

# **JIS COLLEGE OF ENGINEERING**

*Annual Report*

**2018 - 2019**



**JIS COLLEGE OF ENGINEERING**  
AN AUTONOMOUS INSTITUTION

**Department of  
Computer Science and  
Engineering**

### **VISION:**

The Computer Science and Engineering Department at JIS College of Engineering will be a leader in computing innovation through excellence in undergraduate and graduate education, active research programs and the dissemination of knowledge. The Department will leverage both the international and interdisciplinary nature of computing.

### **MISSION:**

The Department's mission is

- To provide students and faculty with an open environment that encourages professional and personal growth.
- To prepare students for flexible career paths and continuing advancement in computing.
- To motivate and encourage the students to build successful career in the computing professions through flexible programme of study that can be adapted to support individual career goals.

## Departmental Objectives

The resolution of the department is to perfectly obey and abide by the vision “Igniting Minds Empowering lives” and the vision statement of disseminating and generating knowledge among students so as to make them industry-ready with State-of-the-Art skill set to the extent possible.

Influenced and inspired by the global trends in expansive application and intensive research opportunities in Information Science, Technology and Management, the department of Computer Science and Engineering has been working with dual objectives of strengthening R & D activities as well as Industry Institute initiatives.

Amidst a relatively young department, the departmental faculty members contributed their works collectively in important research Forum like IEEE, Elsevier, Springer etc. Continuous encouragement from the Authority of the Institution enabled the young faculty members of the department to attend and contribute in various conferences, symposiums, seminars and workshops organized by various international forums like IEEE CS Society, IEEE ED Society. The faculty members are involved in Professional Society Activities and associated with various research forums. Presently the Departmental activities on Research have been accelerated largely due to World Bank grant through Technical Education Quality Improvement Programme (TEQIP). In addition, department has awarded with Research Projects under RPS Scheme, MODROB Scheme.

On the other hand, guided by the Institution Authority the departmental faculty members are associated in establishing / participating / conducting Infosys Campus Connect Programme, WIPRO Mission 10X Learning Approach and Microsoft Edvantage Programme.

The department is eagerly expect advice / guidance / suggestions from everyone so as to work-out its weaknesses and can serve the Institutional needs and desires in a better way.

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**HOD, CSE**

## Programme Details

- Name of Program: B.Tech in CSE
- Nature of Program: Full time
- Duration: 4 years
- Sanctioned Intake: 120
- Year wise students on roll:

B. Tech (2018-19)	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year
No of students	118	112	133	124

Lateral entry – 10%

- Name of Program: M.Tech in CSE
- Nature of Program: Full time
- Duration: 2 years
- Sanctioned Intake: 18

M. Tech (2018-19)	1 <sup>st</sup> year	2 <sup>nd</sup> year
No of students	3	8

## **Accreditation**

Department of CSE has been accredited by NBA in 2007 for the first time followed by 2<sup>nd</sup> cycle accreditation in 2013 under tier II category. In 2017 the NBA expert team has visited for evaluating under tier- I framework in 3<sup>rd</sup> cycle accreditation and the department is waiting for the result.

## **Practices: Administrative and Teaching Learning**

Departmental Planning for a session is done by the DC in a meeting prior to that session. Departmental Planning for an Odd /Even semester is also done in the previous Semester last two DC meets.

The Departmental procedures are guided by the regulation stipulated by the National Board of Accreditation (NBA) under the framework of affiliating University.

### ***Time Table***

For all sections of UG and PG approved by the Principal.

### ***Class Conduction Records***

The following follow up practices (not all simultaneously) have been made.

- Recorded in the Attendance Register maintained by the Faculty
- .Delivery of Syllabus content (with students signature) kept with Individual faculties
- Summary of class conduction statistics (in Excel format) submitted by the faculties to the HOD

### ***Students Attendance Records***

- Recorded in the Attendance Register maintained by the Faculty

### ***Faculty attendance Records***

- Is maintained centrally and online by the Institute by using Biometric Authentication Device.

Moreover, the following activities are all online through centralized facilities via SAP /ERP:

- Leave application
- Staff Attendance
- Material requisition

- Account Info (e.g. Salary records etc.)

### ***Addressing Absence***

The records are maintained online in the URL: <http://172.5.0.17:8014/~login.aspx>

- Informed leave: It is duly approved up the hierarchy by HOD the. HOD leave is approved by the Principal. All are requested to adjust their individual load prior to the leave. Students are also intimated before the class.
- Emergency leave: faculties are instructed to communicate it using any electronic gazette (email /mobile) so that classes can be adjusted.
- Frequent Absence / Irregularities: Are directly taken care by HOD with the concerned faculty member and conveyed to higher Authority on Emergency.

### ***Addressing Students Absence***

- Emergency leave: In case of any event / incident / accident students are asked to keep department into confidence either by informing any of the subject teacher / TIC (UG programme) / HOD.
- Irregular attendance: Concerned student is taken care either by mentor / subject teacher of that class for initial interaction. Then, it is addressed by the HOD. HOD even communicates guardian on emergency. Finally there is a process to address centrally from the Institution through postal communication.

In any of the above cases, University has no norms of consideration of attendance on the above grounds. In spite of the above someone must maintain desirable attendance to get rid of non-collegiate and dis-collegiate bindings.

### ***Personal file***

Faculty members keep records of the following in their respective personal file

- Personal routine
- Attendance register
- Lesson Plan
- Delivery of syllabus contents
- List of publication

- List of Conference /Seminar / Symposium attended
- Professional Society Activity

### ***Mentorship Programme***

All the students are assigned in group to any of the faculty members of the department. They can communicate to the corresponding faculty at any point of time. Several such interactions take place in the department. Highest priorities are put to maintain a student friendly department.

### ***Continuous performance Evaluation***

In addition to regular curriculum based mandatory class tests, to ensure the continuous involvement and consistency in the Teaching Learning process, by following the Institutional practice under autonomous Framework, the department has been conducting continuous performance evaluation on a weekly basis. This weekly evaluation contributes in internal / sessional marks as decided by the Academic Council and further ensures a distinction between regular and irregular students.

### ***Content beyond the Syllabus***

In addition to regular curriculum based programme, the department issues to the students the audio-visual learning materials at the beginning of 2<sup>nd</sup> year and aids for Competitive exams / Placements at the beginning of 3<sup>rd</sup> year so that students can get support to plan their career.

### ***Remedial Measures***

Weaker / academically backward students are provided with the consistent interactive support from the faculty members. Such kind of beyond contact hour tutorial programme are occurred in either of the departmental rooms / class rooms or even in the Computer System laboratories. It is a continuous process and instances are recorded to keep track of remedial.

### ***Co-curricular and Extra-curricular Activities***

The Department provides necessary Information to the Students for their Training / Internship. Ordinarily centralized training Programmes are all taken care at the Institutional end. The department

takes part in organizing / participating in number of Institution directed events. The following are few Illustrations of such events:

- Infosys Campus Connect programme
- Microsoft EdVantage and Faculty Connection Programme
- WIPRO Mission 10X Learning approaches
- IBM TGMC Programme

Students are never compelled to be too much curricular centric but encouraged to participate in the other events like sports, social and cultural events through constituted institutional Clubs.

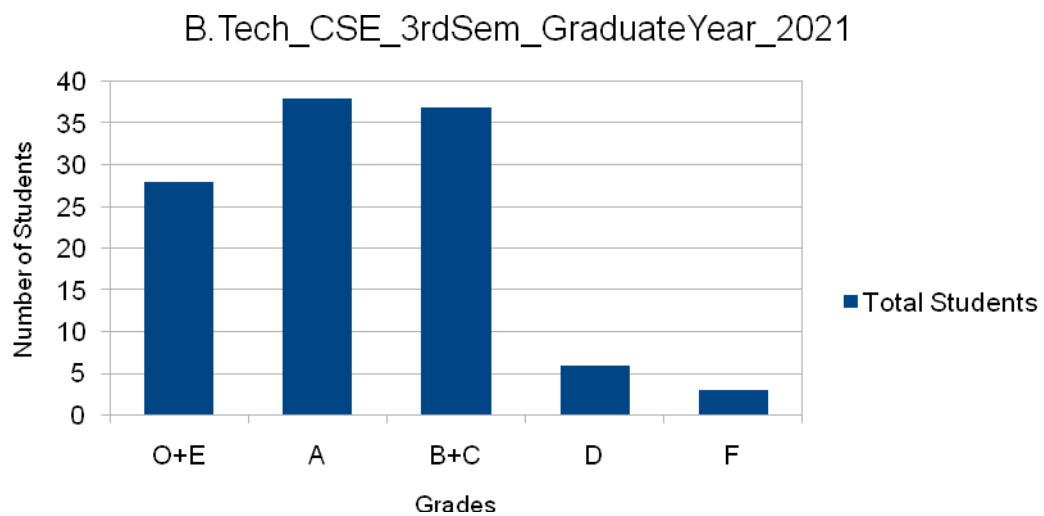
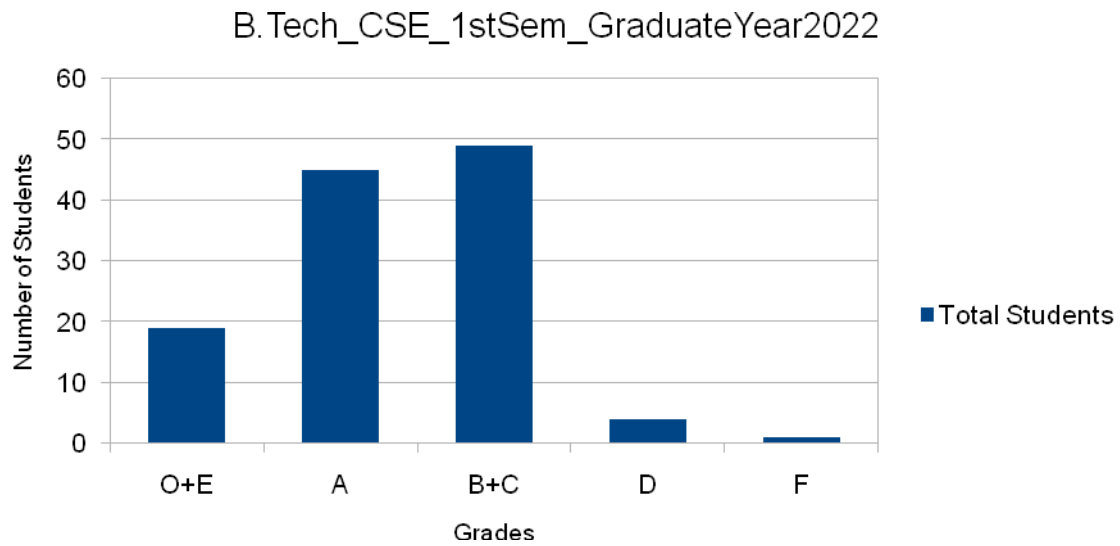
### ***Disciplinary issues***

Any matter of indiscipline is informed by the DC to HOD. HOD conveys it to the Chairman of Disciplinary Committee of the Institution (Principal). (Presently CSEIT-HOD is Convener of Institutional Disciplinary Committee). The following regulation a student must maintain, failing any one of which is considered to be misconduct / non-cooperation.

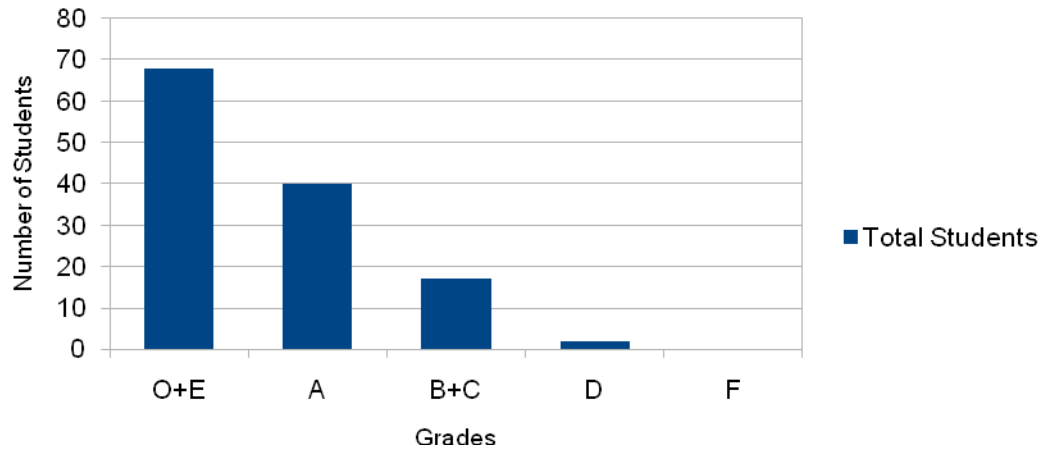
- Must maintain the attire (dress code)
- Must maintain the stipulated attendance and must value time
- Must convey the needs /demands desires in a proper form to HOD through mentor / guide/ faculty
- Must attend the career / personality development programme organized by the Institute
- Must attend the surprise tests /class tests /continuous performance Evaluation to enrich them.
- Must not indulge in any sort of provocation / instigation that leads to disturbance of departmental / institutional programmes.



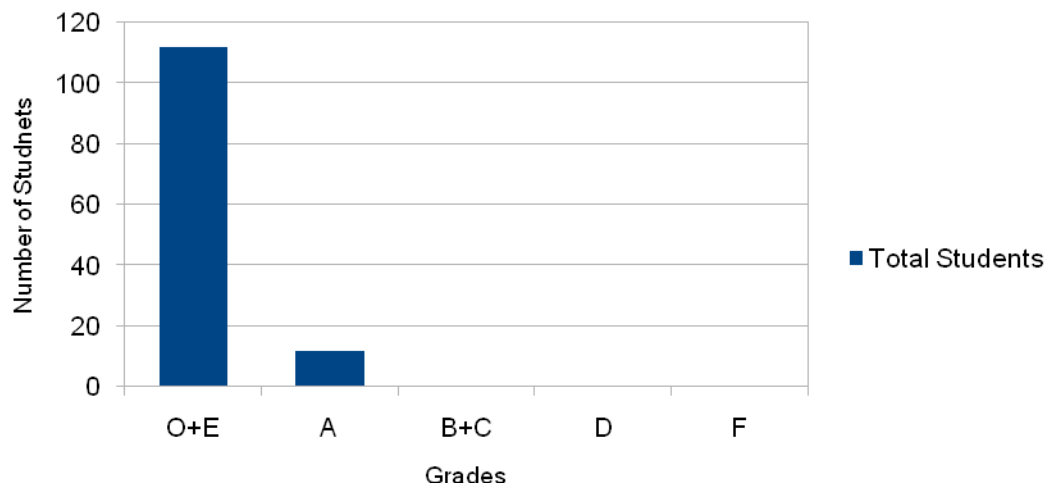
## Students Academic Performance



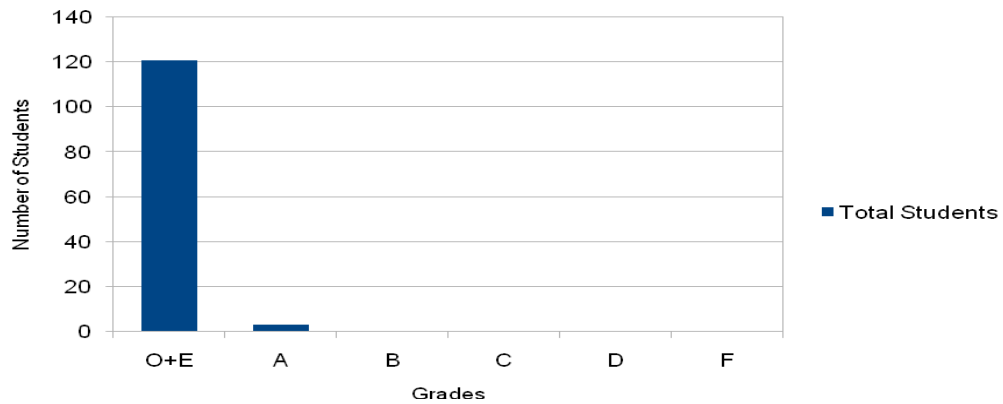
B.Tech\_CSE\_5thSem\_GraduateYear2020



B.Tech\_CSE\_7thSem\_GraduateYear2019



B.Tech\_CSE\_8th Sem\_GraduateYear\_2019



## Students Industrial Training

Students have taken their industrial training from the following institute:  
Globsyn, NIVT, HCL, NIIT, Ardent, CSI, CMC

## Students' Project Allocation:

### Detail of Project (2018-2019)

SI No	Name	Title of the project	Supervisor
1	ANURAG MALLIK	E – TransInfo : Scheduling and Locating system of public transport	Mr. Sudipta Sahana
	ARCHIK DAS		
	ARINDAM GHOSH		
	ARUNAKSHA MANDAL		
2	Suchismita Gupta	App Based Vehicle Information System with Smart Monitoring Technique	Mr. Sudipta Sahana
	Ujjwal Barman		
	Trisha Chakraborty		
	Utpal Maji		
3	AKASH SINGH	A Prototype for a e-Courts Procedure	Dr. Bikramjit Sarkar
	JAY PRAKASH		

	JITENDRA KUMAR SHARMA		
	KISLAY KUMAR		
	DEEPAK KUMAR JHA		
4	Sayan De	Gender Identification using Deep Learning	Mr. Apurba Paul
	Prateek Das		
	Silpi Ghosh		
	Renesa Ghosh		
5	VIVEK RANJAN	Exploring and Analyzing the Performance of Different Classifier Models in Machine Learning	Mr. Apurba Paul
	ROHIT RAJ		
	TABREZ HASHMI		
	SURAJ KUMAR SHAW		
6	GYAN RANJAN	Some application	Dr. Souvik Pal

	PRUSTY	on Big data	
	Amritangsu Nath Majumder		
	Monimala Mondal		
	Manisha Choudhary		
7	BUNTY SHARMA	Online Banking Management system	Mr. Sumanta Chatterjee
	GAUTAM KUMAR		
	KAJAL KUMARI		
	JYOTI KUMARI		
8	DEBRAJ DAS	NAEDPCC:A NEW APPROACH ENSURING DATA PROTECTION IN CLOUD COMPUTING	Ms. Ira Nath
	ANWESHA SAHA		
	ARIJIT SARKAR		
	INDRANIL BATBYAL		
9	Durba Santara	Tutor student Portal using PHP	Mr. Sudipta Sahana

	Nur Afsana Khatun		
	Gargi Saha		
	Mouli Das		
10	Sayan Dey Biswas	Text Extractor using OCR	Ms. Debasree Mitra
	Sourav Dutta		
	Shaswata Mitra		
	Sourav Sarkar		
11	SUCHISMITA SADHUKHAN	Prediction of different diseases using medical image analysis and machine learning	Ms. Pranati Rakshit
	SWATILEKHA NAG		
	TANMOY GHOSH		
	ARPITA SARKAR		

12	Suman Halder	Online Grocery Store	Dr. Souvik Pal
	Pritam Biswas		
	Souvik Mandal		
	Soumadeep Nayek		
13	Sayantani Biswas	An Intelligent Approach towards the Recognition of Plants and their diseases	Dr. Bikramjit Sarkar
	Arnab Biswas		
	Mousumi Pal		
	Nirupam Sengupta		
14	Santanu Singha	Flights Data Analysis using Apache PIG in BigData.	Dr. Souvik Pal
	Subham Kumar Mahanty		
	Sanjib Mitra		
	Shruti Kulshrestha		
15	Sairik Kumar Dhara	A Prototype for e-Courts Procedure	Dr. Bikramjit Sarkar
	Tania Roy		
	Sujata Debnath		
	Amit Debnath		

16	Mrinmoy Bhowmick	Analyze a Large Dataset using Hadoop Tools and compare them	Mrs. Sonali Bhattacharyya
	Arnab Banerjee		
	Manisha Singh		
	Adwitiya Das		
17	SANJU JANA	Social Networking Site	Mrs. Sonali Bhattacharyya
	RIPAN MONDAL		
	SAURAV SHUKLA		
18	Parantapa Sarkar	Design of knowledge base using soft computing	Dr. Dharmpal Singh
	Madhavi Kumari		
	Payel Roy		
	Hindol Bag		
19	Niladri Shekhar Pal	Weather data analysis using	Mrs. Sonali Bhattacharyya



	Kalyan Das	Hadoop Mapreduce embedded in cloud	
	Anirban Karmakar		
	Aritra Dutta		
20	Subhankar Goswami	DATA ANALYSIS USING CLUSTERING TECHNIQUE	Dr. Dharmpal Singh
	Subhankar Dey		
	Amit Paul		
	Pradipta Guha		
21	SRESTHA SARKAR	PREDICTION OF FOREST FIRE USING MACHINE LEARNING	Mrs. Pranati Rakshit
	SAMBIT KHAN		
	NILARPAN DEY		

22	Priya Kumari	Campus recruitment and support system	Mr. Sumanta Chatterjee
	Richa Kumari		
	Shubham Singh		
	Simon Biswas		
23	RUP SAHA	Computer Eye: Live Detection of Patterns through WebCam and classify them into different sets with inbuilt ability to detect Living Face	Mrs. Pranati Rakshit
	SONU KUMAR SINGH		
	SAURABH SINGH		
	SUMIT VERMA		
24	Soukhin Basu	Swaad-E-shahi	Ms. Debashree Mitra
	Subham Roy Tapader		
	Somnath Sadhu		
25	Sayantana Halder	NAENS:A NEW APPROACH	Ms. Ira Nath

	Waqar Zama Khan	FOR ENHANCING NETWORK SECURITY	
	Md. Athar Raza		
	Satish Kumar Thakur		
26	Matiur Rahman	Real Time Project Estimation using Big Data Hadoop	Ms. Ira Nath
	Kaushal kumar Singh		
	Akash Ghosh		
	Koushik Dutta		
27	Arka Das	Chatbot using Deep Natural Language Processing	Mr. Apurba Paul
	Soumyajit Sarkar		
	Tanbhaba Bhattacharjya		
	Sumanta Sen		

28	NILESH KUMAR	Product Recommendation Making Based on User Behaviour and User location and Potential of E-commerce for SMEs in a Globalizing Business Environment.	Mr. Sumanta Chatterjee
	PRADIP AWASTHI		
	DIPU KESHRI		
	DEBARISHI SAHA		
29	Riya Gorai	FACE RECOGNITION USING PYTHON AND OPEN CV	Mrs. Pranati Rakshit
	Rajit Basu		
	Sneha Biswas		
	Lal Krishna Jha		
30	Adit Jana	Educational Assistance BOT	Dr. Dharmpal Singh
	Aditi Ghosh		
	Adrija Ganguly		

## Student Projects

List of projects presented in **JISTECH-2K19**

## ‘JISTech 2K19’

Project ID	Project Title	Mentor	Students Name
CSE01	Edufii	Mr. Sudipta Sahana	<b>Aman Adarsh (TL)</b> Gourav Keshari Amit Kumar Agrwal Mahen Saha Ali Shiraz Akhter Ankita Roy Chowdhury
CSE02	Waste Management: A solution towards good life	Mr. Sudipta Sahana	<b>Sayan De (TL)</b> Arnab Biswas Prateek Das Anima Tripathy Renesa Ghosh Silpi Ghosh
CSE04	Mentorship Platform (Best Project with societal contribution)	Mr. Sudipta Sahana	<b>Rishav Sen (TL)</b> Ravi Raj Bandhu Snehansh Chaturvedi Anik Mandal Shubham Anand Gourav Chatterjee
CSE05	Automatic Plant Watering and Filling Tanks (Home Automation)	Mr. Apurba Paul & Mr. Sumanta Chatterjee	<b>Nivedita Pandit (TL)</b> Nandita Gupta Sattik Das Ramaadyuti Battabyal Anjali Ray Azhar Maqbool Ansari
CSE06	Patient case similarity (College level - 3)	Mr. Sudipta Sahana	<b>Ankita Roy (TL)</b> Arghya Bhowmick Akriti Jha Anshu Kumar Shandilya
CSE07	DTMF based robot controller	Dr. Dharmpal Singh	<b>Prithwijit Das (TL)</b> Suravi Kar

			Shashank Kumar Bharti Shrijoyee Roy Shiwanshu Kumar Jha Josimuddin Mullick
CSE08	IoT Prototype for LPG Leakage Detection & Prevention	Dr. Souvik Pal	<b>Subhayan Sarkar (TL)</b> Anusua Biswas Srirup Lahiri Amitabha Dawn Subhabrata Panda Arghyadeep Dolui
CSE09	Auto Irrigation Pump	Mr. Apurba Paul & Mr. Sumanta Chatterjee	<b>Devarghya Chakraborty (TL)</b> Aindrila Das Shyam Mohan Kunwar kumari sakshi Smriti Pragya Nihal Anand
CSE10	Energy-Efficient Smart Street light System	Dr. Souvik Pal	<b>Meghna Verma (TL)</b> Amisha Singh Md Faisal Mrinmoy Bairagya

### Seminar/Workshop/Events organized by Dept. of CSE, JISCE

Sl.	Name of Visitor / Guest Speaker	Designation/ Occupation	Seminar/ Workshop/	Total Participant	Date	Sponsored by
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			Conference Topic			
1	Rajen Chhetri	Software Trainer	Big Data	45	24.06.2019-06.07.2019	Skill Priority
2	Sayen De and Arnab Bose	Software Trainer	Workshop on LINUX	30	Continuous training by 4 <sup>th</sup> yr student to 1 <sup>st</sup> year student	JISCE
3	Ogma Tech Lab	Software Trainer	Angular JS & Node JS	60	10.05.2019	Ogma Tech Lab
4	Mr. Sankha Chatterjee	Alumni of CSE, 2005 Graduate Year, Senior Data Engineer, Matson Navigation	Tech-Talk on Data Analytics and Data Visualization	40	10.05.2019	<u>JISCE</u>
5	Ogma Tech Lab	Software Trainer	Python Programming	21	24.06.2019-06.07.2019	Ogma Tech Lab
6	Mr. Abhishek Mitra and Ms. Alakananda Rao	CSI	CSI Student Chapter organized Technophilia	90	02.02.2019	JISCE
7	Mr. Rajarshi Rai Chowdhury	Advocate at Calcutta High Court	Cyber Law and Cyber Security	60	16.02.2019	JISCE
8	CSI Student Chapter	CSI	Code-a-thon	60	01.03.19	CSI Student chapter
9	Alumni Meet	Dept	Alumni Meet	50	23.03.19	CSE, JISCE
10	IoT by The Electro System	Manager	Workshop on IoT by The Electro System	30	26.04.2019	<u>JISCE</u>
11	Digital Pedagogy	CSE Dept	Seminar on Digital Pedagogy	200	25.04.2019	JISCE
12	Sayen De and Arnab Bose	Software Trainer	Workshop on LINUX to JIS Polytechnic	30	Continuous training by 4 <sup>th</sup> yr student to 1 <sup>st</sup> year student	JISCE

## Seminar/Workshop attended by Faculty

Sl	Title of the Event	Name of the Faculty	Period	Venue
1	International Conference on Distributed Computing and Networking (ICDCN, 2019) (Paper presented).	IRA NATH	4-7 <sup>th</sup> January, 2019	Indian Institute of Science, Bangalore, India.
2	UKIERI-AICTE Leadership Development Programme (Workshop-III)	Dr. Bikramjit Sarkar	11-13 <sup>th</sup> June, 2019	North Eastern Hill University, Shillong
3	UKIERI-AICTE Leadership Development Programme (Workshop-III)	Dr. Dharmpal Singh	11-13 <sup>th</sup> June, 2019	North Eastern Hill University, Shillong
4	ICEECC-2019, kolkata	Sumanta Chatterjee	4-5 <sup>th</sup> April 2019	Pailan College of Management & Technology, Kolkata
5	ICEECC-2019, kolkata	Apurba Paul	4-5 <sup>th</sup> April 2019	Pailan College of Management & Technology, Kolkata
6	ICEECC-2019, kolkata	Dr. Dharmpal Singh	4-5 <sup>th</sup> April 2019	Pailan College of Management & Technology, Kolkata
7	FDP on Cyber Security	Sudipta Sahana	09-14 <sup>th</sup> July.2018	GNIT
8	MHRD-IIC inauguration	Sudipta Sahana	21 <sup>st</sup> Nov2018	AICTE, New Delhi
9	INFOCOM 2018	Sudipta Sahana	06-8 <sup>th</sup> Dec.2018	ITC Sonar, Kolkata
10	NISC 2019	Sudipta Sahana	10-11 <sup>th</sup> Jan.2019	Biswa Bangla convention centre
11	Seminar on Transformation and Reformation of Teaching Learning and Research	Sudipta Sahana	13 <sup>th</sup> March 2019	Dr. Sudhir Chandra Sur Degree Engineering College



12	Awareness Programme cum workshop on Solar Energy (Roof Top)	Sudipta Sahana	26 <sup>th</sup> June 2019	MSME - TC, Kolkata
13	PHP and My SQL	Pranati Rakshit	16 <sup>th</sup> April-2019	JIS College of Engineering
14	Cyber Law and Cyber Security	Pranati Rakshit	16 <sup>th</sup> Feb.2019	JIS College of Engineering
15	FDP on Cyber Security	Sumanta Chatterjee	09-14 <sup>th</sup> July.2018	GNIT
16	FDP on Cyber Security	Apurba Paul	09-14 <sup>th</sup> July.2018	GNIT
17	FDP on Cyber Security	Pranati Rakshit	09-14 <sup>th</sup> July.2018	GNIT

## Faculty Achievement

1. Dr. Souvik Pal invited as session chair international Conference on Intelligent Computing and Communication Technologies (ICICCT-2019)

2. Dr. Bikramjit Sarkar, Workshop Director for the “Research Workshop on Information Security” held on 07.01.2019 at Durgapur Institute of Advanced Technology and Management, Durgapur, West Bengal.
3. Dr. Dharmpal Singh, Editorial Advisory Board for the Book of Pre-Screening Systems for Early Disease Prediction, Detection, and Prevention, IGI Global.
4. Ms. Sonali Bhattacharyya won third prize in Women Race on 25.01.2019 Annual Sports
5. Dr. Souvik Pal is editor of book Chapter
  - a. “Principles of Internet of Things (IoT) Ecosystems: Insight Paradigm
  - b. Digital Education Pedagogy: Principles and Paradigm
  - c. IoT and Analytics for Agriculture
6. Dr. Dharmpal Singh, Reviewer of International Journal of Computer Aided Engineering and Technology
7. Dr. Souvik Pal invited as PhD External Examiner to conduct the public Viva-voce Examination which is Going to be held at R & D Center, Bharathiar University, Coimbatore, Tamilnadu
8. Dr. Dharmpal Singh, Reviewer of International Journal of Applied Metahuristic
9. Mr. Sumanta Chatterjee Invited Speaker for VHDL: Basics to programming by  
TECHNIQUE POLYTECHNIC INSTITUTE P.O.-Sugandhya, Dist: Hooghly, Pin-712102, on 24.04.2019
10. Dr. Bikramjit Sarkar, Nominated as a Member of the Technical Programme Committee of the International
11. Conference on Innovative Computing and Cutting-Edge Technologies (Springer Conference) Middle East Association of Computer Science and Engineering (MEACSE) ,Istanbul, Turkey , October 30-31, 2019.
12. Dr. Souvik Pal is editorial board member of SCIREA Journal of computer
13. Dr. Dharmpal Singh invited as reviewer for SPRINGER 4th International Conference on Micro-Electronics and Telecommunication Engineering (ICMETE-2019) on 28 & 29, September, 2019.
14. Ms. Ira Nath invited as reviewer in 5th International Conference on Fuzzy system And Data Mining, FSDM2019.
15. Ms Debasree Mitra as recognized as Top Performing Mentor in SWAYAM NPTEL for Jan-June 2019 Session for C++ and Java Courses.
16. Mr. Apurba Paul as recognized as Top Performing Mentor in SWAYAM NPTEL for July- Dec 2018 Session for Data structures through Python Courses.
17. Mr. Sumanta Chatterjee as recognized as Mentor in SWAYAM NPTEL for Jan- June 2019 Session for C Programming Courses.

## Student Achievement

Event	Date	Name of the Students	Venue	Skills Developed
Project Presentation in Tech fest	14.02.2019	Subhayan Sarkar , Sirup Lahri,	Regent College , Tech fest	Improved Presentation Skill
Technical Poster competition	15.02.2019	Shyam Mohan Kunwar and Nihal Anand	Techno International at Batanagar	Brain Controlled Car using for disabled using Artificial Intelligence.
JIS Tech 2019	08.03.2019 -09.03.2019	Sayan De (TL) Arnab Biswas Prateek Das Anima Tripathy Renesa Ghosh Silpi Ghosh	JISCE	Department Level Position: 3 Project accomplished “Waste Management: A solution towards good life”
JIS Tech 2019	08.03.2019 -09.03.2019	Aman Adarsh (TL) Gourav Keshari Amit Kumar Agrwal Mahen Saha Ali Shiraz Akhter Ankita Roy Chowdhury	JISCE	Department Level Position: 2 PROJECT ACCOMPLISHED “EDUFIT”
JIS Tech 2019	08-09 April 2019	Rishav Sen (TL) Ravi Raj Bandhu Snehansh Chaturvedi Anik Mandal Shubham Anand	JISCE	Improve communication presentation skill and coding skill
Smart India Heckathon, 2019	02.03.2019	Nilesh Kumar, Jay Prakash, Pradip Awasthi, Riya Goral, Suraj Kumar Shaw, Aquib Jawed	AICTE	Improved Coding skill
JIS Tech 2019	08-09 April 2019	Ankita Roy (TL) Arghya Bhowmick Akriti Jha Anshu Kumar Shandilya Kaustav Chakraborty Mohiuddin Ansari	JISCE	College Level Position: 3 Project accomplished “Patient Case Similarity”
Techno International	31 <sup>st</sup> April 2019	Gourav Keshari, Amit Kumar Agrwal, Aman	Techno India	Improve communication and

Batanagar Paper Presenentati		Adarsh	Batanagar	presentation skill
Techno International Batanagar Paper Presenentati	31 <sup>st</sup> April 2019	Sayan De, Prateek Das	Techno India Batanagar	Improve communication and presentation skill
Techno International Batanagar Paper Presenentati	31 <sup>st</sup> April 2019	Prithwijit Das	Techno India Batanagar	Improve communication and presentation skill
Paper Presentation atInternational Conference on “Electrical, Electronics, Computer Science & Civil Engineering” (ICEECC, 2019)	26.04.2019	A.Das, D, Dulai, P. Kramakar, S. Deabnath, S.Das, A. Roy, N. Pandi, N. Gupta	Pailan College of Manageme nt & Technology	To give exposure in research and develop presebataion skill
Peer Learning	Every week	Sayen Deb and Arnab Roy	JIS Final yr student	Improve the knowledge
SWAYAM NPTEL	Dec – July 2018	Isan Saha Prithwijit Das Sanjit Paul Adit jana	CSE 2 <sup>nd</sup> CSE 2 <sup>nd</sup> CSE 2 <sup>nd</sup> CSE 4th Year	To excel their knowledge in data Structures, Python, IoT
SWAYAM NPTEL	Jan-June 2019	Isan Saha Samar Anand Dwaipayan Roy	CSE 2 <sup>nd</sup> CSE 1 <sup>st</sup> CSE 2 <sup>nd</sup>	To excel their knowledge C,C++, Java

### **List of Student Selected Through Internshala**

SL	First Name	Company Name	Stipend (per month)
1	Sandip Das	IIM Bangalore	15000
2	Riten Debnath	SpoizedFoodTech Private Limited	10000
3	AQUIB JAWED	Corporate Shiksha	7500
4	PRADIP AWASTHI	Saletancy Consulting Private Limited	4000
5	Sakshi	The Misfits	2000
6	SohamChatterjee	MereExams	2000
7	AvinashBharti	Blakcoat	2000
8	Nilesh Kumar	UjwalDesigning	1000
9	RiyaGorai	UjwalDesigning	1000
10	PRADIP AWASTHI	UjwalDesigning	1000
11	Nilesh Kumar	DU Assassins	Performance Based
12	VivekRanjan	DU Assassins	Performance Based
13	Ankit Chakraborty	Aparoksha , IIIT Allahabad	Performance Based
14	Ankit Chakraborty	MECHANICA IIT MADRAS	Performance Based
15	Anjali Jha	New Barrackpore Navachetna Welfare Society	Performance Based

**Contributed talk by the faculty**

Sl	Name /Title of the Lecture/Talk	Date	Name of the Faculty Speaker	Category of the Participants	Venue
1	Talk on “ VHDL :Basics to programming”	24.04.2019	Mr. Sumanta Chatterjee	Students(3rd year CSE)	Technique Polytechnic Institute, Hooghly, West Bengal
2	Research Workshop on Information Security	07.01.2019	Dr. Bikramjit Sarkar	Faculty Members	Durgapur Institute of Advanced Technology and Management, Durgapur, West Bengal

### National/International visits of faculty

Name of the Faculty	Name of the National/International Place visited	Purpose	Date
DEBASREE MITRA	Internship Day at AICTE New Delhi	Receiving Award for JISCE	25.08.2018
Sumanta Chatterjee	IIT- Kanpur	Smart India Hackathon-2019	02.03 2019 to 03.03.2019
Apurba Paul	IIT- Kanpur	Smart India Hackathon-2019	02.03 2019 to 03.03.2019
Sudipta Sahana	AICTE, New Delhi	MHRD-IIC inauguration	21.11.2018
Sudipta Sahana	ITC Sonar, Kolkata	INFOCOM 2018	06.12.2018 - 08.12.2018
Sudipta Sahana	Biswa Bangla convention centre	NISC 2019	10.01.2019 - 11.01.2019
Sudipta Sahana	Dr. Sudhir Chandra Sur Degree Engineering College	Seminar on Transformation and Reformation of Teaching Learning and Research	13.03.2019
Sudipta Sahana	MSME - TC, Kolkata	Awareness Programme cum workshop on Solar Energy (Roof Top)	26.06.2019

## Publications of Faculty

S1	Title of the paper	Author	Publication Details/Vol.No./ISSN No./Page No.
1.	Automated Attendance System Using Face Recognition Technique	Sumanta Chatterjee	International Journal of Engineering and Applied Sciences (IJEAS), Volume-5/ ISSN: 2394-3661/07.06.2018
2.	An enhance DE algorithm for analysis in dataset	Dr. Dharmpal Singh	International Journal of Data Science, July 2018 Vol.3 No.3. pp.203 – 235/ DOI: <a href="https://doi.org/10.1504/IJDS.2018.094503">10.1504/IJDS.2018.094503</a> , July 2018.
3.	3-D Digital flows in cerebrovascular phantoms	Nirmal Das, Pranati Rakshit, Mita Nasipuri, Punam Saha, Subhadip Basu	Ninth International Conference on Advances in Pattern Recognition (ICAPR-2017).December 27-30, 2017/ Published after July, 2018.
4.	Design of Cerebrovascular Phantoms “Using Fuzzy Distance Transform-based Geodesic Paths Progress in Intelligent Computing Techniques: Theory, Practice, and Applications. Advances in Intelligent Systems and Computing	Guha I., Das N., Rakshit P., Nasipuri M., Saha P.K., Basu S.	Chapter in <u>Advances in Intelligent Systems and Computing</u> · July 2018, vol: 518. Singapore/ Springer, July, 2018.
5.	An Efficient Heuristic to Minimize Number of Regenerations in Translucent Optical Network under Dynamic Scenario	I. Nath, U. Bhattacharya, M. Chatterjee	International Conference on Distributed Computing and Networking (ICDCN19), ISBN: 978-1-4503-6094-4 Pages 451-454 Published and included in ACM Digital Library.
6.	A new bio-inspired algorithm: lizard optimization	Dr. Dharmpal Singh	International Journal of Computer Aided Engineering and Technology, Accepted, abstract publish, (Scopus).
7.	A Noble Approach Towards Security Implementation In Cloud Virtualization Framework	Tanmoy Mukherjee, Sudipta Sahana, Debabrata Sarddar	2nd International Conference on Communication, Devices and Computing (ICCDC 2019), Published (Scopus).
8.	Image Steganography Based Additive Smart Data Encryption Technique for	Suchismita Gupta, Ujjwal Barman, Sudipta	2nd International Conference on Communication, Devices and Computing (ICCDC 2019),

	Network Security Improvement	Sahana	Published (Scopus).
9.	MFAO: Modified Firefly Algorithm For Optimization	Dr. Dharmpal Singh	Malaysian Journal of Computer Science (MJCS), Communicated
10.	A New Bio-inspired Algorithm: Social Spider Algorithm	Dr. Dharmpal Singh	Journal of Soft Computing, Communicated, SCI
11.	A Comparative study of meta heuristic model to assess the breast cancer disease type under the domain of data mining	Dr. Dharmpal Singh	IETE Journal of Research, Under Revision SCI Index
12.	Assessment of The Heart Disease Using Soft Computing Methodology	Dharmpal Singh, Souvik Pal, Sudipta Sahana, Ira Nath, S. Bhattacharyya	The 4th International Conference on Research in Intelligent and Computing in Engineering, Hanoi University of Industry , Vietnam, August 8-9, 2019 (Scopus)
13.	An Effort to Analysis the Causes of Rail Accident using the concept of statistical methods	Dharmpal Singh, Souvik Pal, Sudipta Sahana, Ira Nath, S. Bhattacharyya	The 4th International Conference on Research in Intelligent and Computing in Engineering, Hanoi University of Industry , Vietnam, August 8-9, 2019 (Scopus)
14.	Security and Privacy Challenges in Big Data	Dr. Dharmpal Singh, Ira Nath	Book chapter for the upcoming book, " <i>Security, Privacy, and Forensics Issues in Big Data</i> ", DOI: 10.4018/978-1-5225-9742-1, EISBN13: 9781522597445 (accepted) (Scopus Indexed)
15.	Information Technology and Student Success	Dr. Dharmpal Singh, Sonali Bhattacharyya	Book chapter, International, for the upcoming book, " <i>Emerging IT Issues in Higher Education</i> ."
16.	Efficiency of Big Data Application in Smart City	Dr. Dharmpal Singh, Pranati Rakshit, Sudipta Sahana	Book chapter, International, book of <i>Big Data Analytics for Sustainable Computing</i>
17.	Application of IoT in Health care	Pranati Rakshit, Ira Nath, Dr. Souvik Pal	It will be published in BOOK TITLE: "Principles of Internet of Things (IoT) Ecosystems: Insight Paradigm", <i>Book chapter (Springer)</i> BOOK SERIES TITLE: Intelligent Systems Reference Library "Springer" PUBLISHERS: Springer



			INDEXING: ISI Web of Science, SCOPUS, DBLP and Springerlink. (accepted)
18.	A Design of IoT Based Agricultural System for Optimal Management	Dr. Dharmpal Singh, Dr. Souvik Pal, Sudipta Sahana	<i>Analytic in IoT agriculture, Book chapter</i>
19.	An Empirical study of Digital Marketing Strategies in E-Commerce Review and Prospect	Sumanata Chatterjee	<i>Book of Digital Marketing Strategies and Models for Competitive Business</i>
20.	Enhancing Data Safety Through Dual Layer Security Protection in Cloud Network	Sudipta Sahana, Suchismita Gupta, Debabrata Sarddar	IOSR Journal of Engineering ISSN (p): 2278-8719 Vol. 09, Issue 3 (March. 2019),   S (III)    PP 01-10
21.	App Based Vehicle Information System with Smart Monitoring Technique	Ujjwal Barman, Suchismita Gupta, Trisha Chakraborty, Utpal Maji, Sudipta Sahana	IOSR Journal of Engineering ISSN (p): 2278-8719 Vol. 09, Issue 3 (March. 2019),   S (II)    pp. 62-68
22.	Automatic Music Genre Detection using Artificial Neural Networks	P. Mondal, Ira Nath, N. Gupta, M. K. Jha, D. G. Ganguly.	International Conference on Research in Intelligent and Computing in Engineering (RICE-2019) [will be Published by Springer & Scopus Indexed]
23.	Breast cancer prediction using clustering techniques	P. Karmakar, D.P. Singh and D. Dulai, Ira Nath	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ), Paper will index to UGC Approved Journal, 26 th & 27 th of April, 2019
24.	Assessment of Chronic Kidney Disease using clustering techniques	D. Dulai, D.P.Singh, S. Bhattacharyya, P. Karmakar, Ira Nath	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019), Paper will index to UGC Approved Journal, 26 th & 27 th of April, 2019
25.	Self-Reliant Traffic Signaling System Based On Piezoelectric Effect	A. Das, A. Ghosh, S. Sahana, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of April, 2019
26.	DPDOS: A New Heuristic To Detect And Prevent	K .Roy I. Nath, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of

	Distributed Denial Of Service Attack In VANET		April, 2019
27.	A New Heuristic for Multiplication of two matrices of order 2*2	S. Debnath, I. Nath, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019) 26 th & 27 th of April, 2019
28.	Assessment of Exported Tea Quantity by Soft Computing Model	A. Roy, S. Kundu , J. Bhattacharya, D. P Singh, S. Sahana	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019) 26 th & 27 th of April, 2019
29.	IOT Based Automatic Plant Watering and Tank Filling System	Sumanta Chatterjee, S.Das, Apurba Paul	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of April, 2019
30.	Microcontroller based earthquake indicator and measurement system	Sumanta Chatterjee, N. Pandit, A. Ray, N. Gupta. Apurba Paul	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of April, 2019
31.	A Logical Approach Towards Effective Data Search using Ant Colony Optimization in Cloud Environment	Sudipta Sahana, Tanmoy Majumdar, Debabrata Sarddar	International Journal of Computer Sciences and Engineering, April, 2019
32.	Rail Fence Cipher Based Encryption Technique For Secure Data Transfer	A. Roy, S.Kundu , J. Bhattacharya, D. P Singh, S. Sahana	International Journal of Computer Sciences and Engineering, April, 2019
33.	Feature Selection using the harmony search	P .Chatterjee, D.P.Singh, A.Samaddar, B. Pal	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ), 26 th & 27 th of April, 2019
34.	Rail Fence Cipher Based Encryption Technique For Secure Data Transfer	A. Roy, S.Kundu , J. Bhattacharya, D. P Singh, S. Sahana	International Journal of Computer Sciences and Engineering, April, 2019
35.	Face Recognition by City-Block Distance Classifier in Supervised Machine Learning	Debasree Mitra,,Parantap Sarkar, Payel Roy	International Journal of Research and Analytical Reviews (IJRAR)   / Vol 6 / E-ISSN 2348-1269, P- ISSN 2349-5138 /Issue 2/June 2019
36.	Machine Learning	Debasree Mitra,	IJCSE / Vol.7 / e-ISSN: 2347-2693 /Issue.5 /

	Approach for Signature Recognition in Digital Image Processing	Aurjyama Baksi, Alivia Modak, Arunima Das, Ankita Das	pp.73-80/ May-2019
37.	Business Ethics	Debasree Mitra Sumanta Chatterjee Apurba Paul	For the upcoming book, " <i>Challenges and Opportunities for SMEs in Industry 4.0.1</i> ", 19 <sup>th</sup> May
38.	An Integrated Business Development Model of Electronic Commerce Based on E- Marketing Plan by Demand Analysis for the Growth Enhancement of Small and Medium Scale Industries (SMEs)	Sumanta Chatterjee Apurba Paul Debasree Mitra	Book chapter “ <i>Challenges and Opportunities for SMEs in Industry 4.0.1</i> ”, 22 <sup>rd</sup> May
39.	Case Study on Software Engineering(Agile application)	Sumanta Chatterjee Debasree Mitra Apurba Paul	Book Chapter, “Software Engineering for Agile Application Development”, 21 <sup>ST</sup> May, 2019 Accepted
40.	Machine Learning in Healthcare	Debasree Mitra Apurba Paul Sumanta Chatterjee	Book Chapter , will be published in book titled “AI Innovation in Medical Imaging Diagnostics”, 19 <sup>TH</sup> May, 2019 , Communicated
41.	A conceptual Business model on E marketing strategy of Electronic Business for growth of the small scale Industries (SMEs) through Digitization and Information Mining	Sumanta Chatterjee	IJRAR journal, 30 <sup>th</sup> May, 2019 (Accepted)

## Publications of Students

Sl	Title of the paper	Author	Publication Details/Vol.No./ISSN No./Page No.
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1.	Breast cancer prediction using clustering techniques	P. Karmakar and D. Dulai, D.P. Singh and Ira Nath	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019), 26 th & 27 th of April, 2019
2.	Assessment of Chronic Kidney Disease using clustering techniques	P. Karmakar and D. Dulai, D.P.Singh, S.Bhattacharyya, Ira Nath	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019), 26 th & 27 th of April, 2019
3.	Self-Reliant Traffic Signalling System Based On Piezoelectric Effect	A. Das, A. Ghosh, Sudipta Sahana, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019), 26 th & 27 th of April, 2019
4.	DPDOS: A New Heuristic To Detect And Prevent Distributed Denial Of Service Attack In VANET	K .Roy, I. Nath, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019), 26 th & 27 th of April, 2019
5.	Automatic Music Genre Detection using Artificial Neural Networks	P. Mondal, Ira Nath, N. Gupta, M. K. Jha, D. G. Ganguly.	International Conference on Research in Intelligent and Computing in Engineering (RICE-2019) [will be Published by Springer & Scopus Indexed], March, 2019
6.	A New Heuristic for Multiplication of two matrices of order 2*2	S. Debnath, I. Nath, D.P Singh	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019) 26 th & 27 th of April, 2019
7.	Assessment of Exported Tea Quantity by Soft Computing Model	A. Roy, S.Kundu , J. Bhattacharya, D. P Singh, S. Sahana	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019) 26 th & 27 th of April, 2019
8.	IOT Based Automatic Plant Watering and Tank Filling System	Sumanta Chatterjee, S.Das, Apurba Paul	International Conference on “Electrical, Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of April, 2019
9.	Microcontroller based	Sumanta Chatterjee, N.	International Conference on “Electrical,

	earthquake indicator and measurement system	Pandit, A. Ray, N. Gupta. Apurba Paul	Electronics, Computer Science & Civil Engineering” ( ICEECC, 2019 ) 26 th & 27 th of April, 2019
10.	Rail Fence Cipher Based Encryption Technique For Secure Data Transfer	A. Roy, S.Kundu , J. Bhattacharya, D. P Singh, S. Sahana	International Journal of Computer Sciences and Engineering, April, 2019
11.	App Based Vehicle Information System with Smart Monitoring Technique	Ujjwal Barman, Suchismita Gupta, Trisha Chakraborty, Utpal Maji	IOSR Journal of Engineering (IOSRJEN) Vol. 09, Issue 3 (March. 2019),   S (II)    PP 62-68
12.	Detection of Heart Disease using different Machine Learning Techniques	Jhumpa Mistri, Pranati Rakshit	IJLTET, Vol.(13)Issue(1), pp.022-027, DOI: <a href="http://dx.doi.org/10.21172/1.131.05">http://dx.doi.org/10.21172/1.131.05</a> , e-ISSN:2278-621X
13.	Security and privacy issues in IoT, and its challenges and solutions	Tilak Kumar Dhar, Dr. Bikramjit Sarkar	It has been accepted for the book “IoT Security And Privacy Paradigm” , CRC Press, Taylor & Francis Group , May 2019 (Book Chapter)
14.	An Analytical Survey on the Health-Care Paradigm in IoT Ecosystem and Policy Implementation Protocols in India	Riya Biswas, Dr. Bikramjit Sarkar	4th International Conference on Research in Intelligent and Computing in Engineering (RICE 2019), August 08-09, 2019, Accepted (Springer)  [Scopus indexed]
15.	Face Recognition by City-Block Distance Classifier in Supervised Machine Learning	Debasree Mitra, Parantap Sarkar, Payel Roy	International Journal of Research and Analytical Reviews (IJRAR)   / Vol 6 / E-ISSN 2348-1269, P- ISSN 2349-5138 /Issue 2/June 2019
16.	Machine Learning Approach for Signature Recognition in Digital Image Processing	Debasree Mitra, Aurjyama Baksi, Alivia Modak, Arunima Das, Ankita Das	IJCSE / Vol.7 / e-ISSN: 2347-2693 /Issue.5 / pp.73-80/ May-2019

## Research Projects: Grant Received

Name of the Dept.	Name of PI	Date	Authority	Title	Amount (Rs.)
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CSE	Dharmpal Singh	December 2018	AICTE	MODROBS	20 lacs (Applied)
CSE	Dharmpal Singh	December 2018	AICTE	SPDP	25 lacs (Applied)
CSE	Bikramjit Sarkar	December 2018	AICTE	ISTE	12 lacs (Applied)
CSE	Bikramjit Sarkar	December 2018	AICTE	RPS	20 lacs (Applied)
CSE	Dharmpal Singh	December 2018	AICTE	MODROBS	20 lacs(Applied)

## Mentoring Activities

Computer Science and Engineering Department has scheduled weekly once Mentor-meet for Forth and third year students, and weekly twice for First and Second year students.

### Mentor activities

- Discuss mentee's expectations of one another
- Identify an article or book that a mentor feel would be beneficial for the mentee to read.
- Ask the mentee about the professional development activities he/she has participated in as a student.
- Ask the mentee to create a vision for where he/she wants to be in five, ten and/or fifteen years.
- Encourage the mentee to get involved in an appropriate professional organization
- Share resources. Consider and collect any resources that might be useful to the mentee.

### Mentor Program Outcome

- Increasing the engagement of students through interactions with a mentor,
- Assisting students in developing a mentoring relationship for career development in an effort to increase knowledge, skills, and competencies that may be needed for future job duties or future career advancement.
- Provide an avenue to access available resources and information to support lateral or upward mobility.
- Student development and engagement - engaging students through professional and personal development;
- Aligns with Talent Management Initiative



## Award

List of the students have got Best Project awards from Dept of CSE in **JISTECH 2019**

Sl. No.	Student Name	Project
1	Gourav Keshari	Edufii
2	Amit Kumar Agrwal	
3	Mahen Saha	
4	Ali Shiraz Akhter	
5	Ankita Roy Chowdhury	

## Target for Next year

- 1 The department will provide high quality education in computer science by enhancing teaching effectiveness, refining curriculum to keep the program current with the rapidly changing computer technology and providing equipment/facilities for students to access and gain practical experience.
2. The Department will organize International conference in the year of 2019.
3. The Department will organize International and National seminar/workshop for academic development of faculty and students.
4. The Department will generate fund from different research projects.
5. The Department will organize Faculty development Programme for enhancement of knowledge for faculty and staff.
6. The Department will organize industry oriented training programme for students' placement.
7. The Department will continue Mentoring Activities for students' development.