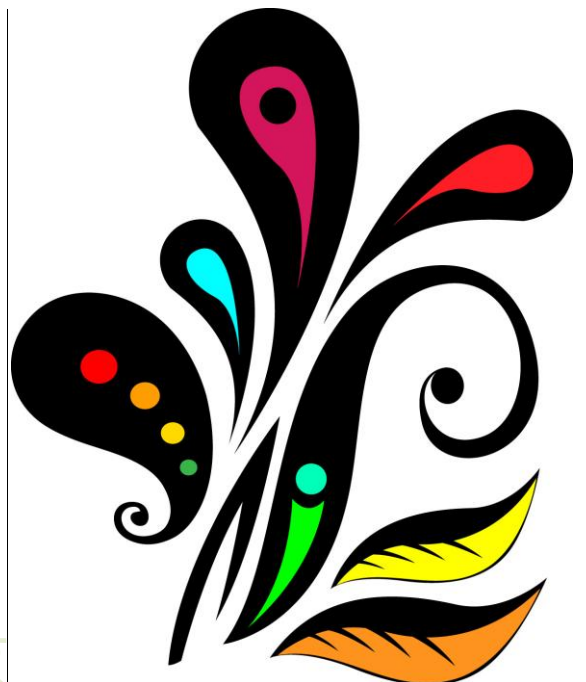




SMRITI

DEPARTMENT
OF
COMPUTER SCIENCE &
ENGINEERING





SNEAK PEEK

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HOD'S DESK



As we have ushered in a new year, I wish all of you a very interesting semester ahead. It has been a magnificent moment for our department with one of our alumni receiving the Anna University gold medal securing the highest CGPA in the Computer Science and Engineering discipline among all the colleges affiliated to Anna University, for the second year in a row. Congratulations to Sanjana Sahayaraj, who is currently pursuing her Ph.D at the University of California, San Diego.

As an avid MOOC enthusiast, it gave me immense happiness when our college was recognized by NPTEL as one of the top 10 colleges with AAA rating. I appreciate all the students who sustained till the end of the course in which they enrolled. My special compliments to Muthu Annamalai, Vanshika Sridharan, Sangeetha and Sudharson who emerged as toppers and Nachiappan, Karthick, Vrithika, Sounderya who scored very well. I sincerely hope that this will encourage more students to enroll in useful courses and earn valuable certificates.

Congratulations to the Adhithyas of III year for winning the GENEREX android application development competition for solving the daily life healthcare related problems at the prestigious IIT Bombay Tech Festival, which is Asia's largest science and Technology festival.

I highly commend Varna of final year for the appreciation she received from Google regarding the active role played by her as the facilitator of the Applied CS with Android program. She was one of the 5 campus facilitators among 160 to be given an all expenses paid trip to attend the Grace Hopper Celebration of Women in Computing at Bangalore.

I wholeheartedly appreciate the efforts of all our faculty members who contributed towards the formulation of syllabi for subjects in R-2017 undergraduate curriculum.

It is very heart warming to see several research projects being submitted by multiple faculty members to AICTE and DST. Two faculty projects and 14 student projects have been selected for internal funding by the SSN Trust. I wish them success in their projects for producing fruitful results. Let us keep up this momentum and continue achieving a lot more milestones.

Dr.Chitra Babu
HoD/CSE

FACULTY PUBLICATIONS

1. **K.Madheswari, Dr.N.Venkateswaran**, " Fusion of Visible and Thermal images using Curvelet Transform and Brain Storm Optimization", IEEE TENCON 2016.
2. **Mr.H.Shahul Hamead, Dr.T.T.Mirnalinee, Ms.N.Sowmiya**, "Burst-based Adaptive Link rates towards the prosperity of Green Networks", In Proceedings of the IEEE 10th International Conference on Advanced Networks and Telecommunication Systems, Indian Institute of Science, Bangalore, 2016.
3. **Beulah, A.** "Human Spine Structure Localization on MRI–A Survey", Indian Journal of Science and Technology Vol.9 (42), pp: 1-4, November 2016, DOI: 10.17485/ijst/2016/v9i42/99261.
4. **Ms.S.Savitha, Mr.K.R.Sarath Chandran**, "Energy Efficient Reconfigurable Architecture for Motion Estimation in Video Coding", Indian Journal of Science and Technology, Vol. 9(39), DOI: 10.17485/ijst/2016/v9i39/100769, October 2016, pp.1-6,ISSN (Print) : 0974-6846.
5. **Kanchana Rajaram, Chitra Babu, Arun Adiththan**, "Dynamic Generation of Transactional Contracts for Hierarchical Workflows", In Procs. of The International Conference on Computer, Communication, and Signal Processing (ICCCSP - 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).
6. **Kanchana Rajaram, Malarvizhi, M.P.**, "A Model for Predicting Resources For On-Premise Applications", In Procs. of The International Conference on Computer, Communication, and Signal Processing (ICCCSP - 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).
7. **Kanchana Rajaram, Malarvizhi, M.P.**, "Utilization Based Prediction Model For Resource Provisioning", In Procs. of The International Conference on Computer, Communication, and Signal Processing (ICCCSP - 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).
8. **Kirtana R. N and Lokeswari Y. V.**, "An IoT based Remote HRV monitoring system for Hypertensive patients" in Procs. of The International Conference on Computer, Communication and Signal Processing (ICCCSP 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).

9. **Kanchana Rajaram, Susanth, G**, "Emulation of IoT - Gateway for Connecting Sensor Nodes in Heterogenous Networks", In Procs. of The International Conference on Computer, Communication, and Signal Processing (ICCCSP - 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).
10. **K Sriraghav, R Vijayaraghavan, S Shriram and Shomona Gracia Jacob**, "Transaction Overhead Reduction by Server Localization in Bank Database Management Systems", International Journal of Computer Applications 158(3):11-16, January 2017.
11. **Vallidevi Krishnamurthy, Chitra Babu and R.C Brinda**, "Performance Evaluation of Dynamic Composition and Dynamic Reconfiguration in SOA Applications", in Procs. of The IEEE International Conference on Computer, Communication, & Signal Processing (ICCCSP – 2017). (To appear in IEEE Xplore).
12. **D. Varun Ranganathan, R. Vishal, Vallidevi Krishnamurthy, Prasanth Mahesh, Roopeshwar**, "Design Patterns for Multiplayer Card Games", in Procs. of The IEEE International Conference on Computer, Communication, & Signal Processing (ICCCSP - 2017). (To appear in IEEE Xplore).
13. **Shrinidhi Rajagopal and Vallidevi Krishnamurthy**, "OO Design for an IoT - Based Automated Plant Watering System", in Procs. of The IEEE International Conference on Computer, Communication, & Signal Processing (ICCCSP - 2017). (To appear in IEEE Xplore).
14. **D. Thenmozhi, R. Seshathiri, K. Revanth and B. Ruban**, "Robotic Simulation using Natural Language Commands", In Procs. of The International Conference on Computer, Communication, and Signal Processing (ICCCSP - 2017), SSNCE, India, Jan 2017. (To appear in IEEE Xplore).
15. **Beulah A., Sreesharmila T.**, "EM Algorithm based Intervertebral Disc Segmentation on MR Images", in International Conference on Computer, Communication, and Signal Processing (ICCCSP-2017)", SSNCE, Chennai, India, January 2017. (To appear in IEEE Xplore).
16. **Tej Tharang Dhandala, Vallidevi Krishnamurthy, Rajan Alwan**, "Study of Internet of Vehicles (IoV) for Traffic Management", in Procs. of The IEEE International Conference on Computer, Communication, & Signal Processing (ICCCSP - 2017). (To appear in IEEE Xplore).

FACULTY ACTIVITIES

1. **Dr. Chitra Babu**, attended the syllabus sub-committee meeting for the R-2017 curriculum for B.E (CSE), B.Tech (IT) and B.E (Computer and Communication) degree programmes, on 1st November 2016 at CEG, Anna University.
2. **Dr. Chitra Babu and Dr.T.T.Mirnalinee**, attended the one day Teacher's Conclave on "Pursuing Excellence in Teaching" organized by the Good Citizenship Forum(GCF), SSN CE in association with Rajaji Centre for Public Affairs(RCPA) and ISTE chapter of SSN CE.

PROJECTS SUBMITTED FOR FUNDING FROM EXTERNAL AGENCIES

AICTE – RPS SCHEME

1. **Dr. J. Suresh & Dr.D.Venkatavara Prasad**, "Vighna - A Smart Tool for preventive Healthcare", worth Rs.12 L.
2. **Dr.D.Thenmozhi & Dr.C.Aravindan**, "Clause Extraction from English and Tamil Text for Semantic Applications in Health Care", Agriculture and Computer Domains, worth Rs.19.99 L.
3. **Dr.P.Mirunalini & Dr.C.Aravindan**, "Automatic Detection of Stenosis in Computed Tomography Angiography (CTA) Images of Heart using Machine Learning Techniques", worth Rs.19.99 L.
4. **Dr.J.Bhuvana & Dr.C.Aravindan**, "Design of Multiobjective Memetic Algorithm with Automatic Termination Scheme and Preferential Local Search Using Adaptive Weights for real world problems", worth Rs.15.56 L.

AICTE – FDP/Seminar/Conference Grants

1. **Dr. Chitra Babu**, “Convergence of IoT, Big data Analytics and Cloud Computing for Smart Governance” - Seminar Grant for Rs.1 L.
2. **Dr. C. Aravindan, Dr. R.S. Milton and Dr. T.T. Mirnalinee**, “Deep Learning for Text and Image Analysis - Principles, Techniques and Challenges” – FDP Scheme, worth Rs.7L.
3. **Dr. S. Kavitha and Dr. B. Bharathi**, “Soft Computing Techniques and its Applications for Text, Image and Speech Processing”, - FDP Scheme worth Rs.3.8L.

Centre for Excellence – SV University

1. **Dr. J. Suresh & Dr.D.Venkatavara Prasad**, “Secured Data Store for Satellite Images”, worth Rs.5 L.

Department of Science and Technology

1. **Dr.B.Bharathi**, “Development of a novel approach for speaker verification task using speaker-specific-text”, under the Early Career Research Scheme for Rs.16.9L.
2. **Dr.J.Bhuvana & Dr.C.Aravindan**, “Design of scheduling algorithms to solve optimization challenges in application and virtualization layers of cloud architecture”, under the Early Career Research Scheme for Rs.49.2L.
3. **K.Madheswari & N.Venkateswaran- Prof/ECE**, “Automated vegetation mapping of crops through satellite image fusion and convolution neural networks based classification”, DST-Scheme for Young Scientists and Technologists, worth Rs.21.4L.
4. **Dr.K.Valli Devi & Dr.Chitra Babu**, “Towards improving software productivity in developing dynamically reconfigurable service oriented applications through pattern-based solutions, DST-Scheme for Young Scientists and Technologists, worth Rs.16.8L.

INDUSTRY – INSTITUTE INTERACTION

1. **Dr. Chitra babu, Dr.S. Felix Enigo and Ms. B. Prabavathy** along with the III year students Abhay Krishna and Arjith Natarajan visited Caterpillar office for project discussion on 5th January 2017.
2. **Dr C Aravindan , Dr R S Milton and , Dr T T Mirnalinee** had a discussion with Scriplogix, a data analytics company in Chennai, regarding collaboration on a project, Synchronization of lip movement with the speech of avatars in a virtual world controlled by human simulation specialists, involving learning from data consisting of video, audio, and text. A preliminary draft of the proposed work has been agreed upon with Scriplogix and the corpus creation has started.
3. **Dr.T.T.Mirnalinee, Dr.J.Bhuvana, Mr.V.Balasubramanian and Mr.H.Shahul Hamead** attended a meeting at Tata Elxsi, Chennai for discussing the project proposals on Green networking and Security in Vehicular communication.
4. Product design team from **Polaris Intellect Design** visited CSE department on 22/11/2016 at 2.00 PM and addressed the third year B. E students and first year M. E students along with the faculty members. They explored Digital Transformation Journey, especially for Digital Banking. Few features for future digital banking technology were also demonstrated and were interested to offer paid internship to the students.
5. **Dr. Chitra Babu, Dr. R. S. Milton, Dr. T.T Mirnalinee and Dr. D. Thenmozhi** had a meeting with Mr. P. Elayaraja, Access Health Care to initiate industry-institute collaboration.

EXTERNAL INTERACTION

1. **Dr. V.S. Felix Enigo** underwent a training on "Data Analytics and Machine Learning using R" conducted by SCS-India during 26-27 November 2016.
2. **Dr. V.S. Felix Enigo** underwent a training on "Artificial Networks and Fuzzy Logic for Machine Learning using MATLAB" conducted by SCS-India during 19-20 November 2016.
3. **Ms.R.Priyadharsini, Ms.A.Beulah and Dr.T.Sreesharmila** submitted a task for a challenge titled," Optic Disc and Cup segmentation", in Tenth Indian Conference on Computer Vision, Graphics and Image Processing-(ICVGIP 2016)held on 18 - 22 December at Indian Institute of Technology, Guwahati.
4. **Ms.S.Rajalakshmi** along with the final year students Ms.Varshini, Mr.Balavenni and Mr.Srinivasan attended the Boot camp programme conducted by Cognizant Technology Solutions on January 9 and 20, 2017

PAPER REVIEWS

1. **Dr. T. T. Mirnalinee, Prof. /CSE** reviewed a paper titled" Learning Multi-Scale Deep features for high resolution satellite image classification" for IEEE Transactions on Geoscience & Remote Sensing.
2. **Ms.K Madheswari, AP/CSE** reviewed a paper titled "Multispectral and Hyperspectral Image Fusion Using a 3D-Convolutional Neural Network" for IEEE Geoscience & Remote Sensing letters.
3. **Dr. V.S. Felix Enigo, Asso.Prof./CSE**, reviewed a paper entitled "Concurrent Transmission Mechanism for Mitigating pan-exposed Node Problems in Wireless Sensor Networks" for International Journal of Distributed Sensor Networks. Impact Factor: 0.906.
4. **Dr.Shomona GJ, Asso. Prof/CSE**, reviewed a paper titled "Adaptive Type-2 Fuzzy Controller for Nonlinear Delay Dominant MIMO Systems: An Experimental Paradigm in LabVIEW" for the International Journal of Advanced Intelligence Paradigms, Inderscience Publishers.
5. **Dr. B. Bharathi, Asso.Prof./CSE** reviewed a paper titled "Study on the Effects of Using Short Utterance Length Development Data in the Design of GPLDA Speaker Verification Systems" for International Journal of Speech Technology.



ACM INDIA ANNUAL EVENT 2017

It was a wonderful experience for me to attend the ACM (Association of Computing Machinery) India Annual event that was held in Kolkata on 19th, 20th and 21st January, as a member of the ACM India Education Committee.

On 19th, ACM India Education Committee along with the Special Interest Group on Computer Science Education (iSIGCSE) organised a workshop on “Computing Curricula for India: Learning Outcomes, Pedagogy and Assessment”. Dr. Arati Dixit of Pune University briefed the ACM CS2013 curriculum and how it provides guidelines for formulating the curriculum as per the context of different universities. Prof. Abhiram Ranade of IIT Bombay discussed how an introductory programming course can be designed using ACM CS2013. Prof. Viraj Kumar of PES University discussed the same for the course on Algorithms. He also pointed out how to look for potential pitfalls while trying to map the assessment questions to different learning levels. Later, the participants were divided into groups and were asked to look at their own syllabus for a particular subject and figure out the gaps as per The ACM CS 2013 curriculum. Further, the group also formulated the learning outcomes from scratch and designed the subject matter to meet those learning outcomes.

In a parallel session, a CPathshala workshop for school teachers also was conducted. CPathshala initiative has really taken up in big ways during the past 9 months. Already 15 schools in Pune are piloting the newly designed curriculum for classes 1-5 in 2016-17. It has been aimed to rope in atleast 60 schools across Delhi, Cochin, Ahmedabad, Chennai and Kolkata to adopt the curriculum for classes 1-8 in 2017-18.

On 19th, the 11th Inter-Research Institute Student Seminar (IRISS) was organized. Ph.D. research scholars from reputed institutes presented their work as papers as well as posters. ACM India provides partial travel funding for selected submissions. It is a wonderful forum to receive feedback on the work carried out by the research scholars. The keynote address for this IRISS was given by Dr. Naveen Garg, Professor, IIT Madras and a Shanthi Swarup Bhatnagar Awardee, on the topic “Online Algorithms”. ACM India also recognizes the best doctoral dissertation every year and TCS sponsors this award of Rs. 2 Lakh. This year, it was awarded to Rohit Gurjar, IIT, Kanpur for his work on “Derandomizing Polynomial Identity Testing(PIT)”.

Prof. Vicky Hanson, Global ACM President and Mr. Bobby Schnabel, CEO of ACM, Ms. Pat Ryan, Global ACM COO attended the ACM annual event. The first technical talk was by the 2010 Turing Award winner, Dr. Leslie Valiant, Harvard University on the topic “Beyond Supervised Learning: Towards Artificial Intelligence”. He pointed out that, not all of cognition can be accounted for by supervised learning. He questioned whether one can build on the success of machine learning to address the broader goals of artificial intelligence. Since reasoning happens to be the other main component of cognition, the central challenge is to unify the formulation of these two fundamental phenomena, learning and reasoning into a single framework. He talked about Robust Logic for realizing this.

The second talk was given by Prof. D. B. Pathak of IIT Bombay on how MOOCs can be exploited for large-scale faculty training by adopting a hybrid approach. The third talk was by Dr. Armando Fox, University of Berkley, who illustrated how team projects can be formulated from real-life problems and how that can be effectively administered through MOOC platforms.

The fourth invited talk was by Dr. Jeannette Wing, Corporate Vice-President, Microsoft Research on “Crashing Drones and Hijacked Cameras Cyber Trust meets Cyber Physical”. She talked about the research challenges involved in building trustworthy cyber-physical systems ensuring reliability, safety and privacy in the context of Internet-of-Things (IoT).

In essence, I derived a lot of fresh perspectives by meeting a variety of people. Indeed, the entire event was exciting and memorable.



Dr. Chitra Babu, with Prof. Leslie Valiant, 2010 Turing award winner, Harvard University



From left: Prof. Abhiram Ranade, IIT Bombay, Dr.Chitra Babu, Prof. Madhavan Mukund, President, ACM India, Mr. Ashwani Sharma, Google, Mr. R. Venkatesh, Tata Research Development and Design Centre and Chair, ACM India Education Committee, Mr. Vipul Shah, TCS, Coordinator of CSPathshala initiative.

Dr.Chitra Babu
HoD/CSE

ART CORNER



'New Shoes' photographed by Gerald Waller, Austria 1946 Six year-old Werfel, living in an orphanage in Austria, hugs a new pair of shoes given to him by the American Red Cross. This photo was published by Life magazine.

By,
Sudha M R, CSE-B, IV

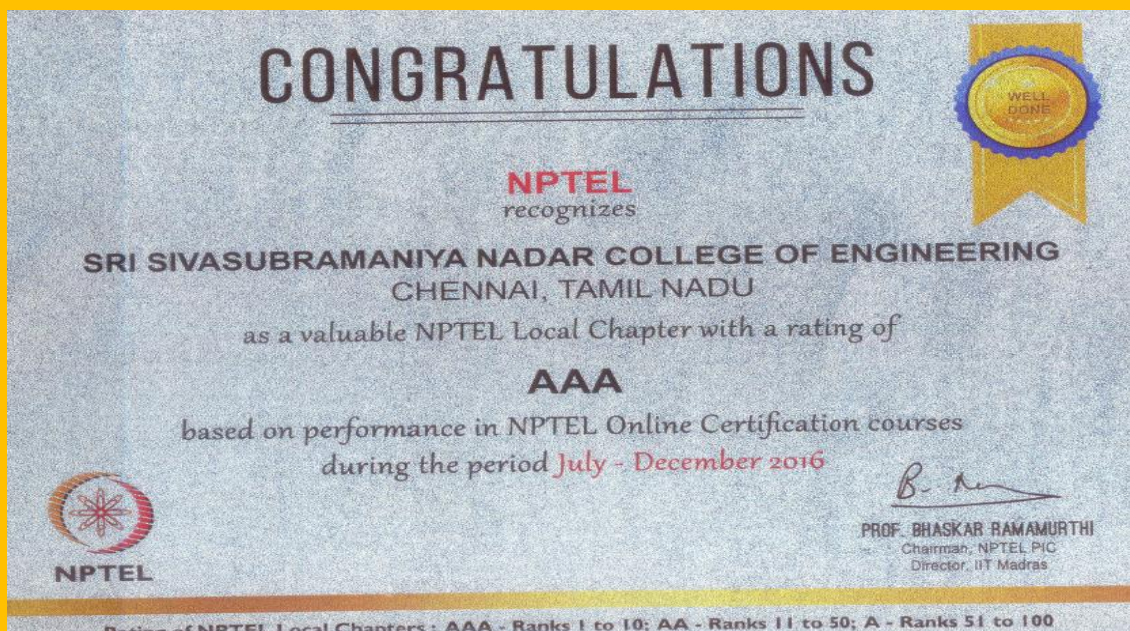
NPTEL Online Certification



Our college has been rated with AAA (top 10) among 686 NPTEL local chapters.
Several of our students have scored well and emerged as toppers in various courses.
The details of SSN College of Engineering students who registered for the Sep/Oct exam:
PRESENT CANDIDATES - 106
GOLD - 12
ELITE - 75
SUCCESSFUL - 14
TOPPERS - 16
RATING - AAA
Our college was felicitated on Dec 17th, 2016.



From L-R. Prof. K. Mangalasunder, NPTEL Founding Coordinator, Prof. PrathapHaridoss, NPTEL Current Coordinator, Prof. Bhaskar Ramamurthy, Director, IIT Madras, Dr.Chitra Babu, HoD-CSE, Dr. G. Sethuraman, Librarian and SPOC for NPTEL.



Student Achievements

University First Rank!

Sanjana Sahayaraj, 2012- 2016 Batch,
secured the coveted university 1st rank among all
the affiliated colleges to Anna University.



Winner @ Techfest, IIT Bombay

Adithya J and **Aditya Vazhipokkil Manoharan** of third year CSE have won first prize in GENEREX (android application development for solving the daily life healthcare related problems), as part of Techfest 2016, IIT Bombay, conducted during 16-18 December 2016.



Adhithya V Manoharan



Adhithya J

Nptel Online Certification – High Scores

S.No	Name	Subject	Score
1.	Muthu Annamalai CT	Modern Application Development	95%
2.	Vanshika S	Introduction to Programming, Data Structures and Algorithms using Python	92%
3.	Sangeetha V S	Introduction to Programming, Data Structures and Algorithms using Python	92%
4.	Karthik U	Introduction to Programming, Data Structures and Algorithms using Python	86%
5.	S.Sudarsan	Introduction to Programming, Data Structures and Algorithms using Python	84%
		Design and analysis of algorithms	80%
6.	VRithika M	Introduction to Programming, Data Structures and Algorithms using Python	84%
7.	Nachiappan N	Algorithms for Big Data	81%
8.	Sounderyan B	Introduction to Programming, Data Structures and Algorithms using Python	81%



Muthu Annamalai CT



Vanshika S



Sangeetha V S



Karthik U



S. Sudarson



VRithika M



Sounderyan B



Nachiappan N

All India Hackathon - DigitalOcean Campus Shark Program

DigitalOcean Campus Shark, **Organized by Hasura and Digital Ocean**, a one-of-its kind contest to identify & recognize the best student developers across Indian universities.

Problem Statement:

“Build a product that will be useful to the community around you”

Stages:

The Productathon was a 2-stage contest, with Stage 1 being an elimination round.

Stage 1: Required a 1-page write up on the product idea and its potential utility/impact on the community. Also, included were mockups or designs of the proposed product.

- **Stage 2:** Required a working prototype of the product/application based on the idea submitted in Stage 1. Deliverable would be the URL to a working prototype of the product and a 1-page write up on the technical architecture and features of the product.

Muthu Annamalai C T and Manish Chandra C of III yr CSE applied to the Hackathon and their Idea was shortlisted to Stage 2 as one among top 25 in the Country.



Muthu Annamalai C T



Manish Chandra C

CS Pathshala Workshop on Bringing Computational Thinking to Schools

CSPathshala is an Association of Computing Machinery (ACM) India initiative to bring modern computing curriculum to Indian schools. This effort is funded by Google. Within 9 months since its inception, 15 schools in Pune are already piloting this curriculum for classes 1-5 in the academic year 2016-17. Workshops have been conducted for school teachers in Delhi, Ahmedabad, Chennai, Cochin and most recently in Kolkata, apart from the very first one in Pune. For more information on this initiative, please refer to <http://cspathshala.org> and <http://learn.cspathshala.org>

This workshop was conducted for the Principals and computer science teachers of different schools in Chennai. The main objective of CS Pathshala was to bring in the joy of learning computer science for school students. Thus, changing the perspective with which the students think and making it easier for them to solve and reason out the problems given to them.



In the workshop that was conducted in Institute of Mathematical Sciences (IMSc), Chennai, more than 100 school teachers teaching computer science and school principals participated. Prof. Venkatesh Raman, IMSc welcomed the participants. He also opined that while there is absolutely no interference from parents in terms of what should be taught in school - Mathematics or science, every parent has an opinion regarding what should be taught in school computer science. Prof. R. Ramanujam, IMSc and Prof. Madhavan Mukund, CMI delivered the keynote addresses. They both brought out the significance of teaching computing as a science as well as instilling algorithmic thinking and problem solving to young minds, with compelling examples. The strong message conveyed was it is high time to bring computing to the forefront rather than the history of computers. Mr. Vipul Shah of TCS, Pune, who is the coordinator of the CSPathshala initiative, explained briefly the long-term vision and the efforts that have been taken to achieve them. Followed by that, there was an open session in which the participating teachers shared their current experiences of teaching computer science at their respective schools.

We the student representatives from the Department of CSE, SSN College of Engineering conducted two activities - bit coding and binary search - to demonstrate how to bring in a little bit of fun in learning the course. The idea behind bit coding was to simply convert the given decimal number to binary code. We asked the teachers to come forward and take part in the activity. They were split into two teams of five each and were given placards carrying the digits 1 and 0 and they had to shuffle themselves to give the right conversion. The teachers were really excited and they actively participated in the event.

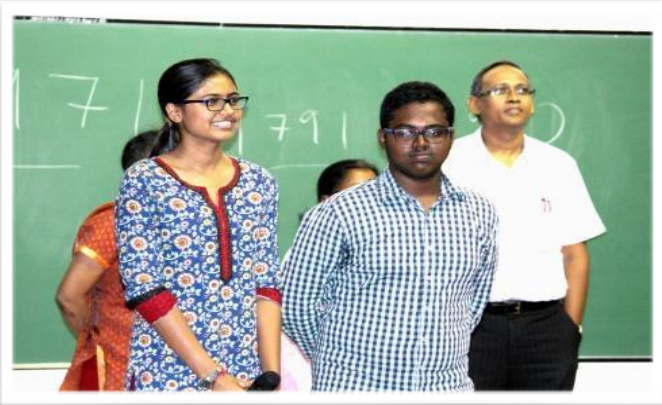
The next activity was something related to binary search technique. Here the teachers arranged themselves in a particular order based on a given criteria. The keywords representing the left and right directions were also given to them and the seeker will have to find the key person with the help of the keywords. One such criteria was date of birth.

All the teachers were brimming with enthusiasm and energy, and actively participated in both of the activities. Dr.Chitra Babu, Prof. & Head, Dept. of CSE, accompanied the students, and briefed the teachers about the activities the students would be conducting. Immediately after the activity Prof.Dr.Ramanujam conducted a small game demonstrating cryptography. He insisted that such activities would keep the students to enjoy learning and change their perspective of computer science. He further encouraged the teachers to inculcate these activities in schools so that the students show much interest in learning and come out with flying colors.

ACM Student Volunteers



Rhea Marian, Vrithika M, Varsha D



Nidhi B, Muthu Annamalai



Shreyas Gopal, S. Thirumla Devi



ANITA BORG INSTITUTE

GRACE HOPPER

CELEBRATION OF WOMEN IN COMPUTING

INDIA

I got an opportunity to be a part the Grace Hopper Celebration India 2016 on December 7,8,9 thanks to my affiliation with the Google's Applied CS with Android program. I have been a facilitator for the program for about a year now, and it has opened up many new opportunities for me. Following my initial training in Bangalore, I conducted two Android workshops in college for students of the second, third and final year. The extremely good response coupled with the high quality of the apps made during the code sprint, earned recognition from the Applied CS team. I was selected to travel to Mumbai to meet Ms. Aida Matrinez, the global head of the programme to discuss how to further shape it. I also was awarded passes to the three days of GHCI 2016 in Bengaluru.

The conference was a huge learning experience for me. I got to sit in panel discussions, presentations and workshops in various fields. The main tracks included Data Sciences and Machine Learning, Human computer interaction, Open source development and Management. I got a great opportunity to network with women from different companies who broke the glass ceiling to rise in the corporate ladder. I also received an invite to the Google's Women Techmaker's dinner, a gathering of enthusiastic techies who discussed their experiences in the workplace.

The GHCI 2016 was an extremely fun and educational event and I am extremely grateful to Google for sponsoring this experience for me. I would also like to thank the department for their support in bringing this program to our college and in helping me through all my workshops.



Varna Suresh,

CSE – B, IV

INOI 2017

Indian National Olympiad on Informatics (INOI 2017) for school students, powered by **Codechef**, was conducted in our department labs on 8th January 2017. 326 students took this exam on multiple centers all over the country. In this centre, roughly 60 students took the exam.

INOI is an online competitive programming exam that is organized by the **Indian Association of Research in Computer Science (IARCS)** for the school students to select around 30 students for an intense training camp that would normally be conducted sometime during May. At the end of this training camp, the 4-member team for the prestigious International Olympiad for Informatics (IOI) representing our country will be selected. This year's IOI, which is going to be the 29th edition of IOI, will take place in Tehran, Iran from July 28th to August 4th 2017.

To qualify for the INOI itself, the first step is to participate in the Indian Computing Olympiad that has two alternatives: getting selected through the Zonal Informatics Olympiad (ZIO), which is a written exam or getting automatically qualified by participating in the Zonal Computing Olympiad (ZCO), which is a programming contest.

IARCS provides leadership in computing within India. Its members are leading researchers in Computer Science drawn from major institutions from all over the country. IARCS aims at promoting excellence in Computing. It does so by facilitating interaction amongst its members, acting as a bridge between Academia and Industry and finally by elevating the quality of Computer Science education within the country.

To know more about IARCS and the Olympiads for school students, you can visit <http://www.iarcs.org>

Dr.Chitra Babu
HoD/CSE



Did You Know?

The **Motorola DynaTAC 8000X** was the first cell phone sold in the US; launched on April 11, 1984, it was designed by **Rudy Krolopp** and weighed 2 pounds.



First Indian SAT+SMT Winter School 2016

SAT and SMT solvers are the backbone of a wide range of academic and industrial R&D activities today. These include software and hardware verification, logistics, planning, operations research, non-linear discrete optimization, model counting, etc. Recent developments in the field suggest that these solvers may soon be leveraged in an even wider range of applications that touch almost all aspects of computing. In India the technical study of these solvers is limited to a few individuals and/or groups. This has hampered the growth of research and development in this area, both in the Indian academia as well as industry.

Keeping in view this gap, the first **SAT+SMT Winter School 2016** was jointly organized by **Dr. Ashutosh Gupta** of TIFR Mumbai and **Dr. Supratik Chakraborty**, IIT Mumbai, from 4th of December to 10th of December. The school had participants from academia (IITs, IISc, CMI, IMSc, and NITs), research (MS Research) and industry (Mercedes). It included a basic course on logic, tutorials on solvers by eminent scientists and developers from around the world, and latest research and applications centered around these solvers.

On the first day, **Dr. Madhavan Mukund** gave a set of lectures on basics of Propositional Logic (PL) with an extended problem solving session in the afternoon. In his talk, first he gave an introduction to PL and then discussed various issues like compactness, completeness, axiomatization, and wrapped up the session with Boolean functions, Binary Decision Diagrams, Tsetse in transformations, essentially the machinery for symbolic representation of state transition systems. During the problem solving session, in the afternoon, the participants divided themselves in 8-10 groups and were assigned two problems each from a question set provided by Dr. Mukund. Each group had to solve their assigned exercises and present them to Dr. Mukund.

On the second day, **Dr. Supratik Chakraborty** gave a set of lectures on basics of First Order Logic (FOL) with an extended problem solving session in the afternoon. His, perhaps, was the best set of lectures in the workshop. Dr. Supratik gave a gentle introduction to FOL, starting with its syntax and semantics, with copious examples, and culminating with encoding Relational databases and graphs as FO structures. He made it look all simple and even engineers from the industry, who had no familiarity with formal logics could appreciate and comprehend FOL. As previously, the post lunch session was devoted to problem solving.

On the third day, **Dr. Ashutosh Gupta** gave a set of lectures on basics of First Order Logic Theories with an extended problem solving session in the afternoon. In the first part of First

Order Logic Theories, there was an extended problem solving session in the afternoon. In the first part of lectures, Dr. Ashutosh defined FO theories with a number of examples and discussed the twin issues of axiomatization and decidability. In the second part, he discussed decision procedures for various theories viz. Ackermann's reduction for Theory of equality and function symbols and Cooper's method for Theory of integers.

On the fourth day, **Dr. Alberto Griggio** (FBK, University of Trento, Italy) gave a set of lectures on SMT Solvers followed by a session in the afternoon devoted to coding using SMT Solvers on Python platform. He discussed the basics of SMT Solvers, starting from an overview of CDCL-based SATsolvers (more on it later) and went on to describe two simple applications viz. quantifier elimination and interpolants computation.

On the fifth day morning, we had a set of lectures on Formal Inductive Synthesis, its theory and applications by **Dr. Sanjit Seshia** (University of California, Berkley). The highlight of his talk was an industrial application of formal synthesis where requirements in signal temporal logic (STL) were mined for Toyota experimental engine control model. We had a series of talks in the afternoon by students from CMI, IMSc, IITs (Patna & Mumbai) and TIFR.

Dr. Joao Marques Silva (University of Lisbon, Portugal) was the lecturer on the sixth day. Dr. Joao can be considered the father of modern industrial SATSolvers. He developed the first industrial SAT Solver, GRASP, in the late 90's, when he came up with the break through technique of Conflict-Driven Clause-Learning (CDCL) for searching SAT models efficiently.

He started his talk with an overview of CDCL and gave an intuition of why it works. In the second session, he discussed problem modeling using SAT, where formal problems, like, say Planning, can be solved using SAT solvers. He described various encoding techniques with multiple examples, including CSPs and sudoku. The concluding session was focused on his current area of research where he discussed problem solving using SAT oracles.

After this session, we had an invited talk by **Dr. R. Venkatesan** (Director, TRDDC) on model checking research in TCS which was open for all. He was followed by **Dr. Mandyam K. Srivas** (CMI) who presented his recent research work on Compositional Bounded model checking for Software, which he is presently doing with his collaborators in University of Sussex.

The last day was reserved for research talks where an array of people from academia and industry presented their work. The lectures included **Akash Lal** from Microsoft Research India, **Kuldeep Meel** from Rice University, Texas and **Priyanka Darke** from TRDDC.

Dr S Sheerazuddin
Associate Professor/CSE



Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2016)

The conference had three different tracks viz., Tutorials, Workshops and Main conference. Tutorials on “The Semantics Of Shape: Computational Methods For High-Level 3D Shape Analysis” was handled by DR. Siddhartha Chaudhuri, IIT Bombay . He discussed different levels of shape analysis for 3D images. The second tutorial was on “Learning to control from visual inputs” by Pulkit Agarwal research scholar, UC Berkeley. He discussed about systems that were developed by optimizing the perception and action problems to control and manipulate objects directly from visual inputs.

Four different workshops were conducted as part of the conference in the fields of Medical Image Processing (MedImage), Document Analysis and Recognition (DAR), Digital Heritage (WDH), Computer Vision Applications (WCVA). In the MedImage workshop three invited talks were given by the experts from academia, industry and medical field. Dr. N. R. Jagannathan from AIIMS, Delhi delivered a talk on “Potential of MR imaging (MRI) and MR Spectroscopy (MRS) in Clinical Medicine”, Dr Rakesh Mullick (GE, Global Research), gave a talk on the topic “Current challenges in medical imaging: Industrial view” and Dr. Guido Gerig, Computer Science and Engineering, NYU Tandon School of Engineering,

New York delivered a talk on “Role of Normative Atlases for Subject-specific Analysis of Pathology and Age-related Changes”. In the workshop, 3 full papers were presented by the researchers and 9 papers were presented as posters. As part of the MedImage workshop, a challenge on “Optic disk and cup segmentation on Fundas Images” was conducted. I, along with my research supervisor, Dr.C.Aravindan and Dr. Jaishakthi, Associate Professor, VIT University, Vellore registered and participated in the challenge. Also we were given opportunity to present our work.



Dr.P.Mirunalini

Associate Professor/CSE

International conference on Forum of Information Retrieval and Evaluation (FIRE-2016)

Information Retrieval Society of India organized an International conference on FIRE – Forum of Information Retrieval and Evaluation at Indian Statistical Institute (ISI), Kolkata during 7-10 December, 2016. Dr.C.Aravindan, Prof./CSE, Dr.D.Thenmozhi, Asso.Prof./CSE and Dr.P.Mirunalini, Asso.Prof./CSE attended the event. Tutorials on “Author profiling: age, gender, personality, native language identification” by Paolo Rosso from Universitat Politècnica de Valencia, Spain and “Deep Learning for Information Retrieval” by Dr. Parth Gupta IIT Varanasi and Dr. Manoj from Microsoft were conducted on 7th December.

Several invited talks were given by the experts from academia and industry. Fabrizio Sebastiani from Qatar Computing Research Institute, Qatar Foundation, Paulo Quaresma, Universidade de Évora, Portugal, Hoa T. Dang, NIST, U.S.A., Thomas Mandl, Universität Hildesheim, Germany, Nicola Ferro, University of Padua, Italy, Udo Kruschwitz, University of Essex, U.K., Matt Lease, University of Texas at Austin, U.S.A., Gareth Jones, Dublin City University and Frank Hopfgartner, University of Glasgow gave the talks on several fields of information retrieval. Lipika Dey, Principal Scientist from TCS Innovation Labs also delivered a speech on “Contextual Intelligence to enrich Enterprise Business Intelligence”.



Dr.D. Thenmozhi

In the conference, 7 papers were presented by researchers from India, South Africa and Germany. FIRE also organized 7 tracks in the fields of Consumer Health Information Search (CHIS), Detecting Paraphrases in Indian Languages (DPIL), Information Extraction from Microblogs Posted during Disasters, Persian Plagiarism Detection (Persian PlagDet), Personality Recognition in SOURCECODE (PR-SOCO), Shared Task on Mixed Script Information Retrieval (MSIR) and Shared Task on Code Mix Entity Extraction in Indian Languages (CMEE-IL) along with the conference. Track overviews were given by the task organizers on 8th December. Several works on each task have been presented in the conference during 9-10 December. We have participated in CHIS task and secured the first place in the task. We presented our work on “Decision Tree Approach for Consumer Health Information Search” in the conference.

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We explored recent trends and technologies in several fields such as text mining, cross-lingual and multi-lingual IR, text summarization, question answering, sentiment analysis from micro blogs, mixed-script IR, entity extraction for Indian languages, plagiarism checking, deep learning for IR and text quantification.

Dr.D.Thenmozhi, Asso.Prof./CSE

Faculty Development Programme on Wireless Networks

Ms.K.Madheswari, AP/CSE attended Anna University approved Seven Days FDTP ON “EC6802 – WIRELESS NETWORKS”, December 2016, Velalar College of Engineering and Technology (Autonomous), Erode, Tamilnadu, India.



Ms.K. Madheswari

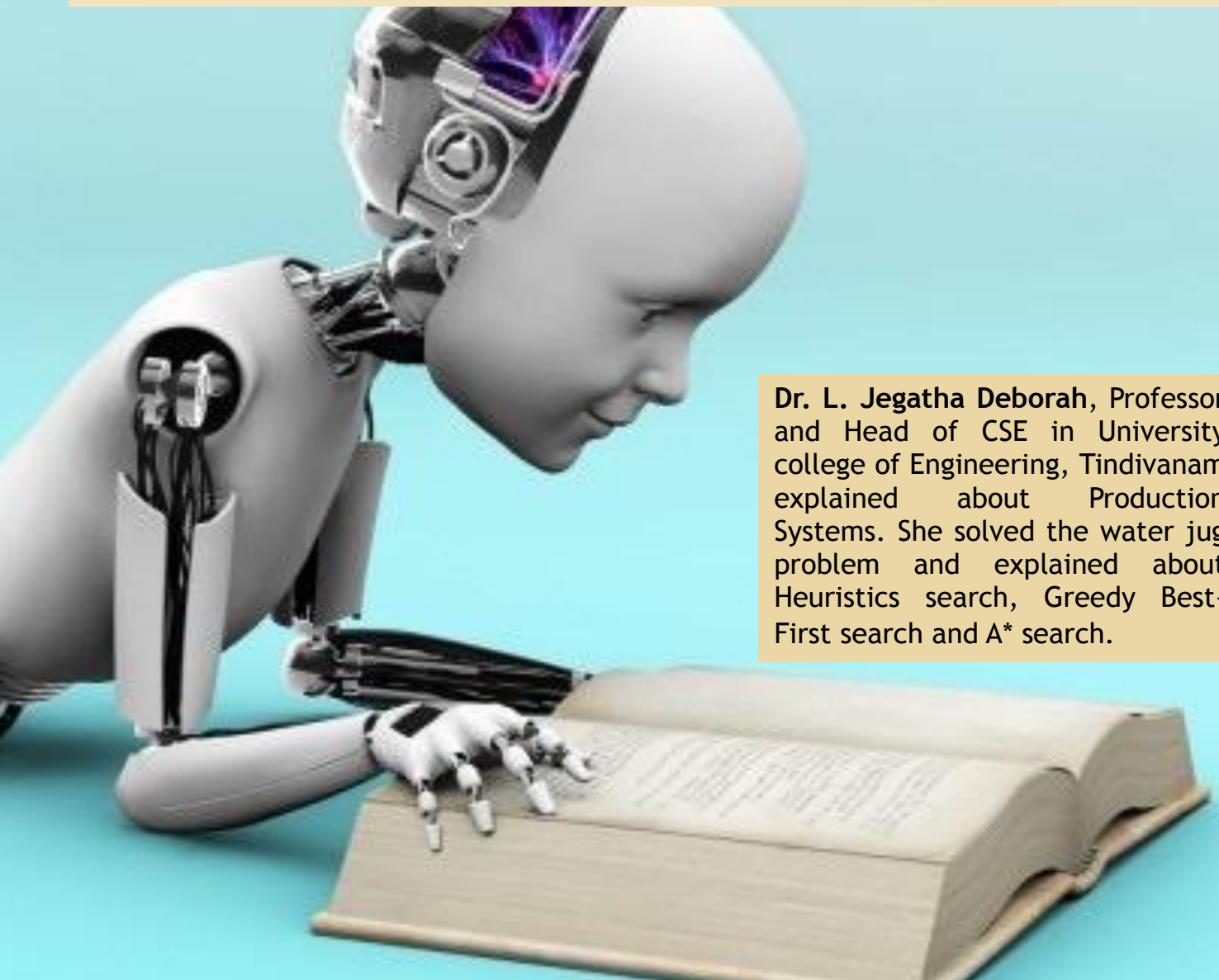
Fun but Facts!

- 1. The words in "Albert Einstein" can be rearranged to form the word: "Ten elite brains".*
- 2. Like fingerprints, everyone's tongue print is different.*
- 3. If you try to suppress a sneeze, you can rupture a blood vessel in your head or neck and die.*
- 4. India has 122 major languages and 1599 other languages.*
- 5. One-armed tennis player Hans Redl played at Wimbledon from 1947 to 1956. He served by tossing the ball up with his racket.*

Faculty Development Training Programme on Artificial

Dr. A Kannan, Professor and Dr. L. Sai Ramesh of Anna university, DIST, organised a seven-day Faculty Development Training Program on Artificial Intelligence CS6659 Regulation 2013 during December 5, 9 to 11 & 16 to 18 - 2016. The Introductory session was given by Dr. Kannan. Kannan sir introduced the audience to AI problem formulation. He gave an overall idea of Knowledge Representation, First Order Logic, Higher Order Logic and Searching techniques.

Dr. Selvakumar of VIT university defined Artificial Intelligence and showed a video on learning, explaining in detail the categorisations in AI, Agent types and Searching techniques.



Dr. L. Jegatha Deborah, Professor and Head of CSE in University college of Engineering, Tindivanam explained about Production Systems. She solved the water jug problem and explained about Heuristics search, Greedy Best-First search and A* search.

Dr. Kannan explained about difference between First Order Logic and propositional logic. Kannan Sir gave a brief description on Forward Chaining, Backward Chaining and Unification algorithm. Later Dr. Kannan elaborated on Knowledge Representation using IF...THEN rules and facts.

Ms. R. Logambigai, Department of Mathematics, CEG gave a very good description of Fuzzy Reasoning, Fuzzy systems, different membership functions, Fuzzy Inference Systems and explained about how to apply fuzzy logic in a research work titled “Fuzzy Logic based unequal clustering for Wireless Sensor Networks”. This gave an idea of how to apply fuzzy logic to perform research investigations.

Ms. M. Selvi, Department of IST, CEG, explained about Knowledge Inference using Bayesian Theory, Bayesian Network and Dempster-Shafer theory.

Dr. Swaminathan, Associate Professor, DIST, CEG gave a talk on Expert Systems using IF..THEN rules. Sir explained about Conflict Resolution when more than one rule is fired from Knowledge Base. Sir gave research directions such as different tools available for building a production system.

Dr. P. Anandhakumar, Professor and Head of Computer Technology, MIT, briefed about Principles of Neural Networks and his research scholar gave a demonstration on training a classifier model using Neural Network in MTLAB. Finally Sir mentioned about books to be referred for acquiring further knowledge on Neural Networks.

All the sessions were very informative and provided a lot of ideas on undertaking further research in the area of AI and related fields.



Ms. Y. V. Lokeswari
AP/CSE

INVITED TALKS

Dr. K. Vallidevi, Asso. Prof./ CSE was invited to deliver a guest lecture on "Service Orientation principles and its Research Issues" at Anna University, Chennai, on 3rd December, 2016. The lecture was delivered as a part of Anna University sponsored one week FDTP on "Service Oriented Architecture".



Mr.H.Shahul Hamead, AP./CSE delivered an invited talk on "Green Communication Systems" at IEEE Workshop titled "Building a Smarter and Safer India" at the Nokia Corporate Office, Manyata Tech Park, Bangalore.



Paper Presentation At Gandhinagar and Pune

The SSN funded project titled "*Multiobjective optimization techniques to improve the automation of test data generation in SBST*" resulted in two papers being presented at Gandhinagar and Pune. The first paper titled "*Search Based Test Data Generation: A Multi Objective Approach using MOPSO Evolutionary Algorithm*", was authored by Pooja G, Mohanasundari R and Chamundeswari A. It was presented at the ACM Compute Conference, Oct 2016, which was held at Dhirubhai Ambani - Institute of Information and Communication Technology (DA -IICT), Gandhi Nagar, Gujarat. The second paper titled "*Weighted Particle Swarm Optimization Algorithm for Test Data Generation*" was presented at IEEE International conferences CAST, Dec 2016 held at College of Engineering, Pune. This paper was authored by Pooja G, Mohanasundari R, Anand Kumar M, Sayooj P, Jayashri M and Chamundeswari A.

In addition to this, we collaborated with an industry, to present a paper titled "*Global Software Development: A Design to Measure Risk of Global Practitioners*", at IEEE International conferences CAST 2016, College of Engineering Pune. This joint work was authored by Chamundeswari A and Baskaran Kaliamourthy.

Overall, the experience of travelling to various locations and presenting several papers, was overwhelming and phenomenal.

Dr.A.Chamundeswari
Prof./CSE



PAPER PRESENTATION

AUTOMATED USER INTERFACE HARMONIZATION IN A MULTI-SOURCE BIG DATA STREAMING SCENARIO

A paper titled AUTOMATED USER INTERFACE HARMONIZATION IN A MULTI-SOURCE BIG DATA STREAMING SCENARIO authored by T. Shakthipriyan and Dr. R. Kanchana has been accepted and presented during Fifth International Conference on Recent Trends in Information Processing & Computing -IPC 2016 held in Bangalore. The paper will be published by the Narosa Publishing House. The conference is organised by the IDES and ACEECom.



Sanctioned Faculty Internal Funded Projects 2016 – 2017

1. Title: "Prototyping Green Networking Model"

Project Incharge: Mr.H.Shahul Hamead, AP/CSE

Co-Project Incharge:

- Dr.T.T.Mirnalinee, Prof/CSE
- Dr.S.Sheerazuddin, Asso.Prof/CSE
- Mr.K.R.Sarath Chandran, AP/CSE

Duration: 3 years
Sanctioned amount:
Rs. 5.10 lakhs



Mr. H. Shahul Hamead



Dr. T. T. Mirnalinee



Dr. S. Sheerazuddin

2. Title: "Energy Aware Multimedia Processing in Handheld Devices through Real Time Hardware Reconfiguration"

Project Incharge: Mr. K. R. Sarath Chandran, AP/CSE

Co-Project Incharge:

- Dr. Premanand V. Chandramani, Professor/ECE

Duration: 3 years
Sanctioned amount:
Rs. 4.38 lakhs



Mr. K. R. Sarath Chandran



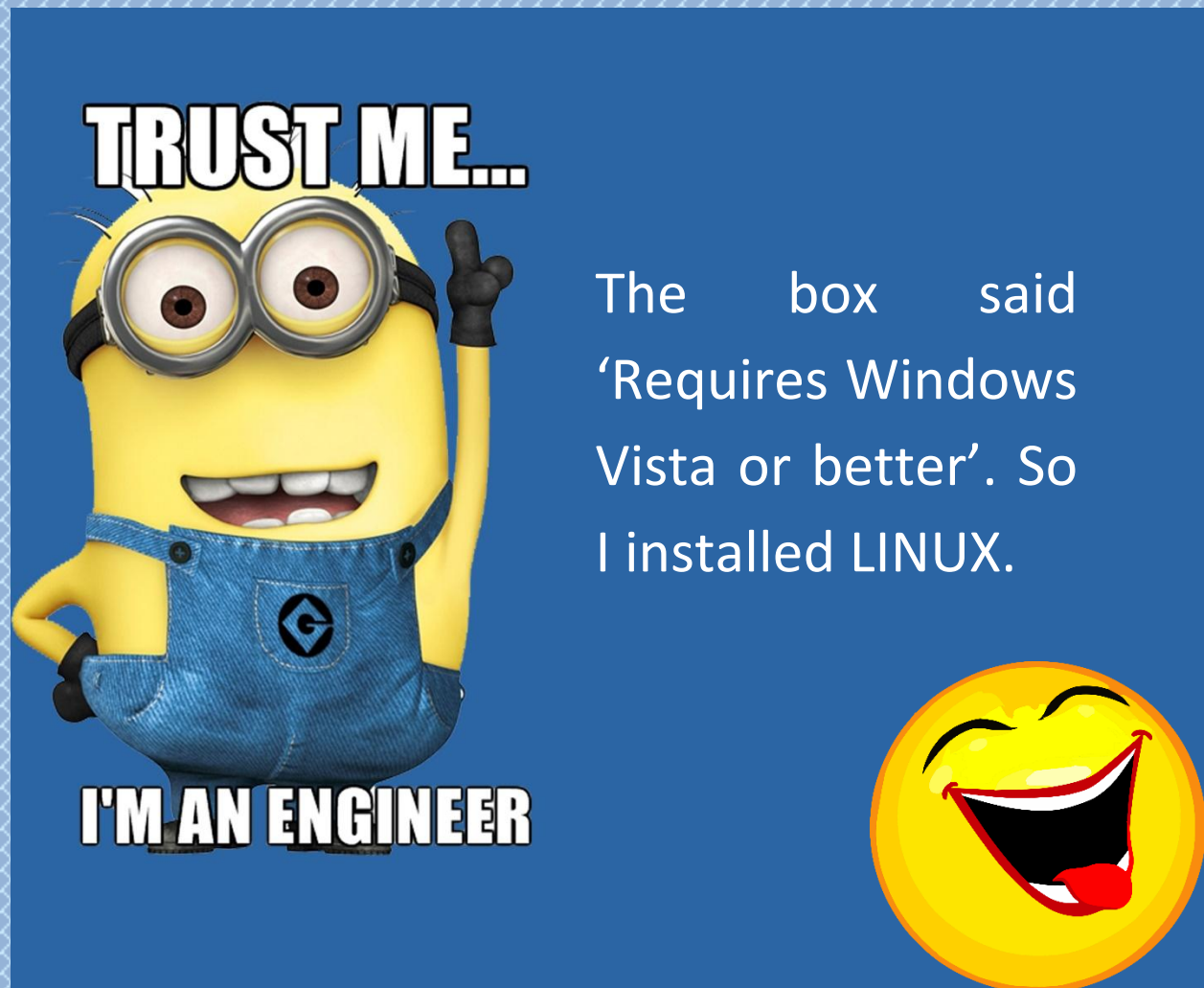
Dr. Premanand Chandramani

Sanctioned Internal Funded Student Project : 2016 - 2017

S.No.	Principal Investigator/ Co-Investigator	Year	Title of the project	Duration	Amount (in Rupees)
1.	Dr. Chitra Babu, Mr. H. Shahul Hamead [Ramya Priyadarshini, Satheesh P, Simran Modi	III	Kernel Optimization on Raspberry Pi 3	7 Months	10000
2.	Dr. B. Bharathi Dr. P. Mirunalini [Skanda Suresh, Nirupan Ananthamurugan, Shreyas Gopal]	II	Multi-Level Smart Parking System	7 Months	15000
3.	Dr. D. Thenmozhi [S. Gajesh, Daniel Jeswin Nallathambi, Arul Thileeban]	II	The Robotic Arm Manipulation (TRAM)	1 Year	18000
4.	Ms. B. Prabavathy, Dr. D. Thenmozhi, [C.T.Muthu Annamalai, C. Manish Chandra, N. Nachiappan	III	A Multilevel Secure Banking Application for Visually Impaired (MLSBVI)	1 Year	18000
5.	Ms. S. Angel Deborah Mr. K.R. Sarath Chandran Dr. P. Mirunalini [R. Vivek Narayanan, S. Venkatesh, S. Aakash]	II	High Speed Package Delivery BOT using Arduino, GSM Communication and GPS Interfacing	6 Months	15000
6.	Ms. S. Angel Deborah, Mr. K.R. Sarath Chandran [V.Shanmuga Velayutham, S. Shailesh, B.Skandharuban]	III	Travel Guide Application using Augmented Reality	9 Months	6000

7.	Ms. S. Angel Deborah, Ms. S. Rajalakshmi [S.N. Sivagami, B. Sounderyan, R. Sricharan, V. Sreenidhi, K.R.Uttam Raj]	III	AIR Quality Detection and Intelligent Route Suggestion using IoT and Data Analytics	1 Year	24000
8.	Mr. K.R. Sarath Chandran [S. Kaushik Narayanan, K. Saket Ram]	III	Drowsy Driver Detection with Alert System	10 Months	12000
9.	Dr. R.S. Milton, Ms. S. Angel Deborah, Ms. S. Rajalakshmi, Ms. M. Saritha [G.B. Krishna Priya, M. Vrithika, S. Thirumla Devi]	III	RFID Based Traffic Violation detection and Traffic Flow Prediction System (TVDTPS)	8 Months	18000
10.	Dr. D. Thenmozhi, Ms. B. Prabavathy [Nithish B, Sidharth Divi, Tarun R K]	II	Smart Metro Water Transportation	7 Months	10000
11.	Ms. S. Angel Deborah Mr. K.R. Sarath Chandran [A. Gautham, J. Adithya, R. Ramya, Rhea Marian]	III	Automated Appliances for Energy Conservation by Reducing Vampire Energy	7 Months	22000
12.	Ms. A. Beulah, Ms. S. Rajalakshmi, Ms. S. Angel Deborah [Rithwin Siva, Nishanth Mathew, R. Nidhi Bhandari, Varsha Bhargavi]	III & II	Braille Interpretation Pad	7 Months	22000

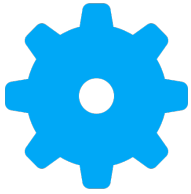
13.	Dr. V.S. Felix Enigo [S. Mohan Sha, S. Nikhil, K. R. Nitin, S. Aravind]	IV & III	Smart Mirror : To Maximize Productivity and Time Management	1 Year	22000
14.	Ms. S.V. Jansirani Ms. R. Priyadarshini [S. Gowtham, U. Jagan Kumar, U. Karthik]	III	Wild Animal Intrusion Detection from Forest into Residential Area using Sensor Platform	7 Months	25000



University Rank Holders

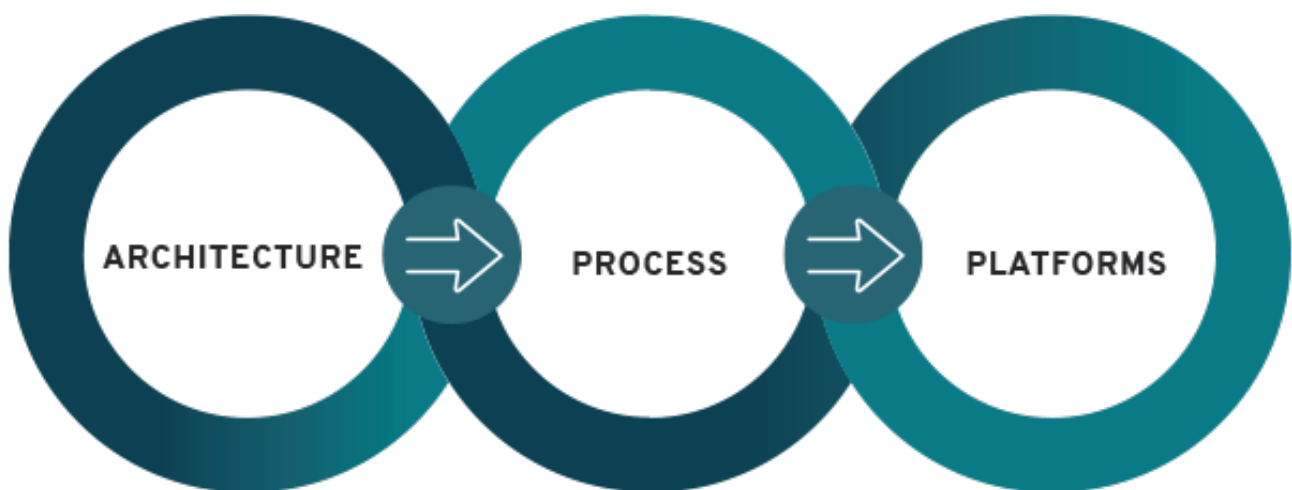
S.No	Name	Rank	CGPA
B.E. CSE			
1.	Sanjana Sahayaraj	1	9.31
2.	Sruthi V	16	9.00
3.	Jayashree S	18	8.98
4.	Sai Sravanthi S	23	8.94
5.	Mohana Priya K	24	8.92
6.	Divya Brindha R	29	8.87
7.	Siddharth G	35	8.81
8.	Nivetha T	38	8.78
9.	Naveen H	40	8.76
10.	Vidhyalakshmi S	43	8.73
11.	Vishal Ramasamy C V	44	8.72
12.	Raghul Asokan	48	8.68
13.	Sri Ranjitha Raghuraman	48	8.68
14.	Srinivas Bharathwaj	48	8.68
M.E. CSE			
1.	Sasikumar V	24	8.69
2.	Sowmiya N	29	8.63
3.	Malarvizhi N P	42	8.45
4.	Abirami M	48	8.37
5.	Sowntheriya G	50	8.35

Congratulations!
Congratulations!



NPTEL IMAD Course - My Experience

Online courses are flooding the internet these days and students are spoiled for choices to choose which one to enrol themselves into. This was never the case a decade ago. Students had to rely completely on their professors, college libraries and private institutes to learn something new apart from their curriculum. But now you have online courses for Coding, Management, Marketing, Art, Electronics, Theoretical CS: you name it and there is a professional course from top notch universities around the world which are offering them for free. You just need to have the passion to learn and patience to absorb the content. Add a little bit of self motivation into the mix, now you have a mind set where only sky is the limit for your potential to learn. You can add a lot of skills and knowledge to your learning armour in quick time.



Even though I had taken numerous online courses before (but always dropped out in the second week) this was the first time I seriously pushed myself to genuinely learn and complete an online course. I usually learn from sites like Coursera. But this time I wanted to complete a course offered by our very own IITs through the NPTEL platform. So I enrolled myself in two courses: a course on Python and another one on Application development offered by IIT Madras called IMAD - Introduction to Modern Application Development (Heavily advertised by NPTEL and Hasura). I missed my registration date for exams for the python course and soon lost motivation to complete the course. So I became even more determined to complete the application development course. Also I was really liking the field of multi-platform application development and so I was naturally interested in doing the assignments that were posted for this course. I didn't miss the registration deadline for the exam this time and so I had the opportunity for the first time to successfully complete an online course in my otherwise unfruitful online learning journey till then.

The course contents were really good and they emphasised the industry standard and best practices for application development. Even though the course was just 5 weeks long, I had learnt so much which I otherwise wouldn't have in the same period. I won't say there weren't any issues, (last week contents were posted in the last minute and there was a lot of confusion about the exam portions) but they are understandable because this was the first time they were offering this course .It will get better and better as they offer new sessions.

The day of exam arrived and as usual I was consuming a lot of course content in the last minute (like the university exams but with a far higher understanding of the content), and reached the exam centre an hour before the scheduled start. I expected the exam to be moderately challenging but to my surprise it was very easy. I knew I would get a good score but I never expected I would be one among the toppers. It was a sweet reward for a month long dedication of time and effort.



2015



2016

DEVELOPER ACTIVITY GROWTH

76% of app builders consider developing apps part of their day job, up from 68% in 2015.

So for those reading this article till the end I would like to say that you already have the patience (to have read my article till here)and the eagerness to learn, (otherwise you wouldn't have read this article) so just enrol yourself in an online course and immerse yourself in the pleasure of learning at your will and the endless possibilities that come with it.

Muthu Annamalai CT,
3rd Year, CSE - A.

ACM International Collegiate Programming Contest (ICPC), 2016

The ACM International Collegiate Programming Contest (ICPC) is a multi-tier, team-based, programming competition operating under the auspices of ACM and headquartered at Baylor University. The contest involves a global network of universities hosting regional competitions that advance teams to the ACM-ICPC World Finals. The India-Final contest-2016 was jointly organized by National Institute of Technical Teachers' Training and Research Kolkata (NITTTR, Kolkata), ABV-Indian Institute of Information Technology & Management, Gwalior (ABV-IIITM Gwalior) and JIS University (Under the aegis of JIS Group), Kolkata and was held at GNIT Kolkata and ABV IIITM Gwalior, India.

Prashant Mahesh, Keshav T and Roopeshwar D of III CSE attended 2 regional contests initially and then got selected to attend the India finals. Their team was ranked fourth at the ACM Chennai ICPC (Held at Hindustan University). In the India finals, held at IIITM Gwalior – their team was ranked 18th.



Prashant, Keshav and Roopeshwar (III CSE)

SSN CODING CLUB

The SSN Coding Club was started in August 2016 to focus on improving the competitive programming culture in our college. The club meets went on for 6 weeks, having a session per week on a specific set of topics. The topics included Introduction to online judges, C++, STL, Prefix Sums, Number Theory, Binary Search, Dynamic Programming, Graphs and Trees. There was an average turnout of 60 – 70 students each class, the majority being 2nd Year CSE and IT students. The club also raised awareness about major competitions like ICPC and conducted contests on Codeforces, the day following each of the sessions. The intended activities for this semester are: to include 1st Years and give them an introduction to competitive programming as well as helping 2nd Years learn and become better in more advanced topics. There is also a plan to include more specific areas like Data Science, Interview Preparation etc. Prashant, Keshav and Roopeshwar of III CSE organize the events of SSN Coding Club.

Hats Off! Alumni !

N. Aravind Ram who graduated from our department in 2014, completed his M.S. at University of Southern California, and has joined as Junior Data Scientist and Data Engineer at Scry Analytics, San Jose, USA from January 2017.



Arvind Ram of 2013 batch, who worked in Thoughtworks for close to 2 years, did his M.S in Stony brook University, New York, and is going to join Google, USA as Software Engineer shortly.

P.G. Seshakumar, who graduated in 2012, worked in Thoughtworks for 2 years, completed his M.S. at Arizona State University, has been working in Facebook, USA as Data Engineer since June 2016.



Abhishek Khataria, who graduated in 2014, completed his M.S at Rutgers University, and is working as Software Engineer at Square, San Francisco, USA, since July 2016.

My First Experience Abroad

As Fall passes and winter sets in, it's time to write about all the events of the Fall quarter. I joined UCSB on September 22nd 2016. Since then, I've had experiences that made me learn a lot. I've learnt about how to have a professional attitude towards any course project. I've learnt how to manage time and also to take time off and enjoy life despite deadlines and pressures. Most importantly, I'm learning to cook. Now, let's start with the experiences.

To anyone who is planning to pursue higher studies in the US, unless you are going to a place which has around 80 percent of the student population as international students, you are definitely in for a culture shock (no matter how many HBO series and Hollywood movies you've watched). Having said that, Americans are really nice people. Once you take your time to get to know them, it won't be shocking anymore. I do have one funny incident to narrate though. Every time, I walk across an American friend, the question is the same – "How's it going?". I was sincerely answering it, until a guy in one of my classes told me, "Welcome to America. We ask, but we don't care!". So "how's it going?" is basically a "hi" and they actually don't expect anything more than an acknowledgement of their question in the form of a smile. Same thing goes for "Let's have lunch sometime". They're just trying to be polite. No lunch plans for real.

My university and in fact the whole city has a bicycling culture. People bicycle everywhere, whether it's to the college or to the movie or to grocery shopping. They have dedicated bicycle lanes in almost all the places. One strange thing is that, they call cycle as 'bike' and bike as 'motorcycle'. Anyway, it's not as strange as 'soccer' and 'football'. And I have a cruiser bike (cycle) too that I use for going to my classes, grocery shopping and once to go to the movie theatre. I am TAing for a lab (python programming) that is from 8AM to 11AM on Wednesdays and it gives an amazing feel to bike to the lab through the chill air on those mornings. Of all my course work, paper reading and TAing, I would say TAing is the best. It gives me so much satisfaction to make a concept clear to a group of people and to see them put that knowledge into a working program.



Grad students are almost always busy. Even if you have friends, each one of your friends will take turns to drown in assignments, midterms and project deadlines. So, outing plans hardly workout. However, if you're part of clubs and associations, there will be grand events that most people attend and you get to hang out with your buddies and also make new friends. The Indian Association here has conducted Garba Night and Diwali so far and both of them were so much fun filled with dancing, chatting and Indian food. Another club called Strictly Social organizes Salsa Nights where I've had the chance to meet many interesting people.

My time here has been a mix of things like happiness from teaching, working with project mates who have lots of industry experience, homesickness, making a good presentation in front of a lab filled with experts, shaking a leg at Salsa night and Garba night, being a bad cook at times and good cook at others, being independent and finally learning and evolving. I look forward to my coming years here and hope this process continues.



S.Sanjana
2012-2016
PhD student - (UCSB)
&
University First Rank Holder



TRIBUTE '2017

DEPARTMENT OF CSE

FACULTY – ALUMNI MEET – A GLIMPSE

“ Every parting is a form of death, as every reunion is a type of heaven. “
Tryon Edwards



Alumni : L - R : Karmegam, Manoj Kumar, Nekshan Kotwal, Gowtham, Harishankar, Kaviarasu, Pragadeeshwaran, Priyanka, Prabu, Rathish, Sasikumar S, Shanmugaraj, Sriram, Vinodhini, Sasikumar V, Gunasingh.

Tribute Overview:

Total No. of Alumni attended: 425

Department of CSE: 86

AN ALUMNUS ' EXPERIENCE!

Nishanth Sivakumar completed his BE (CSE) from SSNCE in 2013. Presently, he is an MS student in Iowa State University. He is expected to graduate in June 2017.

In this talk, Nishanth gave an overview of education and employment opportunities in United States, especially in the light of election of Donald Trump as President of United States.

Nishanth started with the nitty gritty of MS application process focussing on the expenses, in particular the hidden ones which are not covered by the education loan. Thereafter, he took the students through the stage of zeroing in on a course and University. He talked about his own rationale of choosing Iowa State University, which is cost-efficient being in the Mid-west. He impressed upon the students that they should choose a course which falls under the category of STEM. This will give them an edge over others while applying for work Visa post their MS.

In the next stage, he talked about internship and placement. He mentioned that he got an internship in Amazon owing to the Hadoop-based final year project which he did with HoD Ma'm. Regarding placements, he pointed out that Universities on the coast, especially California, have a headstart due to their proximity to Silicon valley. Also, he mentioned that participating and excelling in Hackathons and similar events are a sure shot gateway to internships and good placements.

At the end, he talked about emerging employment scenario, which is getting progressively uncertain due to the evolving political climate in US.

The talk was extremely informative and engaging. The students, from Third year Sections A & B, found it useful and asked lot of questions, each of which Nishanth answered patiently.

**Dr.S.Sheerazuddin,
Asso.Prof./CSE**



"I am the type of guy that has always been the same all of my life. My classmates at our class reunion always say the same thing. They could not believe that, being a world artist, I still seem like I was when we were at school together."

~Percy Sledge

Student Internships



IV Year

Akshay R	Amazon
Dhivya G	
Mohamed Shakeel Ibrahim S	
Senthil B	
Sivashanmugam U	
Sockalingam Rm S	
Priya R	
Vidya N	
Tauseef Ahmed	
Vijay V	Artifacia Pvt. Ltd.
Vignesh G	Ventuno

III Year

Aarthe Jayaprakash	Ting
Akshaya Natarajan	Enchanter
Akash Vinay Aditya R	Logic Information System
Keerthana K	
Lohita S	
Nikhilesh M	
Sricharan R	HealthifyMe Wellness Products

II Year

Aarif Noordeen	Inforill Technologies
Himanshu Singhal	
J Vigneshwara Prakash	
Arul Thileeaban S	Cyber Security Pvt Ltd

Placement Details

As of January, 2017

S.No	Name	Company	Course
1.	Subin Sahayam M	Photon, Chennai	M.E. (CSE)
2.	Subadharshini B		
3.	Rakesh Kumar S R		M.E. (SE)
4.	Alia Tabassum		B.E
5.	Deepak Anandhan		
6.	Nanditha V		
7.	Renuka V		
8.	Hariharasubramaian C	Zoho	B.E
9.	Gowtham R	Zoho Internship	B.E
10.	Dharmadurai D		
11.	Dhivya M		M.E.(CSE)
12.	Bhagyalakshmi	BA Continuum	B.E
13.	Karunya K		

The World Soon to Be!



Yardah- Wrath of Winds and Rains

As I stood gazing out of the window on the gloomy Monday, everything that had been constructed by man fell apart. It was like watching a Hollywood movie, or even better the exact reaction was similar to the one we give after watching the exhilarating animations and graphics and its effects of a Shankar film, struck by awe. The winds blew ferociously howling their way, into the neighborhood, first swaying trees, then bending them, finally uprooting them all at once. Don't get me started about the rains. The floods had already made me hate rains so much and everything became nostalgic for all the wrong reasons. "Wrath of God" is a phrase used by many, and for once we witnessed what it really meant. With roads blocked or damaged, with most of the electric poles being laid to rest forcibly in a haphazard manner, life became difficult. It made people so observant like as if they were in war, always searching for places where dairy products were available. Shelter is when you have a roof above your head, some of them had walls around, but nothing to cover themselves on the top. It was one hell of a week and restoring normalcy was a daunting task. What was to be learnt from this extremely extravagant and excessive damage was that, reconstructing roads or the electric poles, the quality of it had to improve to avoid the extent of damage. Losing trees is a sad thing as it takes years for a plant to grow into a tree and what little we can do for our part is to plant as many as possible to even think of coming close to what we have lost.



R. Vijayaraghavan,
CSE – B, IV



When Vardah Struck SSN



Photographs by K.Saktheeswaran,
CSE – B, IV

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Student Team

IV YEAR

Sudha M R
Sri Raghav K
Akshay Ravichandran

III YEAR

Selvendran K
Thirumla Devi

II YEAR

Gajesh S
Siddharth Divi
Varsha D

Shreyas Gopal
Nidhi B
Vanshika S

