Shri Soman Nair, Executive Registrar, Member (ex-officio)

Strategic Vision Committee

Prof. Anish Mathuria, Convenor
Prof. Suman K Mitra, Member
Prof. Deepak Ghodgaonkar, Member
Prof. Madhumita Mazumdar, Member
Prof. Mukesh Tiwari, Member
Prof. Yash Vasavada, Member
Prof. Bharani Kollipara, Member
Prof. Sourish Dasgupta, Member

BTP Award Committee

Prof. Jaideep Mulherkar, Current BTP Coordinator
Prof. Aditya Tatu, MTech Coordinator
Prof. Rahul Muthu, Immediate past BTP Coordinator

Summer Internship Coordinator

Prof. Rutu Parekh

Director IQAC

Prof. Anil K. Roy

Annexure 2

THESES, PROJECTS AND REPORTS

PhD Theses

1. Bansal, Sumukh, 3D shape deformations : A lie group based approach; vii, 113 p.; 2020. (Supervisor: Aditya Tatu)
2. Jain, Nupur, Investigating into a light-weight reconfigurable VLSI architecture for biomedical signal processing applications; xix, 210 p.; 2019. (Supervisor: Biswajit Mishra)
3. Prakash, Chandra, Compressive sampling architecture for wideband communication; xv, 132 p.; 2020. (Supervisor: Yash Vasavada)
4. Sujata, Facial expression recognition: feature based approaches to deep learning techniques; xvi, 140 p.; 2020. (Supervisor: Suman K. Mitra)
5. Rao, Ch. V. Narasimha, MMIC based high power transmit/receive and receive protection switches with integrated LNAs; xiv, 133 p.; 2019. (Supervisor: Deepak Ghodgaonkar) [missed out in AR-2018-19]
6. Shah, Jalpa Bharatkumar, Investigation into a low cost low energy IoT enabled wireless sensor node for particulate matter prediction for environmental applications; vii, 104 p.; 2019. (Supervisor: Biswajit Mishra) [missed out in AR-2018-19]
7. Kasodniya, Sanjay Kumar, Investigation into radiation hardening techniques on differential receiver and power management unit in 0.8 μ m CMOS for space applications; ix, 123 p.; 2019. (Supervisor: Biswajit Mishra) [missed out in AR-2018-19]
8. Modha, Sandip Jayantilal, Microblog processing : summarization and impoliteness detection; xvi, 164 p.; 2019. (Supervisor: Prasenjit Majumder) [missed out in AR-2018-19]
9. Patel, Hardik Nayankumar, Microwave imaging for breast cancer detection using 3D level set based optimization; xiv, 186 p.; 2019. (Supervisor: Deepak K. Ghodgaonkar) [missed out in AR-2018-19]
10. Gopal, Krishna, On heterogeneous distributed storage systems: bounds and code constructions; xiii, 132 p.; 2019. (Supervisor: Manish K Gupta) [missed out in AR-2018-19]
11. Limbachiya, Dixita, On designing DNA codes and their applications; xvii, 117 p.; 2019. (Supervisor: Manish K. Gupta) [missed out in AR-2018-19]
12. Shah, Nirmesh J., Voice conversion: alignment and mapping perspective; xxvi, 207 p.; 2019. (Supervisor: Hemant A. Patil) [missed out in AR-2018-19]

M.Tech Theses

1. Acharya, Rajul, Replay spoof detection on voice assistants and automatic speaker verification systems; xiii, 76 p.; 2020. (Supervisor: Hemant A. Patil)
2. Amrutiya, Aditya, Performance and power prediction on disparate computer systems; vii, 34 p.; 2020. (Supervisor: Amit Mankodi)
3. Bajpai, Anuj, Energy management control strategy modeling for a mild hybrid electric vehicle; 36 p.; 2020. (Supervisor: Daniel Sukumar Zakkam)
4. Bhaisaheb, Shabbirhussain Hamid, Optimization techniques for deep neural networks; vii, 44 p.; 2020. (Supervisor: Manjunath V. Joshi)
5. Bhatia, Divya, Word segmentation and detection for Gujarati handwritten documents; vii, 37 p.; 2020. (Supervisor: Suman K. Mitra)
6. Bisht, Abhimanyu Singh, Augmenting dialogue generation using dialogue act embeddings: a transfer learning approach; vii, 50 p.; 2020. (Supervisor: Prasenjit Majumder)
7. Chavda, Parita, Sparse representation and fisher discriminant criterion based dimensionality reduction for face recognition; viii, 31 p.; 2020. (Supervisor: Suman K. Mitra and Srimanta Mandal)
8. Chhablani, Reena, Development of surface soil moisture (SSM) retrieval algorithm using multi-temporal sentinel-1 C band SAR data; viii, 45 p.; 2020. (Supervisor: Suman K. Mitra)
9. Chourasia, Ruchi, Driving behaviour monitoring solution; viii, 21 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
10. Datta, Anwesha, Verification of multi-PHY

- SerDes IP; viii, 29 p.; 2020. (Supervisor: Biswajit Mishra)
11. Dave, Rishi, Kernel methods for data analysis; viii, 34 p.; 2020. (Supervisor: Suman K. Mitra)
12. Desai, Harsh Sanjaykumar, Apparel attributes classification using deep learning; vi, 15 p.; 2020. (Supervisor: P.M. Jat)
13. Deven, Dave Bhargav, Study of microarray data to identify putative risk genes in Parkinson's disease; viii, 61 p.; 2020. (Supervisor: Prasenjit Majumder)
14. Digantkumar, Nanavati Tilak, Applications of deep-learning at digital communication receiver; x, 94 p.; 2020. (Supervisor: Yash Vasavada)
15. Diksha, Device modelling and circuit designing using prominent neural network; ix, 75 p.; 2020. (Supervisor: Yash Agrawal)
16. Gami, Shradha, Micro-services of treebo hotels; viii, 17 p.; 2020. (Supervisor: Lavneet Singh)
17. Gautam, Chandan, Microwave NDT of textile composites using rectangular dielectric waveguide technique; ix, 44 p.; 2020. (Supervisor: Deepak Ghodgaonkar and Rutu Parekh)
18. Gupta, Naimishi, Comparison and analysis of channel coding schemes for 5G mobile communication; x, 89 p.; 2020. (Supervisor: Yash Vasavada)
19. Gupta, Suesha, Creation of automation plugins for autosar tool; v, 12 p.; 2020. (Supervisor: Srimanta Mandal)
20. Kakadiya, Ankit Dineshbhai, Creating orderbook data and displaying it realtime; vi, 8 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
21. Kapadiya, Ashik Kumar, Avatar retargeting; v, 9 p.; 2020. (Supervisor: P.M. Jat.)
22. Ketanbhai, Parikh Apurva, Clickbait detection using deep learning Techniques; vii, 37 p.; 2020. (Supervisor: Prasenjit Majumder)
23. Kheni, Denishkumar Hirabhai, Automate deployment of microservice application using kubernetes; vi, 19 p.; 2020. (Supervisor: Saurabh Tiwari)
24. Kosta, Ankur, Design and Implementation of 3-stage Low Power Interrupt Driven Processor using RISC-V ISA; vi, 17 p.; 2020. (Supervisor: Amit Bhatt)
25. Kumar, Manish, Sensors-based prediction of plant diseases using neural network; vi, 26 p.; 2020. (Supervisor: Ahlad Kumar)
26. Kumar, Rajat, Performance and power modeling on disparate computer systems using machine learning; vii, 34 p.; 2020. (Supervisor: Amit Mankodi)
27. Laheri, Vishal Bharatkumar, Video captioning; vi, 25 p.; 2020. (Supervisor: Srimanta Mandal)
28. Lakkad, Tanvi, Retrospective analysis on financial news & NIFTY50; v, 14 p.; 2020. (Supervisor: Prasenjit Majumder)
29. Lalitkumar, Suthar Shubham, Query interceptor; vii, 20 p.; 2020. (Supervisor: Saurabh Tiwari)
30. Langhnoda, Pooja, Mobile messaging and analytics web application with third party API integration; vii, 25 p.; 2020. (Supervisor: Saurabh Tiwari)
31. Makda, Taher, Commercial execution playbook; vii, 9 p.; 2020. (Supervisor: Amit Mankodi)
32. Makwana, Vivek H., Commonsense validation and explanation; viii, 47 p.; 2020. (Supervisor: Jayprakash Lalchandani)
33. Marakana, Meet, VIU content access layer intelligent & flexible content selection; vii, 20 p.; 2020. (Supervisor: Asim Banerjee)
34. Mathur, Ayush, DOOH automation; vii, 18 p.; 2020. (Supervisor: Saurabh Tiwari)
35. Mayank Jha, Prediction of significant co-ordinates from GPS data using clustering techniques; vi, 12 p.; 2020. (Supervisor: Aditya Tatu)
36. Mehta, Kavisha, Recognic console; vii, 34 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
37. Mehta, Nishi, Data warehousing and analytics for chatbot; 23 p.; 2020. (Supervisor: Suman K. Mitra)
38. Methaniya, Dhruvkumar Bharatkumar, DOOH automation; 20 p.; 2020. (Supervisor: Saurabh Tiwari)
39. Mishra, Priyabrata, Chip level simulation for timing analysis of a target micro controller; vii, 22 p.; 2020. (Supervisor: Yash Agarwal)
40. Misra, Ajita, Analysis of on-chip

- interconnects using prospective neural network techniques; x, 68 p.; 2020. (Supervisor: Yash Agrawal and Vinay Palaparthi)
41. Mohanta, Aditya, Front-end design for two lead ECG acquisition system; viii, 36 p.; 2020. (Supervisor: Biswajit Mishra)
 42. Mungalpara, Ankita, Forest stand height estimation using inversion of RVoG model over forest of north-eastern India; x, 53 p.; 2020. (Supervisor: Suman K. Mitra)
 43. Nadeem G, Maulvi Mohammed, Image captioning using xception; vi, 12 p.; 2020. (Supervisor: Manish Khare)
 44. Naik, Krishna Keyurbhai, Remaining useful life prediction and bug triaging using machine learning techniques; x, 58 p.; 2020. (Supervisor: Manjunath V. Joshi)
 45. Naik, Prachi, Revamping pillion module for dunzo user application; v, 20 p.; 2020. (Supervisor: Lavneet Singh)
 46. Neeli, Siva Sravana Kumar, Extraction Of Questionnaire Having Yes /No Format From Scanned Images; vii, 19 p.; 2020. (Supervisor: Manjunath V. Joshi)
 47. Pandya, Himadri, Part replacement prediction for Philips digital X-ray machines; vii, 11 p.; 2020. (Supervisor: Amit Mankodi)
 48. Parekh, Naitik, Beamforming using learning based algorithms; x, 56 p.; 2020. (Supervisor: Yash Vasavada)
 49. Patel, Charin, Implementation of SMAP and sentinel microwave signal based algorithm for high resolution soil moisture; x, 51 p.; 2020. (Supervisor: Suman K. Mitra and Dharmendrakumar Pandey)
 50. Patel, Charmy Bharatbhai, WSN Network Analysis and Prediction using ML; vii, 29 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
 51. Patel, Pankti, Sophia - ELK Tool; v, 15 p.; 2020. (Supervisor: Lavneet Singh)
 52. Patel, Prince Rakeshbhai, Light weight end to end pipeline for ingesting documents into UDR; v, 14 p.; 2020. (Supervisor: Aditya Tatu)
 53. Patel, Urmi, Out of home advertising platform; vii, 17 p.; 2020. (Supervisor: Asim Banerjee)
 54. Pathak, Indra Kumar, Energy parameters measuring system; viii, 26 p.; 2020. (Supervisor: Asim Banerjee)
 55. Patil, Kirtiraj S., Analytics on streaming IoT data : a survey; v, 14 p.; 2020. (Supervisor: Minal Bhise)
 56. Purohit, Mirali Virendrabhai, Deep learning techniques for speech pathology applications; xiv, 113 p.; 2020. (Supervisor: Hemant A. Patil)
 57. Purohit, Saurabh, Business intelligence portal for customer insights; v, 13 p.; 2020. (Supervisor: Saurabh Tiwari)
 58. Raizada, Atul, Wind turbine management system; 30 p.; 2020. (Supervisor: Asim Banerjee)
 59. Rajpura, Divyesh G., Design of robust automatic speaker verification system in adverse conditions; xii, 69 p.; 2020. (Supervisor: Hemant A. Patil)
 60. Sadrani, Riya D., Bayesian networks : Bayesian learning in neural networks and autoencoders; vii, 38 p.; 2020. (Supervisor: Suman K. Mitra)
 61. Sapara, Dhara, Structural properties of realization graphs; vi, 50 p.; 2020. (Supervisor: Rahul Muthu)
 62. Shah, Ishit Rajivkumar, Employee engagement system (PeopleHum); vii, 34 p.; 2020. (Supervisor: Asim Banerjee)
 63. Shah, Pushya, Sentence detection; vi, 13 p.; 2020. (Supervisor: Suman K. Mitra)
 64. Sharma, Rajat, ML-based clients prioritization and ranking algorithm; vii, 27 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
 65. Sharma, Rohan, Machine learning in financial data EPS estimates; iv, 13 p.; 2020. (Supervisor: Manjunath V. Joshi)
 66. Shivhare, Adarsh, DOOH automation; vi, 18 p.; 2020. (Supervisor: Asim Banerjee)
 67. Shyam, Sherashiya, Image aesthetic assessment using deep learning; ix, 44 p.; 2020. (Supervisor: Suman K. Mitra)
 68. Siddhapura, Abhijit, Fraud detection in teen patti; vi, 15 p.; 2020. (Supervisor: Amit Mankodi)
 69. Singh, Praveen Kumar, Lending loan originating & loan management system; v, 10 p.; 2020. (Supervisor: Aditya Tatu)
 70. Sompura, Jigar, Counting number of



- minimum spanning trees; vii, 27 p.; 2020. (Supervisor: Rahul Muthu)
71. Soni, Maulik, Acyclic edge colouring of subgraphs of hypercubes; ix, 47 p.; 2020. (Supervisor: Rahul Muthu)
 72. Suresh, Shweta, Lottery ticket hypothesis : using deeper conv nets and on Atari games; vi, 16 p.; 2020. (Supervisor: Manjunath V. Joshi)
 73. Swarnlata, Ch, Wind turbine power generation monitoring system along with predictive maintenance to identify the mean breakage time; viii, 17 p.; 2020. (Supervisor: P S Kalyan Sasidhar)
 74. Thakkar, Ajay, Mobile automation of acko website; v, 14 p.; 2020. (Supervisor: Saurabh Tiwari)
 75. Tyagi, Akansha, What does BERT learn about questions; vii, 40 p.; 2020. (Supervisor: Prasenjit Majumder)
 76. Vaghani, Shruti, Redactable blockchain and chameleon hash function characterization; vii, 39 p.; 2020. (Supervisor: Maniklal Das)
 77. Vakharia, Hinal, Exposure of MR physics throughout automation of test cases; vii, 14 p.; 2020. (Supervisor: Saurabh Tiwari)
 78. Varshney, Kratika, Bag of words (BoW) generation from given features for optimizing feature matching in V-SLAM application; vii, 18 p.; 2020. (Supervisor: Srimanta Mandal)
 79. Vinay, V. V., Flight search system; vii, 19 p.; 2020. (Supervisor: Asim Banerjee)

M.Des Project Reports

1. Binwani, Pranjali, O laal meri : jhulelal and the Sindhi identity; 30 p.; 2020. (Supervisor: Madhumita Mazumdar, Vishvajit Pandya and Binita Desai)
2. Jain, Mili, Prevention of childhood sexual abuse; 50 p.; 2020. (Supervisor: Binita Desai)
3. Negi, Mohit, Myar himala : Do pahlu - vikas aur palayan; 52 p.; 2020. (Supervisor: Vishvajit Pandya and Madhumita Mazumdar)
4. Siddhesh, Prathamesh, Live light : Interactive website for waste management in Badlapur; 117 p.; 2020. (Supervisor: Binita Desai)
5. Singh, Shivika, Rampuriyat : Culinary journey; 28 p.; 2020. (Supervisor: Madhumita Mazumdar)

Annexure 3

FACULTY WITH AREAS OF INTEREST

Regular Faculty

Name of the Faculty	Areas of Interest
K S Dasgupta (Director) PhD (Engineering) Indian Institute of Technology, Bombay Technological University	Digital Signal and Image Processing, Digital Communication, Computer Networking and Satellite Communication.
Agrawal, Yash PhD (Electronics & Communication Engineering) NIT, Hamirpur, Himachal Pradesh	Design, modelling and simulation of high performance VLSI interconnects, Nanotechnology
Banerjee, Asim PhD (Electrical Engineering) IIT Bombay	Pattern Recognition, Medical Imaging, Image Processing, Digital Signal Processing, Speech Coding, Software Engineering, Software Quality Assurance and Project Management
Bhateja, Puneet PhD (Computer Science) Chennai Mathematical Institute	Formal Methods used for Testing and Verification
Bhatt, Amit PhD (Electrical Engineering) North Carolina State University, USA	Multi core Computer Architecture and Parallel Programming, Low Power Methodology in Digital design
Bhise, Minal PhD (Computer Science) BITS Pilani	Semantic Web, Distributed Databases, Software System Analysis and Design
Chaudhury, Bhaskar PhD (Physics) Institute for Plasma Research (IPR)	Computational Science, High Performance Computing, Computational Physics, Modelling and Simulation of Plasmas, Computational Electromagnetics, Parallel Programming, GPU Computing, Plasma electronics
Das, ManikLal PhD (Information Technology) IIT Bombay	Information Security, Cryptography, System Design and Analysis
Das, Rajib Lochan PhD (Adaptive Signal Processing) IIT Kharagpur	Adaptive Signal Processing, Compressive Sensing, Image Processing
Dasgupta, Sourish PhD (Computer Science) University of Missouri-Kansas City, USA	Distributed Multi-Agent System, Service Oriented Architecture, Semantic Web, artificial intelligence
Desai, Binita BFA (Fine Arts) MS University, Baroda, Animation National Institute of Design, Ahmedabad	Animation, Communication Design and Multimedia
Dutta, Gautam PhD (Physics) Physical Research Laboratory, Ahmedabad	Quantum Computers, Signal Processing, Image Processing, Particle Physics



Garg, Gagan PhD (Computer Science and Automation) IISC Bangalore	Information Theory, Cryptography, Number Theory
Garg, Shweta PhD (English) IIT Roorkee	Food and Cultural Studies, Performance Studies, Creative Writing, Literature of the Indian Diaspora
Ghodgaonkar, Deepak PhD (Electrical Engineering) University of Utah, USA	RF and Microwave Engineering, Microwave Sensors, Microwave Instrumentation, Microwave characterization of composite materials, Biomedical applications of microwaves, Electromagnetic imaging of complex dielectric bodies and Wireless data communications
Ghosh, Ranendu PhD (Soil science & Agricultural Chemistry) Indian Agricultural Research Institute, New Delhi	Satellite Remote sensing & GIS, satellite communication applications for rural development, sustainable agriculture system
Gupta, Manish K PhD (Mathematics) IIT Kanpur	Information processing in Biology, Bio-molecular (DNA, Membrane, Cell) computing, Coding and Information theory, Cryptology, Quantum computing, Computational, Structural and Systems Biology and Bioinformatics
Gupta, Sanjeev PhD (Communication Engineering) Queen's University of Belfast, UK	Smart Antennas, Communication and Radar Systems, RF/Microwave Applications
Hati Avik PhD (Electrical Engineering), IIT Bombay	Computer Vision, Image Processing, Machine Learning
Jat, Pokhar Mal PhD (Computer Science and Engineering) ML Sukhadia University, Udaipur	Databases, Data Mining, Web of Data, Software Design
Jha Shefali PhD (Anthropology), University of Chicago, USA	Political Anthropology, Cultural Studies, Feminist Theory, Film Studies, Literary and Visual Cultures in South Asia
Joshi, Manjunath V PhD (Electrical Engineering) IIT Bombay	Computer Vision, Image processing, Super-Resolution, Restoration, Signal Processing, Digital Communication
Jotwani, Naresh PhD in Computer Science Rice University, Houston, Texas, USA	Solar Energy, Engineering Design, Economics
Khare, Manish Ph.D (Computer Science) University of Allahabad, Allahabad	Image Processing, Computer Vision, Infrared Imaging, Applications of Wavelet transforms.
Kollipara, Bharani PhD (English Literature) English and Foreign Languages University, Hyderabad	Literature and Philosophy, Ancient Greek Philosophy, Political Theory, Aesthetics

Mankodi Amit PhD (Pursuing) DA-IICT, Gandhinagar, Gujarat	Embedded Systems, Computer Networks, High Performance Computing
Majumder, Prasenjit PhD (Computer Science), Jadavpur University, Kolkata	Information Retrieval, Natural Language processing, Digital Libraries
Mathuria, Anish PhD (Computer Science) University of Wollongong, Australia	Computer Security
Mazumdar, Madhumita PhD (Modern History) University of Calcutta, Calcutta	Social history of Science, Technology and Medicine in India, Cultures of Communication and The Media
Mishra, Biswajit PhD (Electrical & Electronics Engineering) University of Southampton, UK	Very Low Voltage Circuits for Wireless Sensor Networks, Digital IC Design, Power Management for Energy Harvesters, Signal Processing Hardware for Color Image Processing, Geometric Algebra and Novel Hardware
Mitra, Suman Kumar PhD (Computer Science) ISI Calcutta	Image Processing, Pattern Recognition, Fractal, Bayesian Network and Digital Image Watermarking
Mulherkar, Jaideep PhD (Mathematics) University of California Davis, USA	Mathematical Physics, Quantum Computation and Information
Muthu, Rahul PhD (Computer Science) HomiBhabha National Institute, Mumbai	Graph Theory and Algorithms
Pandya, Vishvajit PhD (Anthropology) University of Chicago, USA	Material Culture, Design and Communication Culture, Visual Anthropology, Rituals and History with specific reference to Colonialism
Parikh, Alka PhD (Agriculture and Allied Economic) Cornell University, USA	Rural development and the related issues like Agriculture, Poverty, Unemployment and Wages, Rural Finance, Environment and Development, Disaster Management
Parekh, Rutu PhD (Electrical Engineering) Sherbrooke University, Sherbrooke, Quebec, Canada	Nanoelectronics, Nano Device-CMOS Hybridization, Design and Simulation, Circuit Design, Modeling and Simulation of Next-Generation Memory (PCM), Nanofabrication
Patil, Hemant PhD (Signal Processing) IIT Kharagpur	Speaker Recognition and Wavelet Signal Processing
Raut, Manoj Kumar PhD (Mathematics) IIT Madras	Logic in Computer Science
Ray, Arnab Kumar PhD (Physics) Jadavpur University, Kolkata	Astrophysics and Nonlinear Systems



Roy, Anil PhD (Physics) IIT Delhi	Fibre Optics and Optical Communication, Quantum Optics, Nanotechnology, Semiconductor Devices, ICT Applications in Rural Development
Sahu, Nabin Kumar PhD (Mathematics) IIT Kharagpur	Applied Functional Analysis, Operator Theory, Variational Inequality, Variational Inclusion Problems
Sasidhar, P S Kalyan PhD (Computer Science and Engineering) University of North Texas-Denton, Texas, USA	Mobile and Pervasive Computing
Singh, Lavneet M.S. (Software Systems) BITS Pilani	Cloud Computing, IoT, Software Architecture, Design and Engineering, Enterprise Software Systems.
Singh, Priyanka PhD (Computer Science) Motilal Nehru National Institute of Technology, Allahabad, India	Encrypted Domain Processing, Digital Forensics, Security & Privacy issues in Cloud Computing, Secure Data Deduplication, Computer Vision
Srivastava, Sanjay PhD (Physics) University of California, Los Angeles, USA	Computer Networks: Protocol Modelling, Simulation
Sunitha, V PhD (Mathematics) IIT Madras	Algorithms, Discrete Mathematics, Graph Theory, Parallel & Distributed Computing, Theoretical Computer Science, Interconnection Networks
Tatu, Aditya PhD (Image Analysis) University of Copenhagen, Denmark	Applications of Differential Geometry (Shapes, Curve Evolutions, etc.) Image features, Continuous optimization.
Tiwari, Mukesh PhD (Optical Science & Engineering) University of New Mexico, USA	Statistical Physics, Non-Linear Dynamics, Quantum Transport, Surface Science
Tiwari, Saurabh PhD (Software Engineering) IIITDM Jabalpur	Requirement Engineering, Empirical Software Engineering, Evidence-based Software Engineering, Safety Analysis, Model-based Testing
Vasavada, Yash PhD (Wireless Communications) Virginia Polytechnic Institute and State University, USA	Wireless Communications, Satellite Communications, Signal Processing, Detection and Estimation Theory, Information Theory and Coding Theory, Machine Learning and AI, Cognitive Communications, LTE and 4G/5G, MIMO Channels

Adjunct Chair Faculty

Name of the Faculty	Areas of Interest
Banerjee, Nandini M.Phil., PhD R D University, Jabalpur	Economics & General Management
Dasgupta, Kuntala B.Sc. Calcutta University	Rabindra Sangeet, North Indian, Classical, India Film Music and History.
Patel, Narendra Dip. in Fine Arts, Kala Neketan, (Now Government Institute of Fine Arts) Jabalpur, Dip. in Visual Communication (Animation Film), National Institute of Design, (NID) Ahmedabad	Film and Animation film, HFX, Communication Design, eLearning, Photography, Web Design, Multimedia, Graphics user Interface, Software Development, Printing Technology
Nagchoudhuri, Dipankar PhD (Electrical Engineering, Michigan State University, USA)	VLSI Design, CMOS Circuits and Technology, Biomedical Signal Processing Chip Design
Rangwala, Tanvi MS Computer Science, University of Southern California, USA	Computer Science, Entrepreneurship
Aditi Nath Sarkar M.A. in English from Calcutta University, West Bengal, India	English Literature
Grishma Verma NID, Ahmedabad, Gujarat, India	Post Graduate in Animation Film Design
Jasmine Shaikh M.Phil, Gujarat University, Gujarat, India	M.Phil in Fashioning the Self Socio Economics and Cultural Paradigms in the BBC Television Series
Nikita Desai Ph.D, DA-IICT, Gandhinagar, Gujarat, India	Design, Culture, Conversation and Display
Jay Prakash Lalchandani Ph.D, IIT Kharagpur, West Bengal, India	Slicing UML Models, Software Engineering
Anirban Duttagupta Graduate, NID, Ahmedabad, Gujarat, India	Visual Communication Design with Specialization in Filmmaking & Communication Design
Ajit Pal Ph.D, Calcutta University, India	Synthesis of digital logic circuits MOS
Ganesh Devy Ph.D, English from Shivaji University, India	English Literature, Tribal Studies, Indigenous Studies
Korjan Amay Master of Arts Philosophy	Philosophy



Visiting Faculty

Name of the Faculty	Areas of Interest
Levin, David PhD (Statistics) University of California, Berkeley	Mathematics, Probability theory and its applications
Smith, David M PhD (Biological Physics) University of Leipzig, Germany	DNA-based Nano-materials, Bio-nanotechnology, Bio-polymer self-assembly, soft matter Physics, Cellular Biophysics
Pasi, Gabriella PhD (Computer Science) University of Rennes, France	Data Science, Fuzzy Logic, Information Retrieval, and Information Filtering
Fujisawa, Hiromichi PhD (Electrical Engineering) Waseda University, Tokyo, Japan	Pattern Recognition, Integrated Document Management System
Belkin, Nicholas PhD (Information Studies) University College, University of London	Human-centered Information Retrieval and Development of the Cognitive viewpoint in Information Science
Thomas Mandl PhD (Information Science) University of Hildesheim, Germany	Information Management

Annexure 4

OFFICERS AND STAFF

Registrar

Soman Nair, Executive Registrar

Academic Programs

Jigar P Yagnik, Deputy Registrar (Academic)
Jalpesh Pandya, Assistant Registrar (Academic)
Dinesh Prajapati, Senior Programmer
Nandini Banerjee, Counselor
Nitu Singh Bhadauria, Student Counselor
Jainik Patel, Academic Assistant

Administration & HR

Hasendrasinh Jhala, Head - HR & Administration
Rajesh V Patel, Estate Engineer
Sudhir Dave, Commercial Officer
Bhavesh Shah, Senior Stores Assistant
Kiritkumar Pandya, Assistant Administrative Officer
Gyanesh Pandya, Senior HR Assistant
Niketa P Raval, Receptionist-Cum-Office Assistant
Keshurbhai M Zala, General Assistant
Bahadursinh M Veghela, Driver

Accounts

Geeta Mehta, Chief Accounts Officer
Santosh Pandit, Assistant Accounts Officer
Alpesh Chauhan, Accounts Assistant

Director/Dean/Registrar/Faculty Offices

Venugopal PR, Executive Secretary to Director
Abhilash Bhaskaran, Senior Secretary to Registrar
Satyabir Singh, Senior Secretary to Dean (AP) & Dean (R&D)
Pankit Gandhi, Secretary Faculty Block 1
Deepa Poduval, Secretary Faculty Block 2
Geeta S Nair, Secretary Faculty Block 4

Placement

Sneha Thakker, Manager-Placement
Anuradha Srivastava, Secretary

Continuing Education Program (CEP)

Parth Vayeda, CEP Officer
Shreejesh Kumar-Secretary ANCHOR

Resource Centre (Library)

Manish Mankad, Librarian
Prasanna Kumar Muduli, Assistant Librarian
Shashikumara A A, Assistant Librarian
Aakansha Pandey, Library Apprentice Trainee
Nilofar Sayed, Library Apprentice Trainee
Dhawal Kumar, Library Apprentice Trainee
Khushwant Mewara, Library Apprentice Trainee
Manish Goswami, Library Attendant
Mukesh Shrimali, Library Attendant

Computer Systems

Nimesh B Patel, Manager (IT & Systems)
Prabhunath Sharma, Senior Design & Systems Assistant
Darshan Prajapati, Hardware & Network Engineer
Priyank Santola, Hardware & Network Engineer

Laboratory

Rajendra Shah, Laboratory Superintendent
Ramesh Prajapati, Deputy Laboratory Superintendent
Abhishek B Jani, Assistant Laboratory Superintendent
Sanjay Bariya, Senior Laboratory Assistant
Krunal G Patel, Senior Laboratory Assistant
Bhargav Patel, Laboratory Assistant
Naresh Patel, Laboratory Assistant
Dharmik Mehta, Laboratory Assistant

Sports office

Vishal Pratap Singh, Sports Officer
Shirish Varma, Sports Assistant

Hostels

Jitendra Parmar, Senior Hostel Supervisor
Sawankumar Sachaniya, Hostel Supervisor

DCEI

Sujani Shah, Incubation Assistant
Bhumi Vyas, Secretary Project Staff

Project Staff

1. Naimishi Gupta, Junior Research Fellow, DSPLM-ISRO Sponsored project wef 15 July 2019 [Supervisor: Rajib Lochan Das]
2. Tilak Nanavati, Junior Research Fellow, DSPLM-ISRO Sponsored project wef 15 July 2019 [Supervisor: Rajib Lochan Das]



3. Aarushi Dhami, Junior Research Fellow, SATCOM-ISRO Sponsored project wef 01 February 2019 [Supervisor: Yash Vasavada]
4. Naitik Parekh, Junior Research Fellow, SATCOM-ISRO Sponsored project wef 01 February 2019 [Supervisor: Yash Vasavada]
5. Viral Dave, Senior Research Fellow, DLDMVA-ISRO Sponsored project wef 05 September 2017 [Supervisor: Ranendu Ghosh]
6. Surupendu Gangopadhyay, Junior Research Fellow, IMPRINT-MHRD Sponsored project wef 01 June 2018 [Supervisor: Prasenjit Majumder]
7. Megha Pandya, Junior Research Fellow, DLDMVA-ISRO Sponsored project wef 02 April 2018 [Supervisor: Ranendu Ghosh]
8. Swati Priya, Junior Research Fellow, AVIRIS-ISRO Sponsored project wef 01 February 2018 [Supervisor: Ranendu Ghosh]
9. Vishwa Vardiwale, Junior Research Fellow, DBLM-SERB Sponsored project wef 12 April 2019 [Supervisor: Biswajit Mishra]
10. Rahul Vasisth, Junior Research Fellow, DMAASRS-ISRO Sponsored project wef 01 August 2017 [Supervisor: Deepak Ghodgaonkar]
11. Pratik Ghosh, Junior Research Fellow, MMSPD-SERB Sponsored project wef 01 May 2019 [Supervisor: Bhaskar Chaudhary]
12. K Sesha Sai Anudeep Junior Research Fellow, SDGBBF Sponsored ISRO project wef 04 December 2019 [Supervisor: Prof. Yash Vasavada]
13. Joel Fernandez Junior Research Fellow, SDGBBF Sponsored ISRO project wef 04 December 2019 [Supervisor: Prof. Yash Vasavada]
14. Yasha Mehta Junior Research Fellow, DFTEA Sponsored ST DST project wef 01 October 2019 [Supervisor: Prof. Biswajit Mishra]
15. Rohit Kumar Singh Junior Research Fellow, DSPLM Sponsored ISRO project wef 13 August 2020 [Supervisor: Prof. Rajib Lochan Das]
16. Bhavesh Singh Junior Research Fellow, DSPLM Sponsored ISRO project wef 01 October 2019 [Supervisor: Prof. Rajib Lochan Das]
17. Purvi Patel Junior Research Fellow, DNULPD Sponsored DSTSERB project wef 13 August 2020 [Supervisor: Prof. Biswajit Mishra]
18. Rupal Budhbhatti Research Assistant, DODMOG Sponsored Govt. of Gujarat project wef 28 September 2020 [Supervisor: Prof. Anil Kumar Roy]
19. Nilam M Chaudhari Junior Research Fellow, SARNN Sponsored SAC ISRO project wef 10 August 2020 [Supervisor: Prof. Suman Kumar Mitra]
20. Avik Ganguli Research Assistant, IMPRINT Sponsored MHRD project wef 03 September 2019 to 02 March 2020 [Supervisor: Prof. Prasenjit Majumder]
21. Bhargav Dave Junior Research Fellow, IMPRINT Sponsored MHRD project wef 01 August 2019 [Supervisor: Prof. Prasenjit Majumder]
22. Kamlesh Patle Junior Research Fellow, IOTENL Sponsored DST SERB project wef 03 March 2020 [Supervisor: Prof. Vinay Palaparthi]
23. Komal Kumari Junior Research Fellow, GNSS Sponsored ISRO project wef 04 August 2020 [Supervisor: Prof. Sanjeev Gupta]
24. Purva Joshi Junior Research Fellow, ULPCA Sponsored ISRO project wef 24 February 2020 [Supervisor: Prof. Bhaskar Chaudhary]
25. Miral Shah Senior Research Fellow, KMFA Sponsored DAE BRNS project wef 01 October 2018 [Supervisor: Prof. Bhaskar Chaudhary]
26. Vishrut Jetly joined as Student Internship Multiscale Modeling and Simulation of Complex Plasma Dynamics during High Power Millimeter Wave Breakdown 01 February 2020 to 31 March 2020 [Supervisor: Prof. Bhaskar Chaudhary]
27. Sparsh joined as Speech to Speech Machine Translation (SSMT) 01 August to 31 December 2020 [Supervisor: Prof. Prasenjit Majumder]
28. Vedant joined as Student Scholarship Speech to Speech Machine Translation (SSMT) 01 August to 31 December 2020 [Supervisor: Prof. Prasenjit Majumder]

Annual Report Committee
Shri Soman Nair | Prof. Suman K Mitra | Prof. Sanjeev Gupta
Prof. Ranendu Ghosh | Prof. Asim Banerjee | Shri Manish Mankad
Prof. Anish Mathuria | Prof. Shweta Garg

Acknowledgment : Shri Prabhunath Sharma



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