JIS COLLEGE OF ENGINEERING

Annual Report

2017 - 2018

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.

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 (2017-18)	1st year	2nd year	3rd year	4th year
No of students	118	135	133	107

Lateral entry – 10%

- Name of Program: M.Tech in CSE
- Nature of Program: Full time
- Duration: 2 years
- Sanctioned Intake: 18
- Year wise students on roll:

M. Tech (2017-18)	1st year	2nd year
No of students	8	1

Accreditation

Department of CSE has been accredited by NBA in 2007 for the first time followed by 2nd cycle accreditation in 2013 under tier II category. In 2017 the NBA expert team has visited for evaluating under tire- I framework in 3rd 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 2nd year and aids for Competitive exams / Placements at the beginning of 3rd 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 Mision 10X Learning approaches
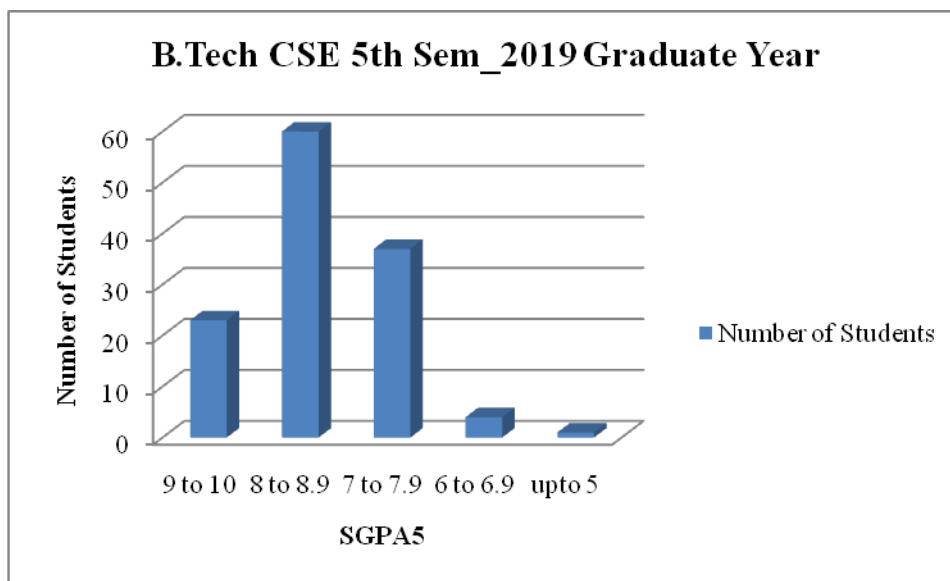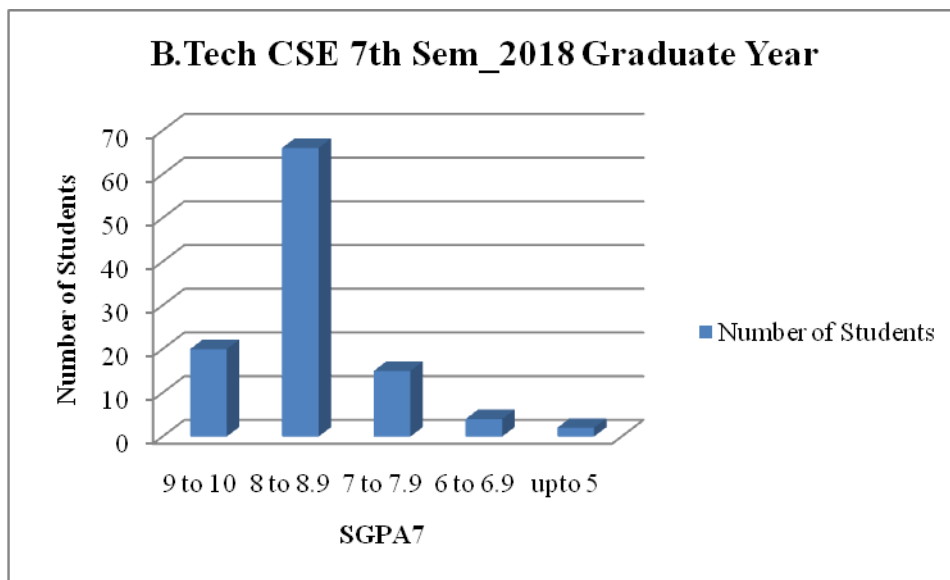- IBM TGMC Programme

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.
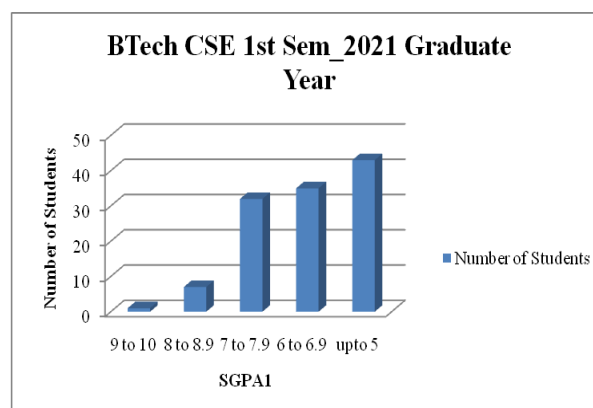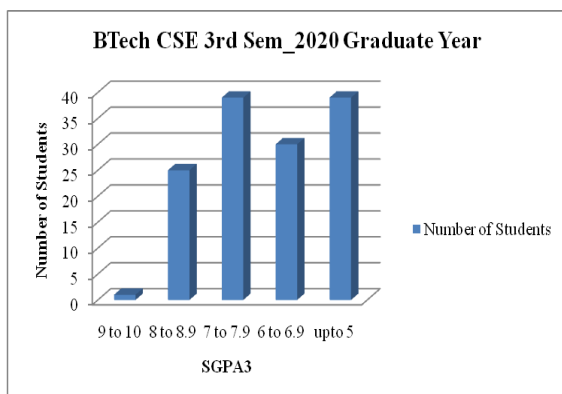
Disciplinary issues

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 7th Sem_2018 Graduate Year

Number of Students vs SGPA7

SGPA7	Number of Students
9 to 10	20
8 to 8.9	66
7 to 7.9	14
6 to 6.9	3
upto 5	2

B.Tech CSE 5th Sem_2019 Graduate Year

Number of Students vs SGPA5

SGPA5	Number of Students
9 to 10	23
8 to 8.9	60
7 to 7.9	37
6 to 6.9	3
upto 5	1

BTech CSE 3rd Sem_2020 Graduate Year

BTech CSE 1st Sem_2021 Graduate Year

	SGPA1	SGPA3	SGPA5	SGPA7
9 to 10	1	1	23	20
8 to 8.9	7	25	60	66
7 to 7.9	32	39	37	15
6 to 6.9	35	30	4	4
upto 5	43	39	1	2

BTech CSE ODD Semester_2017
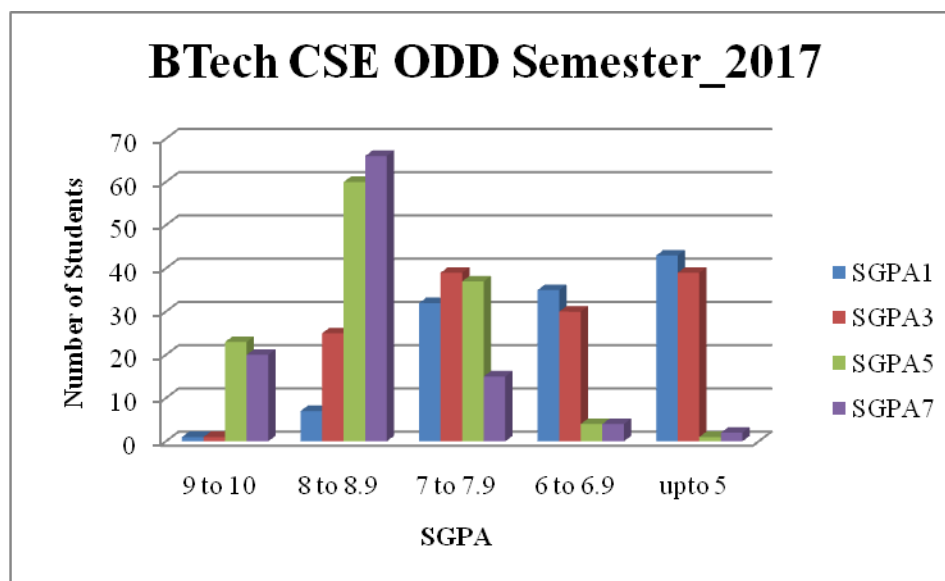
Students Industrial Training

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

Students' Project Allocation:

Detail of UG, PG Project (2017-2018)

Student Roll No	Student Name	Project Title	Faculty Name
140303001	Abhisekh Roy	College Management System (CMS)	Mr. Amrut Ranjan Jena
140303023	Biswarup Prasad Bose		
140303038	Kolaj Kundu		
140303086	Soham Chattopadhyay		
140303026	Deepashree Bhattacharyya	Prediction and assessment of different diseases using medical image analysis.	Ms. Pranati Rakshit
140303068	Sanchita Lakshmi Pal		
140303075	Sayantan Pal		
140303107	Tamal Choudhury		
140303072	Santanu Das	Online Database Management System	Ms. Sonali Bhattacharya
140303036	Kaushik Kumar	Unique Identification key generation system for secure authentication	Dr. Dharmpal Singh
140303007	Aniket Kumar		
140303080	Shrabanti Saha		

140303098	Subhajit Bhakat	Application of neural network in natural language processing	Mr. Apurba Paul
140303062	Rathindranath Dutta		
140303009	Anjali Gupta	Inventory Management System	Mr. Sumanta Chatterjee
140303047	Nikita Gupta		
140303105	Sweta Sharma		
140303111	Zeba Daudy		

140303054	Pratanu Mandal	Analysis and Detection of the Genre of Music	Ms. Ira Nath
140303027	Dev Gobind Ganguly		
140303040	Madhav Kumar Jha		
140303046	Nihal Gupta		
140303077	Shalinipriya	A new heuristic for various attack prevention in MANET	Ms. Ira Nath
140303078	Shambhavi Sinha		
140303082	Shwetan Kumari		
140303061	Rashmi Mondal	Development of ontology from text	Mr. Apurba Paul
140303070	Sandip Pore		
140303087	Soumajit Majumder		
140303012	Ankita Mitra	Detection of lung Tumor using Image Processing.	Ms. Pranati Rakshit
140303018	Arvinder Kaur		
140303052	Pooja Ghosh		
140303101	Suman Shaw		
140303089	Soumitamondal	Detect different stages of colon cancer	Ms. Debasree Mitra
140303063	Remapatra		
140303092	Souradeepsengupta		

140303010	Ankan Banerjee	Voice based search in PC	Dr. Dharmpal Singh
140303055	Pritam Kumar Das		
140303103	Swarup Talukdar		
140303109	Uttiya Mukherjee		
140303016	Aritra Chakraborty	Smart Locking System for home security	Mr. Sudipta Sahana
140303074	Sayandeep Basu		
140303097	Sreeja Chowdhury		
140303102	Suvam Basak		

140303031	Himanshu Soni	Classification of different stages of atheroclerosis using pattern recognition.group:	Ms. Pranati Rakshit
140303014	Archana Pandey		
140303106	Swikriti Guchhait		
140303065	Rocky Bhaskar	Online Medical Support	Mr. Amrut Ranjan Jena
140303088	Soumita Das		
140303100	Suman Kr Pramanik		
140303085	Sk Mustak Hasan	Weather Forecasting System	Mr. Amrut Ranjan Jena
140303067	Saheen Mallick		
140303091	Soumyadeep Mandal		
150403124	Shuvankar Das		
130203096	Saunaksarkar	A novel cryptography algorithm for network security	Mr. Sudipta Sahana
150403123	Shourjadeepsarkar		
150403125	Soham Banerjee		
150403121	Amitava Bose		

140303021	Baraj Lal Ray	Online police record management System	Dr. Bikramjit Sarkar
140303058	Rahul Kumar		
140303104	Sweta Kumari		
140303015	Arindam Chatterjee	E commerce product rating based on customer review mining	Ms. Madhuchhanda Dasgupta
140303013	Apurba Majumder		
140303059	Rajdip Ghosh		
140303051	Pitam Mukherjee		
140303076	Shaif Aslam	Bio-metric and Two level protected	Ms. Sonali Bhattacharya

140303004	Amit Kumar	A new Attendance Monitoring System	Ms. Ira Nath
140303034	Jayshree Bhattacharya		
140303041	Md. Nazmul Hasan		
140303011	Ankit Chakraborty	Data Analytic tool implementation to prevent Tuberculosis	Ms. Debasree Mitra
140303029	Gautam Kumar		
140303108	Uddhab Haldar	MyClgNotes; A mini package of everything a college student need.	Mr. Sumanta Chatterjee
140303069	Sandip Das		
140303064	Riten Debnath		
140303071	Sanjay Dev		

140303002	Agnisuddha Mandal	Image Encryption using color compensation	Ms. Madhuchhanda Dasgupta
140303045	Nandini Kundu		
140303050	Oindrila De		
140303028	Dhiraj Sharma	Knowledge retrieval using Intelligence techniques	Ms. Madhusmita Mishra
140303042	Md Shamim Khan		
140303039	Kumar Subham Bajaj		
140303005	Anandita Sarkar		
140303017	Arpita Dhar Roy	Chalo Jai: A Web Based solution for ride with TOTO	Ms. Madhusmita Mishra
140303053	Poushali Deb		
140303030	Geetanjali Saha		
140303020	Ayush Raj		
140303073	Satarupa Das	Student Academic Information	Ms. Madhuchhanda Dasgupta
140303099	Sudip Kumar Sihi	Cancer Awareness Web Site	Ms. Debasree Mitra
140303083	Sidharth Kumar Gautam		
140303084	Sinchan Maishal		
140303110	Vivekananda Jha		

140303049	Nitish Kr Singh	E-Notice Board Web Application	Mr. Sumanta Chatterjee
140303006	Aniket Dutta		
140303019	Ashis Maity		
140303043	Monish Mukul Das		

Student Roll No	Student name	Project Title	Faculty Name
140303057	Rahul Gupta	Online Library Management	Dr. Bikramjit Sarkar
140303060	Ranita Das		
140303035	Joydeep Mondal		
140303066	Rupam Bhaduri	Online examination System	Ms. Madhusmita Mishra
140303022	Bishal Chakraborty	Student Attendance System Based On Fingerprint Recognition	Mr. Sudipta Sahana
140303008	Aniket Santra		
140303048	Nirmal Chandra Saha		
140303081	Shubhrangshu Basak		
140303024	Debabrata Mandal	Online Food Delivery System	Ms. Sonali Bhattacharya
140303025	Debaroti Sen		
140303032	Indronil Ghosh		
140303037	Keerti	Email access for the blind people	Dr. Dharmpal Singh
140303033	Jayeeta Ghosh		
140303056	Puja Prasad		

PG

Student Roll No	Student name	Project Title	Faculty Name
382116020001	Kakali Samanta	Assessment of Heart Disease using clustering.	Dr. Dharmpal Singh

Student Projects

List of projects presented in **JISTECH-2K18** on 21st Feb 2018 at **Biswa Bangla Convention Centre, Kolkata**

'JISTech 2K18'

Project Id No:	Title of the Project	Faculty Mentor/Guide Name	Student Names
1	Heart Beat Monitoring over Internet using Arduino and ThingSpeak	Prof. Sumanta Chatterjee	Nuzhat Shamim
2	GIS based Monitoring System	Prof. Sudipta Sahana	Suvam Basak
3	Android Development and Bluetooth Controlled Notice Board using Arduino	Prof. Amrut Ranjan Jena	Aman Adarsh
			Ali Shiraz Akhter
			Ankita Roy
			Gaurav Keshri
			Anima Tripathy
			Khwaja Mahiuddin Ansari
4	App based lock system for advanced Home Security	Prof. Sudipta Sahana	Sourav Kundu
			Swannava Dutta
			Soumyojyoti Barman
			Siddharth Das
			Tiyasha Giri
5	E-Jan Suraksha (24x7 On Duty)	Prof. Apurba Paul	Suraj Kumar Shaw
			Rup Saha
			Sonu Kumar Singh
			Sumit Verma
			Subham Kumar Mahanty
6	Radar Technology with Missile Defence System Arduino	Prof. Madhusmita Mishra	Sayan Dey Biswas
			Soumadeep Nayek
7	9 Queen game with Android Application	Prof Apurba Paul	Shaswata Mitra
			Sayan Dey Biswas
			Aditi Ghosh

Students Placement

Some Students Placement data of 2018

Sl No	Name of the student	Company	Department
1	Deepashree Bhattacharyya	Capgemini	CSE
2	Nihal Gupta	Capgemini	CSE
3	Pratanu Mandal	Capgemini	CSE
4	Rashmi Mondal	Capgemini	CSE
5	Sanjay Deb	Capgemini	CSE
6	Shaif Aslam	Capgemini	CSE
7	Sreeja Chowdhury	Capgemini	CSE
8	Uttiya Mukherjee	Capgemini	CSE
9	Ankan Banerjee	IbBS Software Services Pvt Ltd	CSE
10	Arpita Dhar Roy	Net2source	CSE
11	Sanchita Lakshmi Pal	Net2source	CSE
12	Archana Pandey	Poornam Infovision	CSE
13	Subhajit Bhakat	Zensar Technologies	CSE
14	Tamal Chowdhury	Zensar Technologies	CSE
15	Baraj Lal Ray	Csm Technology	CSE
16	Souradeep Sengupta	Csm Technology	CSE
17	Swikriti Guchhait	Csm Technology	CSE
18	Pritam Kumar Das	Dynamics Finar Info Solution	CSE

Student Achievements

List of CSE Students selected for Internship at **Asian Institute of Technology, Bangkok**

Sl. No.	Student Name	Pass out Year
1	BUNTY SHARMA	2019
2	SUCHISMITA GUPTA	2019
3	SUCHISMITA SADHUKHAN	2019
4	GAUTAM KUMAR	2019
5	PRATEEK DAS	2019
6	MADHAVI KUMARI	2019
7	RENESA GHOSH	2019

List of Publications

FACULTY PUBLICATIONS
JULY, 2017-FEBRUARY, 2018

1. D. P. Singh, J. P. Choudhury and M. De, "A Comparative study of meta heuristic model to assess the breast cancer disease type under the domain of data mining" IETE Journal of Research, SCI Index (communicated).

2. *D.* P. Singh "A New Bio-inspired Algorithm: Lizard Optimization Algorithm" Jounral of Soft Computing, 2017 SCI index (communicated).

3. *D.* P. Singh, "An effort to design an integrated system to extract information under the domain of metahuristics", International Journal of Applied Evolutionary Computation (IJAEC), Vol. 8 No. 3 pp. 13-52, 2017 ACM Index.

4. G. Purkait, D. P. Singh, M. Mishra , A. R. Jena and A. Banerjee, "An Improved Bio Inspired BAT Algorithm for Optimization", Springer proceedings of 2nd ICACIE 2017

5. Apurba Paul, D Das," Identification of Character Adjectives from Mahabharata", International Conference on Recent Advancement in Natural Language Processing, Verna, Bulgeria, July 2017

6. Apurba Paul, D Das," A Deep dive into Identification of Character from Mahabharata", International Conference on Natural Language Processing, Kolkata, 2017

7**.** Ira Nath, Monish Chatterjee, Uma Bhattacharya "CLR: A Novel Approach for Sparse Placement of Regenerators and Routing in Translucent Optical Networks", Published in Twelfth International Conference on Wireless and Optical Communications Networks WOCN. Published papers include Engineering Index (EI) and EI Compendex, IEEE Explore Digital Library, October, 2017**.** Electronic **ISBN:** 978-1-4673-9277-8, **Electronic ISSN:** 2151-7703, **DOI:** 10.1109/WOCN.2015.8064490. [IEEEEXPLORE]

8. Pranati Rakshit, Nirmal Das, Mita Nasipuri, Subhadip Basu, "A Qualitative Hemodynamic Analysis on Human Cerebrovascular Phantom",Progress in Advanced Computing and Intelligent Engineering, Springer, Singapore,pp- 219-229, 2018.

9.Pranati Rakshit1, Mita Nasipuri2, Nirmal Das3 & Subhadip Basu,"CLASSIFICATION OF ANOMALOUS REGION IN HUMAN CEREBROVASCULAR STRUCTURE USING RANDOM FOREST ",International Journal of Latest Trends in Engineering and Technology Vol.(9)Issue(3), pp.015-021 DOI: http://dx.doi.org/10.21172/1.93.03 e-ISSN:2278-621X.

10.Indranil Guha, Nirmal Das, Pranati Rakshit, Mita Nasipuri, Punam K Saha, Subhadip Basu,"A semiautomatic approach for segmentation of carotid vasculature from patients' CTA images"Springer journal-Innovations in Systems and Software Engineering (ISSE)December 2017, Volume 13, Issue 4, pp 243–250

11. Indranil Guha, Nirmal Das, Pranati Rakshit, Mita Nasipuri, Punam K Saha, Subhadip Basu, "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, vol 518. Springer, Singapore13 July 2017

12. Guha I., Das N., Rakshit P., Nasipuri M., Saha P.K., Basu S. (2018) Design of Cerebrovascular Phantoms "Using Fuzzy Distance Transform-based Geodesic Paths. In: Sa P., Sahoo M., Murugappan M., Wu Y., Majhi B. (eds)" Progress in Intelligent Computing Techniques: Theory, Practice, and Applications. Advances in Intelligent Systems and Computing, vol 518. Springer, Singapore.

13. Sumanta Chatterjee, Apurba Paul, "Autonomous, Surveillance Fire Extinguisher Robotic Vehicle with Obstacle Detection and Bypass using Arduino Microcontroller", Communications on Applied Electronics (CAE) – ISSN: 2394-4714 Foundation of Computer Science FCS, New York, USA Volume 7 – No.4, July 2017 – www.caeaccess.org, International Journal, ISSN: 2394-4714.

14. Sumanta Chatterjee, Somsubhra Gupta, "Information mining and e-marketing plan on real time data in cottage industries", International Journal of Engineering and Applied Sciences, Indexed by **Thomson Reuters,** ISSN: 2394-3661, Volume-4, Issue-10, October 2017, International Journal.

15. Sumanta Chatterjee, Somsubhra Gupta, Tanushree Saha, "An e-Commerce portal for online Medicine trading", International Journal of Engineering and Applied Sciences, Indexed by **Thomson Reuters**, ISSN: 2394-3661, Volume-4, Issue-12, December 2017, International Journal.

16. G. Purkait and D.P Singh, "An effort to optimize the error using statistical and soft computing methodologies" , Journal of Applied Computer Science & Artificial Intelligence Vol .1 No. 1, pp. 15-20, 2017.

17. D.P Singh, "A Modified Bio Inspired BAT algorithm," International Journal of applied Metaheuristic Computing (IJAMC), Vol. 9 No. 1,pp. 60-77, 2018. Scopus Index.

18. G. Purkait, D. P. Singh, M. Mishra , A. R. Jena and A. Banerjee, "An Improved Bio Inspired BAT Algorithm for Optimization", Springer proceedings of 2nd International Conference of Advanced Computing & Intelligent Engineering ICACIE 2017,23-25 November 2017, Central University of Rajasthan , Ajmer, India.

19.D. P. Singh **"**An effort to design an integrated system to extract information under the domain of metahuristics", International Journal of Applied Evolutionary Computation (IJAEC), Vol. 8 No. 3 pp. 13-52, 2017 **ACM Index.**

20.G . Purkait and D.P Singh, "An effort to optimize the error using statistical and Soft computing methodologies" , Journal of Applied Computer Science & Artificial Intelligence Vol .1 No. 1, pp. 15-20, 2017.

21.D.P Singh, " A Modified Bio Inspired BAT algorithm," International Journal of Applied Metaheuristic Computing (IJAMC), Vol. 9 No. 1,pp. 60-77, 2018. Scopus Index

PUBLICATIONS OF STUDENTS
(JULY, 17-FEBRUARY, 18)

1. Pratanu Mandal, Madhav Kumar Jha, **Apurba Paul**,"Rough Set Analysis Tool",Journal of Applied Computer Science & Artificial Intelligence, Dept of CSE,JISCE,2017.

2. Sayed Karar Waris, **Ira Nath**, "Performance Analysis of MWMCDS Algorithm in Ad-Hoc Networks using NS2", Journal of Applied Computer Science & Artificial Intelligence.

3. Kumar Gaurav Verma , Somsubhra Gupta and **Debasree Mitra**, "IDENTIFICATION OF MASS OF TISSUE GROWTH IN BRAIN REGION UNDER THE FRAMEWORK OF IMAGE SEGMENTATION", International Journal of Latest Trends in Engineering and Technology Vol.(8)Issue(4), pp.179-186 DOI: http://dx.doi.org/10.21172/1.84.28 e-ISSN:2278-621X.

4. Shrabanti Saha, Aniket Kumar, Kaushik Kumar, **Sudipta Sahana**, "Unique Identification Key Generation System for Secure Authentication", JACSAI.

5. Souvik Banerjee, Souvik Roy, Pijus Kanti Dhara, Shawna Saha, Soumendu Das, **Pranati Rakshit**, "Recognition of Handwritten Numerals Using Support Vector Machine", Journal of Applied Computer Science & Artificial Intelligence.

6. **Ira Nath**, Purba Chatterjee, Rajib Roy Choudhury, "A SURVEY ON SURVIVABILITY IN OPTICAL NETWORKS", IETE, Hyderabad (Accepted).

7. Aman Gupta, Neha Gupta, **Ira Nath**, "Design and Implementation of Modified Periodic Table Based Element Superseded Cryptographic Algorithm For Enhancing Network Security", Accepted in IEEE 2017 International Conference on Advances in Computing, Communication and Control (ICAC3 '17), The paper will be included in **IEEE Explore Digital Library**.

8. **Sumanta Chatterjee**, Aniket Santra, Bishal Chakraborty, Nirmal Chandra Saha, "'SADHYATI': An Integrated Platform for Medical Assistance", International Journal of Computer Sciences and Engineering, Volume-5, Issue-10, Page no. 243-246, Oct-2017, E-ISSN: 2347-2693. DOI:https://doi.org/10.26438/ijcse/v5i10.243246

9. **Ira Nath**, Deepashree Bhattacharyya, Agnisuddha Mandal, Nandini Kundu, Oindrila De, "NHSKCA: A NEW HEURISTIC FOR SYMMETRIC KEY CRYPTOGRAPHIC ALGORITHM", International Journal of Computer Engineering in Research Trends (IJCERT) (ISSN: 2349-7084), 4(12): pp: 547-551, December-2017 **[Thomson Reuters].**

Faculty Interaction with Outside World

Name	Year of Interaction	Details
AMRUT RANJAN JENA	2017	Session Chair in IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE-ANTS) at Bhubaneswar during 17-20 December 2017
MADHUSMITA MISHRA	2017	Session Chair in IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE-ANTS) at Bhubaneswar during 17-20 December 2017

Grants received

Sl. No.	Faculty Name	Funding Agency Type (National/International)	Name of Funding Agency	Name of Project	Total grants
6	Sudipta Sahana	National	MEITY	IPR Seminar	2 Lacs

Department hosted events

	2017-2018
Sl. No	**Name of the Event**
1.	One day workshop on **Python Programming "PP-2017"** has been organized Department of Computer Science and Engineering, JIS College of Engineering, on 28th day of October, 2017 at Kalyani . Mr Rajan Chettri (Senior Trainer), Rajesh kumar (Trainer) and Mr. Brijesh Kumar (Training Manager) of Aspirevision Tech Education Pvt Ltd. was the guest speakers of the said event
2.	"**One Day Workshop on Big Data Hadoop**" on 18th Nov, 2017, at JIS College of Engineering (An Autonomous Institution) organized by Department of Computer Science and Engineering.The invited speaker was Mr. Rajmohan De Sarkar, more than 10 years Industry experiences, Senior Consultant Wipro Technologies, Cognizent Technology Solutions, Tech Mahindra etc. He is an expert in Big Data Hadoop and Java Technology.
3.	**One day Workshop on "Machine Learning '' was held on 17th February, 2018**. at Room no 220(Lab-7) .The experts have delivered the talk from Ardent Computech Pvt. Ltd , Saltlake, Kolkata. Students were enlighten with the Hands on work using R Language regarding the application of Machine Learning along with the fundamental concept of Machine Learning .

REPORT OF WORKSHOP ON PYTHON PROGRAMMING (PP-2017)

One day workshop on **Python Programming "PP-2017"** has been organized by JIS College of Engineering, on 28th day of October, 2017 at Kalyani. This **Workshop** was aimed to cover technological aspect of Python programming in different domain of computer application. The department of Computer Science & Engineering has organized the workshop under the guidance of Mr. Amrut Ranjan Jena, Head, Department of Computer Science and Engineering.

Mrs. Madhusmita Mishra and Dr Dharmpal Singh were departmental convener and co-convener of the aforesaid event. All the remaining faculty of the department were organizing committee with their assigned sub duty.

Moreover, more than 70, 3rd & 2nd Year student of department of computer Science & Engineering were participated in the aforesaid workshop with their great zeal and zest.

The presence of Mr Rajan Chettri (Senior Trainer), Rajesh kumar (Trainer) and Mr. Brijesh Kumar (Training Manager) of Aspirevision Tech Education Pvt Ltd. make the seminar more elegant and enhance the knowledge of student in the field o f Python Programming.

One Day Workshop on Big Data Hadoop", on 18th November, 2017(Saturday) Organized by Department of Computer Science and Engineering, JIS College of Engineering

Topic: One Day Workshop on Big Data Hadoop.
Objective: To enhance the knowledge of recent advancement in the field of Big Data Hadoop by which UG & PG Engineering students and researcher would be able to follow a proper research guideline.
Invited Experts:

❖ Mr. Rajmohan De Sarkar, more than 10 years Industry experiences, Senior Consultant Wipro Technologies, Cognizent Technology Solutions, Tech Mahindra etc. He is an expert in Big Data Hadoop and Java Technology.

Participants: More than 85 students have been participated in the workshop.
Brief Report:

As a part of the Student and Faculty development initiatives, One Day Workshop on Big Data Hadoop was organized on 18th November, 2017 by the Department of Computer Science and Engineering, JIS College of Engineering, Kalyani. The convenor and co-convenor of the workshop were Mrs. Ira Nath and Mrs. Pranati Rakshit, Assistant Professor of CSE Department, JISCE respectively. The entire program was enriched by the presence of our Principal Sir, Dr. Maloy R. Dave and the invited speakers Mr. Rajmohan De Sarkar, Senior Consultant Wipro Technologies, Cognizent Technology Solutions, Tech Mahindra etc. More than 85 students have been participated in the seminar. The session was delivered by Mr. Rajmohan De Sarkar and his subject of deliberation was Big Data Hadoop. The implementation part of the hands-on workshop was done by the participants with the help of Mr. Rajmohan De Sarkar and his expert team. In the valedictory session all the participants and organizing committee members are facilitated by certificates and vote of thanks was given by the convenor.

Outcome:
i) Students at UG & PG level were highlighted by the prospects in the emerging field of Big Data Hadoop and their applications.
ii) There were immense interest about the field covered by the workshop and general feedback was to arrange similar event once more.

A Report on "One Day Workshop on Machine Learning ", on 17th February, 2018(Saturday) Organized by Department of Computer Science and Engineering, JIS College of Engineering (An Autonomous Institution), Kalyani, Nadia.

Topic: One Day Workshop on Machine Learning.
Date: 17th Feb , 2018
Objective: To enhance the knowledge of advancement in the field of Machine Learning by which UG & PG Engineering students and researcher would be able to follow a proper research guideline.
Participants: More than 65 students have been participated in the workshop.

Brief Report:

As a part of the Student and Faculty development initiatives, One Day Workshop on Machine Learning was organized on 17th February, 2018 by the Department of Computer Science and Engineering, JIS College of Engineering, Kalyani. The convenor and co-convenor of the workshop were Ms.Sonali Bhattacharyya and Dr.Bikramjit Sarkar, from CSE Department, JISCE . The program was inaugurated by the presence of our Vice Principal Sir Dr. Dipak Ranjan Jana. 65 students have participated in the seminar. The session was delivered by the expers member of Ardent Computech Pvt. Ltd. from Saltlake, Kolkata. The implementation part of the hands-on workshop was done by the participants with the help of expert team.

Outcome:
i) Students at UG & PG level were highlighted by the prospects in the emerging field of Machine Learning and their applications.
ii) There were immense interest about the field covered by the workshop and general feedback was to arrange similar event in more depth once more.

Project Report on Bengalathon (2018)

Bengalathon is a West Bengal Government- Organized Technology based competition in which computer Programmers in being involved with IT applications and Prototype design. JIS college of Engineering is one of the participating institutes in Bengalathon, 2018. One of the participating groups from Computer Science and Engineering Department has successfully reached the Final round after clearing the third round selection level. A project namely "Support for the elderly" has been developed by Shaswata Mitra, Sayantan Halder, and Aditi Ghosh of 3rd Year CSE under the guidance of Dr. Souvik Pal, Assistant Professor, CSE Department. The whole team has presented the Mobile-App based project at Webel Complex, Sector V, Salt Lake, Kolkata on 9th January, 2018. They were also invited to Bengal Global Business Summit, 2018 at Biswa Bangla Convention Center, New town, Kolkata.

Biswa Bangla Convention Center, New town, Kolkata
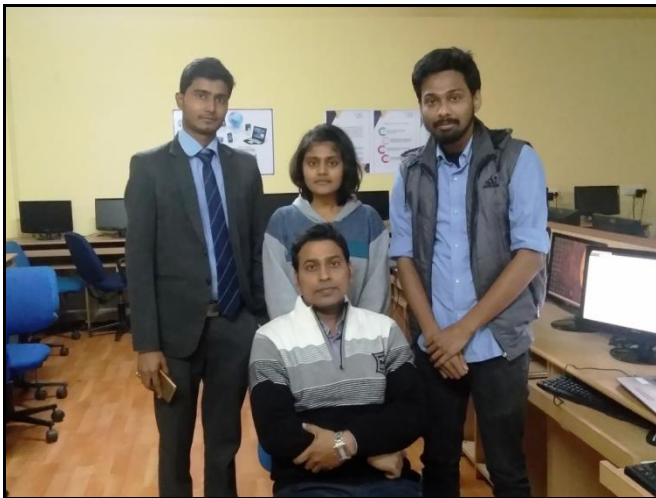
Project Screenshot
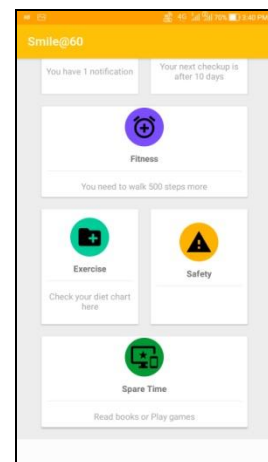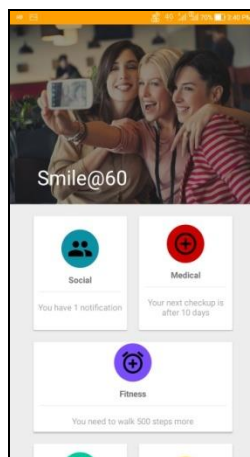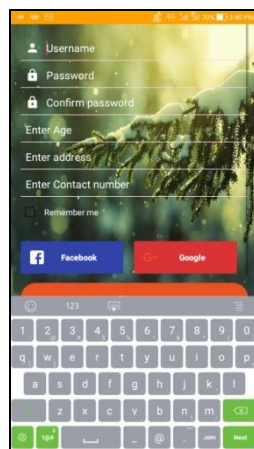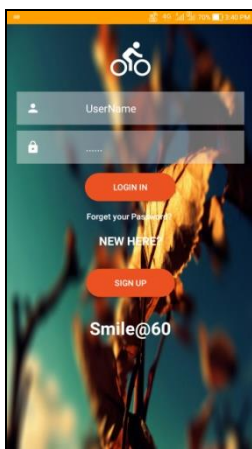
NPTEL LOCAL CHAPTER

Achievements in July-Sept 2017 Session

Following candidates successfully passed the NPTEL Online Certification Examination and many of them placed in Elite/Elite Gold category from JIS College of Engineering for July-Sept, 2017 Session. Wish them all the best for their future work!!!

S.no	Course Name	Name	Final Score	Certificate Type
1	Introduction to R Software	NILESH KUMAR	92	Elite+gold
2	Introduction to Programming in C	SOURANEEL MAZUMDER	82	Elite
3	Introduction to R Software	VIVEK RANJAN	81	Elite
4	Introduction to Programming in C	BHAKTA BALLAV GARAI	80	Elite
5	Introduction to Programming in C	SAURAV CHOWDHURY	80	Elite
6	Introduction to Programming in C	SHOBHIT KUMAR SHAW	79	Elite
7	Introduction to Programming in C	ALI SHIRAZ AKHTER	79	Elite
8	Introduction to Programming in C	ADITI GHOSH	78	Elite
9	Introduction to Programming in C	GOURAV KESHARI	78	Elite
10	Introduction to Programming in C	RIYA GORAI	78	Elite
11	Introduction to Programming in C	NIKHIL KUMAR DUBEY	75	Elite

12	Introduction to Programming in C	SANDEEP SHAW	75	Elite
13	Introduction to Programming in C	SNEHANSH CHATURVEDI	74	Elite
14	Introduction to Programming in C	PRANTIK BANERJEE	73	Elite
15	Introduction to Programming in C	RAHUL MAZUMDER	73	Elite
16	Introduction to Programming in C	ANUBHAB MUKHERJEE	72	Elite
17	Introduction to Programming in C	HIMANSHU SINGH	70	Elite
18	Introduction to Programming in C	NIKITA BAIRAGI	69	Elite
19	Introduction to Programming in C	NIVEDITA PANDIT	68	Elite
20	Introduction to Programming in C	ANIMA TRIPATHY	68	Elite
21	Introduction to Programming in C	ARGHYA BHOWMICK	68	Elite
22	Introduction to Programming in C	TRISHA BASAK	68	Elite
23	Introduction to Programming in C	NAIRITA MITRA	68	Elite
24	Introduction to Programming in C	ANKITA ROY	68	Elite
25	Introduction to Programming in C	MOUMITA CHAKRABORTY	67	Elite
26	Introduction to Programming in C	KHWAJA MOHIUDDIN ANSARI	67	Elite

27	Introduction to Programming in C	RAHUL MAZUMDER	66	Elite
28	Introduction to Programming in C	MEGHNA VERMA	66	Elite
29	Introduction to Programming in C	SOUMYOJYOTI BARMAN	66	Elite
30	Introduction to Programming in C	PRADIP AWASTHI	65	Elite
31	Introduction to Programming in C	MD FAISAL	65	Elite
32	Introduction to Programming in C	RISHAV SEN	65	Elite
33	Introduction to Programming in C	ANKITA SARKAR	65	Elite
34	Introduction to Programming in C	UTPAL MAJI	64	Elite
35	Introduction to Programming in C	TRISHA CHAKRABORTY	64	Elite
36	Introduction to Programming in C	ARITRA DATTA	64	Elite
37	Introduction to Programming in C	SAYAN PAUL	64	Elite
38	Introduction to Programming in C	SAPTARSHI BARAT	64	Elite
39	Introduction to Programming in C	ISHITA GHOSH	64	Elite
40	Introduction to Programming in C	TANVIR AHMED SHEIKH	64	Elite
41	Introduction to Programming in C	APARAJITA KUNDU	64	Elite

42	Introduction to Programming in C	DEEPAK KUMAR JHA	63	Elite
43	Introduction to Programming in C	AVISHEK PAUL	63	Elite
44	Introduction to Programming in C	RITESH KUMAR	63	Elite
45	Introduction to Programming in C	KAUSTUBH CHAKRABORTY	63	Elite
46	Introduction to Programming in C	SAYAN ROY	63	Elite
47	Introduction to Programming in C	SAYAN BASAK	63	Elite
48	Introduction to Programming in C	NANDITA SARKAR	63	Elite
49	Introduction to Programming in C	ROHIT KUMAR SAH	63	Elite
50	Introduction to Programming in C	NILESH KUMAR	62	Elite
51	Introduction to Programming in C	PRATITI BASU	62	Elite
52	Introduction to Programming in C	SIMRAN SHRIVASTAVA	62	Elite
53	Introduction to Programming in C	NANDITA GUPTA	62	Elite
54	Introduction to Programming in C	SAURAV SRIVASTAV	62	Elite
55	Introduction to Programming in C	DIPANWITA BAIDYA	62	Elite
56	Introduction to Programming in C	AKRITI JHA	62	Elite

57	Introduction to Programming in C	AMAN ADARSH	61	Elite
58	Introduction to Programming in C	ANJALI RAY	61	Elite
59	Introduction to Programming in C	SNEHA SWATI	61	Elite
60	Introduction to Programming in C	NUZHAT SHAMIM	61	Elite
61	Introduction to Programming in C	PRIYABRATA PAL	61	Elite
62	Introduction to Programming in C	AZHAR MAQBOOL ANSARI	61	Elite
63	Introduction to Programming in C	SOMA SHARMA	61	Elite
64	Introduction to Programming in C	PRASENJIT MONDAL	60	Elite
65	Introduction to Programming in C	SOURAV KUNDU	60	Elite

Achievements in July-Oct 2017 Session

Following candidates successfully passed the NPTEL Online Certification Examination and many of them placed in Elite/Elite Gold category from JIS College of Engineering for July-Oct, 2017 Session. Wish them all the best for their future work!!!

S.no	Course Name	Name	Final Score	Certificate Type
1	Introduction to internet of things	NILESH KUMAR	73	Elite
2	Introduction to internet of things	VIVEK RANJAN	65	Elite
3	Cloud computing	KALYAN DAS	61	Elite
4	Cloud computing	SHASWATA MITRA	73	Elite
5	Cloud computing	NILESH KUMAR	67	Elite
6	Cloud computing	RIYA GORAI	62	Elite
7	Cloud computing	PAYEL ROY	68	Elite
8	Cloud computing	PARANTAPA SARKAR	61	Elite
9	Cloud computing	VIVEK RANJAN	72	Elite
10	Software testing	ADIT JANA	71	Elite
11	Graph Theory	PRANTIK BANERJEE	61	Elite
12	Graph Theory	HIMANSHU SINGH	66	Elite

Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

NILESH KUMAR

for successfully completing the course

Introduction To R Software

with a consolidated score of **92** %

| Online Assignments | 25/25 | Proctored Exam | 66.75/75 |

Total number of candidates certified in this course: **657**

Prof. T. V. Prabhakar
Chairman
Centre for Continuing Education,IITK

Jul-Sep 2017
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

Roll No: NPTEL17MA17S1400036

To validate and check scores: http://nptel.ac.in/noc

Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

SOURANEEL MAZUMDER

for successfully completing the course

Introduction To Programming In C

with a consolidated score of **82** %

| Online Assignments | 25/25 | Proctored Exam | 57/75 |

Total number of candidates certified in this course: **2992**

Prof. T. V. Prabhakar
Chairman
Centre for Continuing Education,IITK

Jul-Sep 2017
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

In partnership with
NASSCOM

Roll No: NPTEL17CS43S1400145

To validate and check scores: http://nptel.ac.in/noc

Elite

NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

ADITI GHOSH

for successfully completing the course

Introduction To Modern Application Development

with a consolidated score of **78** %

Online Assignments	20.25/25	Proctored Exam	57.75/75

Total number of candidates certified in this course: **3756**

Prof. A. Ramesh
Chairman
Centre for Continuing Education,IITM

Jul-Sep 2017
(8 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

In partnership with
NASSCOM

Roll No: NPTEL17CS40S2450532

To validate and check scores: http://nptel.ac.in/noc

Elite

NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

SHASWATA MITRA

for successfully completing the course

Cloud Computing

with a consolidated score of **73** %

Online Assignments	14.5/25	Proctored Exam	58.5/75

Total number of candidates certified in this course: **1627**

Prof. Anupam Basu
Chairman and Head
Centre for Educational Technology, IIT Kharagpur

Aug-Oct 2017
(8 week course)

Prof. Adrijit Goswami
Dean
Continuing Education, IIT Kharagpur
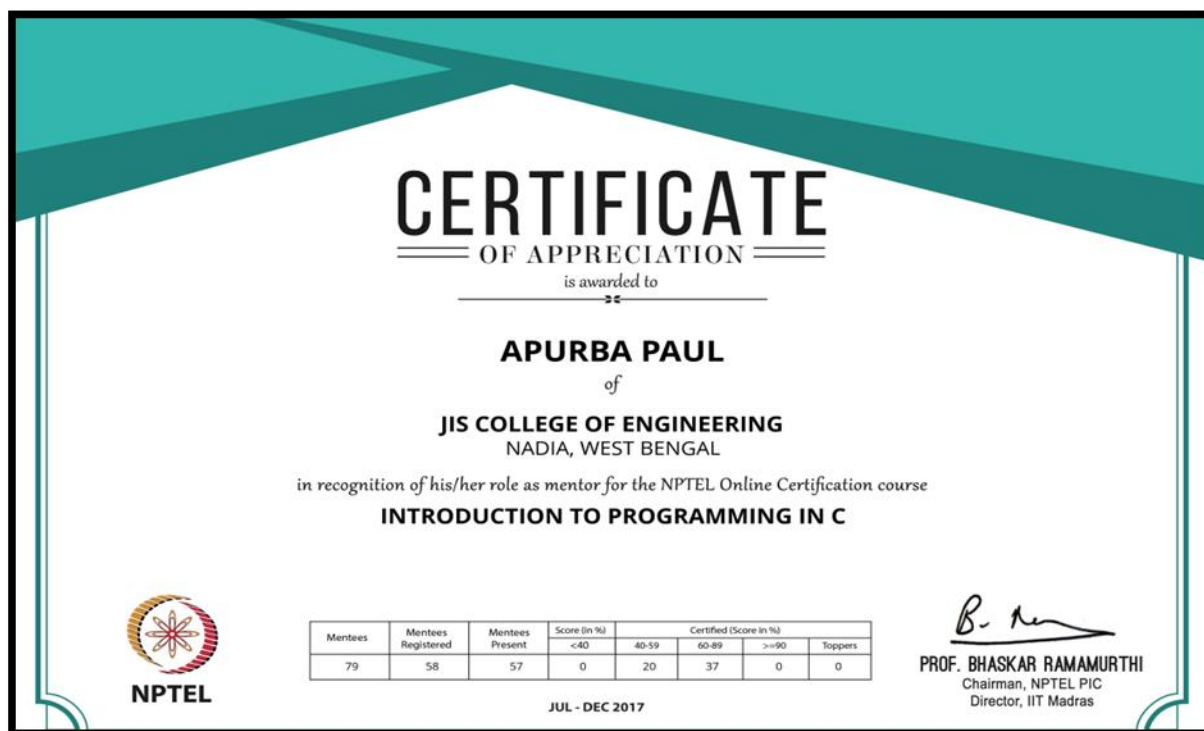
Indian Institute of Technology Kharagpur

In partnership with
NASSCOM

Roll No: NPTEL17CS2352460549

To validate and check scores: http://nptel.ac.in/noc

NPTEL Mentors

S.no	Course Name	Mentor Name	Total Mentee	Points
1	Introduction to Programming in C	Apurba Paul	79	215
2	Introduction to operating systems	Pranati Rakshit	32	45
3	Cloud computing	Sudipta Sahana	9	32
4	Introduction to Modern Application Development	Debasree Mitra	7	16
5	Introduction to internet of things	Debasree Mitra	13	14
6	Programming in C++	Madhuchhanda Dasgupta	17	14

CERTIFICATE
OF APPRECIATION
is awarded to

APURBA PAUL
of

JIS COLLEGE OF ENGINEERING
NADIA, WEST BENGAL

in recognition of his/her role as mentor for the NPTEL Online Certification course

INTRODUCTION TO PROGRAMMING IN C

Mentees	Mentees Registered	Mentees Present	Score (in %)		Certified (Score in %)			
			<40	40-59	60-89	>=90	Toppers	
79	58	57	0	20	37	0	0	

JUL - DEC 2017

PROF. BHASKAR RAMAMURTHI
Chairman, NPTEL PIC
Director, IIT Madras

NPTEL

CERTIFICATE
OF APPRECIATION
is awarded to

PRANATI RAKSHIT

of

JIS COLLEGE OF ENGINEERING
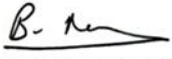NADIA, WEST BENGAL

in recognition of his/her role as mentor for the NPTEL Online Certification course

INTRODUCTION TO OPERATING SYSTEMS

Mentees	Mentees Registered	Mentees Present	Score (in %) <40	Certified (Score in %)			Toppers
				40-59	60-89	>=90	
32	19	19	0	15	4	0	0

NPTEL

PROF. BHASKAR RAMAMURTHI
Chairman, NPTEL PIC
Director, IIT Madras

JUL - DEC 2017

CERTIFICATE
OF APPRECIATION
is awarded to

SUDIPTA SAHANA

of

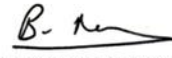**JIS COLLEGE OF ENGINEERING**
NADIA, WEST BENGAL

in recognition of his/her role as mentor for the NPTEL Online Certification course

CLOUD COMPUTING

Mentees	Mentees Registered	Mentees Present	Score (in %) <40	Certified (Score in %)			Toppers
				40-59	60-89	>=90	
9	6	6	0	1	5	0	0

NPTEL

PROF. BHASKAR RAMAMURTHI
Chairman, NPTEL PIC
Director, IIT Madras

JUL - DEC 2017

NPTEL SPOC Workshop at IIT Kharagpur,West Bengal

Ms. Debasree Mitra, Asst. Professor CSE dept. awarded by certificates and memento from IIT Kharagpur for her instrumental role as SPOC and recognizing NPTEL Local Chapter , JISCE as AA rating in India

NPTEL Felicitation Ceremony at JISCE on 19th January,2018

NPTEL mentors are felicitated by JISCE at Dr. B.C Roy Auditorium.

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 2018**

Sl. No.	Student Name	Project
1	SOURAV KUNDU	App based lock system for advanced Home Security
2	SWANNAVA DUTTA	
3	SOUMYOJYOTI BARMAN	
4	SIDDHARTH DAS	
5	TIYASHA GIRI	

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 2018.

3. The Department will open CSI students' chapter in the year of 2018.

4. The Department will organize International and National seminar/workshop for academic development of faculty and students.

5. The Department will generate fund from different research projects.

6. The Department will organize Faculty development Programme for enhancement of knowledge for faculty and staff.

7. The Department will organize industry oriented training programme for students' placement.

8 The Department will continue Mentoring Activities for students' development.