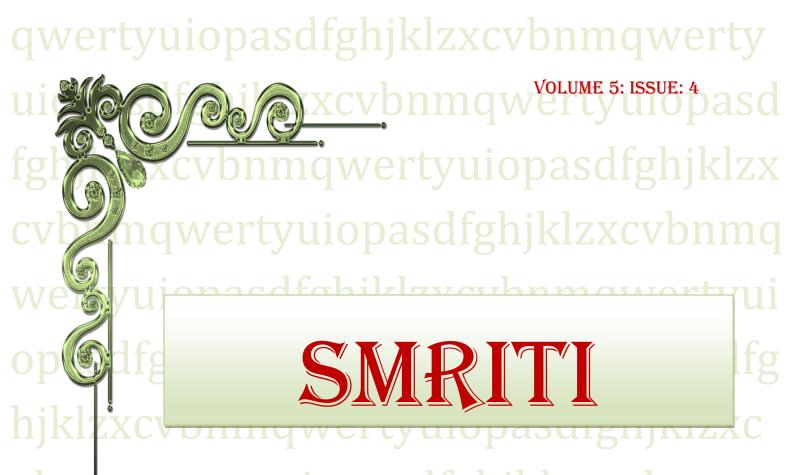
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COMPUTER SCIENCE &

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DEPARTMENT

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Upcoming Events!

- (i) AICWiC 2017 [http://www.aicwic2017.com/]
- (ii) ACM " 50 years Turing Award Talk Series" on 17-08-2017 at IIT, Madras. [https://chennai.hosting.acm.org/chennai-acm/]
- (iii) Chennai International Youth Fest [www.ciyf.org]

HOD'S DESK



As we end an action-filled academic year and enter into a new one with a lot of renewed hope and anticipation, it is a fitting start that our college received an A+ grade from NAAC. My appreciations to Bhuvana and Priya for spearheading the efforts at the department level. I commend Prasad, Suresh, Bala and their team for organizing the International Conference during June. The talks on deep learning were very well-received. I congratulate Praba on successfully defending her doctoral thesis and receiving appreciations from the viva voce panel members.

It was wonderful to see that a large number of students have interned at prestigious places such as, Google USA, Amazon, TCS Innovation Labs, Tech Mahindra, Wabco and IIT Madras.

Congratulations to Satheesh and Vrithika who have bagged the coveted placements in Amazon. It is very heart-warming that 17 of our students have been placed in various companies with attractive pay packages, in just 3 weeks into the placement season. I commend all of them for this significant achievement.

Our student team mentored by Rajalakshmi came third in the Cognizant CTO Challenge in which teams from all over India competed. Congratulations to the students, Varshini and Balavenni as well as the faculty member Rajalakshmi who has pulled it off for the third time.

It was highly satisfying for me to see our 2nd semester students Athreya and Kalaivani emerging in the top 5% in the NPTEL Python course. My compliments to both of them and I also appreciate Saritha for mentoring and actively encouraging them.

The embedded workshop that was conducted by our alumni Thiagesh and Seshan was received very enthusiastically by our second year students. I thank Seshan and Thiagesh for their continued commitment. We are very proud to see the upward career trajectories of several of our alumni.

Thanks to the efforts of Kanchana, Bhuvana and Lakshmipriya, we all had a very refreshing get-together with a potluck lunch contributed by all the faculty and staff of our department.

With our revitalized energies, let us aim for greater heights in the coming academic term.

Dr.Chitra Babu HoD/CSE

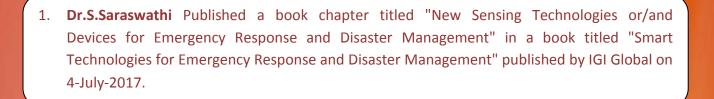


FACULTY PUBLICATIONS

- Prabavathy Balasundaram & Chitra Babu, 'Concurrency control algorithms for deduplicated cloud storage', Turkish Journal of Electrical Engineering and Computer Sciences, (SCI Indexed IF:0.578), In Press.
- Ms.K.Madheswari, Dr.N. Venkateswaran, , "Swarm intelligent based contrast enhancement algorithm with improved visual perception for color images", In Multimedia Tools and Applications, Springer, (SCI Indexed, IF=1.530), pp.1-24, (First Online)
- B. Bharathi, "Speaker-specific-text based speaker verification system using spectral and phase based features", International Journal of Speech Technology, Springer Science+Business Media, 10.1007/s10772-017-9416-2, May 2017.
- Rajeswari Sujana S., Sudar Abisheck S., Tauseef Ahmed A. and K. R. Sarath Chandran, "Real Time Object Identification Using Deep Convolutional Neural Networks" in the Proceedings of the 6th IEEE International Conference on Communication and Signal Processing (ICCSP' 17), April 6-8, 2017.
- 5. K. Sri Raghav, N.Vidya, G.J. Varshitha, Sriharsha Jayanthi, and K.R.Sarath Chandran, "Sub-system Model for Data Collection and Distributed Sensing Search technique for Internet of Things Applications" in the Proceedings of the 3rd IEEE International Conference on Sensing, Signal Processing & Security, May 4 & 5, 2017 Chennai.
- 6. Samundeeswary K, Vallidevi Krishnamurthy, "Comparative Study of Recommender Systems Built Using Various Methods of Collaborative Filtering Algorithm", in the Proceedings of the IEEE International Conference on Computational Intelligence in Data Science (ICCIDS - 2017). The paper will be published in IEEE Digital explorer.
- D. Thenmozhi, Chandrabose Aravindan, "RCE-OIE: Open Information Extraction using A Rule-based Clause Extraction Engine for Semantic Applications" in Procs. of the International conference on Advanced Computing, Networking and Informatics (ICACNI-2017) held at National Institute of Technology (NIT), Goa during 1-3 June. 2017.

Conferences Attended

- Dr.S.M.Jaisakthi, Dr. P. Mirunalini, Rutuja Jadhav and Vatsala participated in the LifeCLEF task conducted as a part of International conference CLEF 2017 and published the working notes titled "Automatic Whale Matching System using Feature Descriptor" in CEUR-Workshop Proceedings on 14-July-
- Dr.P.Mirunalini, Dr.C.Aravindan, Vignesh Gokul and Dr.S.M.Jaisakthi participated in the task conducted by International symposium on Biomedical Imaging 2017 and published the working notes titled "Deep Learning for Skin Lesion", in arXiv preprint arXiv:1703.04364,2017 on 3-July-2017.
- 3. Dr.S.M.Jaisakthi, Dr.C.Aravindan and Dr.P.Mirunalini participated in the task conducted by International symposium on Biomedical Imaging 2017 and published the working notes titled, "Automatic Skin Lesion Segmentation using Semi-supervised Learning Technique", in arXiv preprint arXiv:1703.04301, 2017 on 4-July-2017.



Book Chapters

Awards Received

Dr. B. Bharathi, received the Outstanding Faculty In Engineering Award, 2017, by the Venus International Foundation on 8- July-2017.





- 1. Dr. J.Bhuvana, Asso. Prof./CSE, reviewed two papers on, 'A Machine Learning Approach to Explore Cervical Myelopathic Location from Somato Sensory' and ' Synchronous Discretization of Continuous Attributes Based on Optimization Algorithm' for The 3rd International Conference on Fuzzy Systems and Data Mining (FSDM 2017).
- 2. **Ms.S.V.Jansi Rani, Asst.Prof./CSE,** reviewed a paper titled "Mitigating TCP Incast Issue in Cloud Data Centres using Software-Defined Networking (SDN): A Survey", KSII Transactions on Internet and Information Systems, ISSN: 1976-7277.
- 3. Dr. T.T. Mirnalinee, Prof./CSE, reviewed a paper titled "Landmine Discrimination using spectral features from Ground Penetrating Radar data" for International Conference on Radar systems (RADAR 2017), Belfast, UK. Dr. T. T. Mirnalinee, also reviewed a paper titled "Learning Multi-Scale Deep Features for High-Resolution Satellite Image Scene Classification", for IEEE Transactions on Geoscience and Remote sensing on 20-July-2017.
- 4. Dr. T. T. Mirnalinee, Prof./CSE, reviewed a paper titled "Learning Multi-Scale Deep Features for High-Resolution Satellite Image Scene Classification" for IEEE transactions on Geoscience and remote sensing.
- 5. **Dr.J.Suresh**, **Asso.Prof./CSE**, reviewed book chapters titled, "Expansion in the domain of knowledge management by analyzing and utilizing its existence for improving the functionalities of E-governance" and "Probabilistic Graphical Models for Medical Image Mining Challenges of New Generation", for the book "Knowledge Computing and Applications", published by Springer.

6. **Ms.K.Madheswari, Asst.Prof./CSE,** reviewed a paper titled, "Visualization-Oriented Fusion for Hyperspectral Images Using Self-Adaptive Learning Particle Swarm Optimizer" for Pattern journal(Springer).

7. Dr.Shomona Gracia Jacob, Asso.Prof./CSE, reviewed the following papers for The Fifth and Symposium Women in Computing Informatics International on (WCI-2017)) (i) A Proactive intelligent model for Identification of reduced factors affecting Severity of Coronary Disease and Artery its prediction (ii) IoT - Based Patient Monitoring and Diagnostic Prediction Tool using Ensemble Classifier (iii) Detecting Cyber-Bullying Comments in Social Media using Machine Learning Techniques (iv)An IoT-based E-Parking System for Smart Cities

8. **Dr.Shomona Gracia Jacob, Asso.Prof./CSE,** reviewed a paper titled "A Machine Learning Approach Towards Intraocular Pressure Relationship with Frontal Eye Image Features" for the Elsevier journal 'Knowledge-Based Systems'(SCI Impact factor-4.627).

9. **Dr.P.Mirunalini** has reviewed the paper titled "Comparative Analysis of Image Classification Techniques on the Basis of Shape Feature Extraction using Fourier Descriptors" for IEEE Region 10 Conference (TENCON) 2017.

INDUSTRIAL CONSULTANCY

- Dr. Chitra Babu, Dr. T. T. Mirnalinee, Dr. P. Mirunalini, Mrs. R. Priyadhardhini, Mr. Avinash, Mr. Keshav had a discussion with Dr. Rajasekar Manoharan regarding the progress of the consultancy project under Vimana Technologies on May 11, 2017.
- Dr. Chitra Babu, Dr. T. T. Mirnalinee, Dr. P. Mirunalini. Mrs. R. Priyadharshini along with Mr. Avinash and Mr. Keshav had a discussion for the project "Photogrammetry" with the team of Vimana technonologies, Bangalore through Skype on May 27, 2017.
- 3. Dr. V.S. Felix Enigo and Dr. D. Thenmozhi had project discussion with Mr. Vishnu Gaurav Selvaraj, Caterpillar.





EXTERNAL INTERACTION

1. **Dr. Chitra Babu**, as Vice-Chair of ACM India Chennai Professional Chapter, organized an expert lecture on "Security and Privacy in Cloud" by Dr. Sriram Rajamani, Managing Director, Microsoft Research India, at CMI.

2. **Dr. R. Kanchana** was invited as external examiner to evaluate MTech Projects of IIIT, Tiruchirappalli at NIT, Tiruchirappalli.

3. **Dr. R. Kanchana** acted as a question paper setter for the entrance examination of faculty recruitment in IIIT, Tiruchirappalli.

4. Dr.T.T.Mirnalinee, Dr.Bhuvana, Dr.Bharathi, Mr.Shahul Hamead, attended an Awareness Program on Intellectual Property Rights at SSN College of Engineering.

EXTERNAL RECOGNITION

- 1. **Dr. Chitra Babu** was invited to participate in the valedictory function of the International Olympiad in Informatics (IoI) Training camp that was held at CMI.
- 2. Dr.Chitra Babu has become a Senior Member of ACM. She is also the Secretary of the ACM-W Chennai Professional Chapter.
- Dr. G. Raghuraman acted as Expert committee member for the Research review meeting to provide suggestions to the research scholars during their review presentations at Sathyabama University, Jeppiaar Nagar, Rajiv Gandhi salai, Chennai - 6000119 on 1-July-2017.
- 4. **Dr. T. T. Mirnalinee** served as an academic auditor at Department of Information Science and Technology, CEG. Anna University on 7-July-2017.

HONORS RECEIVED

Google Translate Community acknowledged **Mr. B. Senthil Kumar**, **AP/CSE**, for being one of top 5% contributor to Google Translate in English and Tamil on 18-July-2017.



Mr.B.Senthil Kumar

IntellectDesign – External Collaboration

To crystallize the idea of exploring research based partnership with IntellectDesign, a team of faculties from the department of CSE, SSNCE, visited IntellectDesign on 26th June, 2017. Mr. Rajesh Kuppuswamy, Head Digital Banking, Mrs. Padmani, Head product Digital, along with their technical team elaborated on the functionality of DigitalFace. CSE faculty collaborated with IntellectDesign team in order to solve Machine learning related problems that arise while designing a DigitalFace system. The process of signing a formal MoU with IntellectDesign was initiated.



L-R: Dr.J.Suresh, Dr.R.S.Milton, Ms.Padmani Koteeswara - Vice President- Product Head Digital Channels Retail, Dr.Chitra Babu, Dr.T.T.Mirnalinee, Dr.D.Thenmozhi, Ms.S.Rajalakshmi, Dr.S.Kavitha, Mr.K.R.Sarath Chandran

External Funding – Projects Submitted

SERB – Early Career Research Scheme

- Dr. J. Bhuvana, Asso.Prof./CSE and Dr. C. Aravindan, Prof./CSE have submitted a project proposal titled, "Design of scheduling algorithms to solve optimization challenges in application and virtualization layers of cloud architecture".
- 2. Dr. B. Bharathi, Asso.Prof./CSE, submitted a project proposal titled, "Speech enabled multilingual interactive voice repsonse system".



SSN Institutions obtained NAAC accreditation with Grade A+ and CGPA of 3.55(4-point scale)



Prof. Sachin Deshmukh- Dept. of IT & Computer science Dr. Babasaheb Ambedkar University, **Aurangabad, Dr. S. Salivahanan - Principal SSN Institutions, Prof. B. V. Babu -** Vice Chancellor Galgotias University, Dehradun , **Dr. Prasanjeet Kumar -**Principal Mangalmay Institute of Management & Technology, Greater Noida (from Left).



International Conference on Computational Intelligence in Data Science June 2-3, 2017

The International Conference on Computational Intelligence in Data Science was organized by the Department of Computer Science and Engineering, in association with IEEE Madras Section during 2-3 June 2017.



Co-ordinators: Dr.D.Venkata Vara Prasad Dr. J. Suresh Dr.T.T,Mirnalinee Dr.R.S.Milton Mr.V. Balasubramanian Ms.S.V.Jansi Rani



No. of Participants: 100 (Researcher scholars & Professionals from Academia as well as Industry)

Speakers:

- 1. Dr. Sundaram Suresh, Nanyang Technological University, Singapore.
- 2. Dr. Matthew Chua Chin Heng, National University of Singapore, Singapore.
- 3. Mr. Veeraraghavan Narayanaswamy, BigTapp Private Ltd, Singapore.
- 4. Dr. Manish Shrivastava, IIIT Hyderabad.
- 5. Dr. Avinash Sharma, IIIT Hyderabad.

This conference had attracted 190 papers from around the globe. The technical review committee had the challenging task of reviewing the submitted papers and had recommended 72 papers for publication in IEEEXplore and for presentation at the conference.

The workshops addressed topics in the area of Deep Learning for Data Analytics.

After the formal inauguration, the first key note talk was given by Dr. Sundaram Suresh, on "Spiking Neural Networks and Neuromorphic System: Understanding and Modelling the Human Brain". The next session was organized in parallel. One of the parallel sessions was handled by Dr. Avinash Sharma on "Deep Learning in Computer Vision for Image, Video and 3D Shape Analysis". The other parallel session was handled by Dr Manish Srivatsava, on "Convolutional Neural Networks and Sequence Models for Natural Language Processing Tasks".







L-R: Ms.S.V.Jansi Rani, Dr.T.T.Mirnalinee, Mr.V.Balasubramanian, Dr.Chitra Babu, Dr.Matthew Heng, Dr.D.Venkata Vara Prasad, Dr.J.Suresh, Dr.R.S.Milton, Ms.S.Lakshmi Priya

Talks Delivered

- 1. Dr. Chitra Babu, HoD/CSE, delivered a talk on "Programming" in a training workshop conducted at CMI for teachers from Chennai schools which have registered for piloting the new curriculum proposed by CSpathshala(an initiative of ACM India).
- Dr J. Suresh, Asso.Prof./CSE, delivered a talk on "Virtualization & Cloud Computing", in Anna University Sponsored Seven days Faculty Development Program on CS6703:Grid & Cloud Computing, organized by Department of Information Technology, Sairam Institute of Technology.





3. Ms. K. Madheswari, AP/CSE, delivered a talk on Image Enhancement Techniques using MATLAB and Color Models in Anna University Sponsored Seven days Faculty Development Program on IT 6005: Digital Image Processing, organized by ECE Dept,SSNCE.



ALUMNI TALK

Mr.Sasikumar V, alumnus of CSE Department (ME-CSE Batch 2015-2017), was invited to deliver a talk and hands-on session in "The National Seminar on Data Analytics in Health Care" at Erode Sengunthar Engineering College on July 15, 2017. Sasikumar handled sessions spanning the entire day on the following topics:

- (i) The Healthcare Industry
- (ii) The Role of Big Data and Machine Learning in Healthcare.

Mr.V.Sasikumar, Developer, Coda Global

CTS CIO's CHALLENGE 2017

The CTS CIO Challenge is an event being conducted by Cognizant across India every year. This year SSN College of Engineering won the third place among 85 colleges in the finale that was held at Cognizant, MEPZ, Chennai on 28th May 2017.

As a preliminary, a boot camp was organized by Cognizant on the 9th and 10th of January 2017 for the colleges in Chennai. This camp was held at Cognizant Technology Solutions, Siruseri, Chennai.

The first day at the boot camp involved many activities helping the students understand the different principles in software engineering and application development. The introduction was given about the camp by Ms. Priya from Cognizant. Students from all the colleges were split into five groups. The first activity was the "Marshmallow Challenge". For this activity, all the groups were given 20 spaghetti sticks, a yard of thread, tape and a marshmallow. The aim was to build the tallest self-standing structure using these resources with the marshmallow on top. This activity stressed the importance of building a prototype and then extending that to a larger model rather than building the large model first. Following this was the next activity in which one of the member from the team was made to sit in a separate room and the remaining people were told to develop a model with a chart, a balloon, thread, tape and sketches with no writings in such a way that the other team mate who was in a separate room must lift it (the model), see through it and rub it when he sees the model. This stressed the user understandability of a model.

The next day, we students were involved in activities which showed the importance of agile methods in software engineering. To emphasize this there was the next challenge "Play Doh Zoo". Each team was split into three parts – one customer, three designers, and the rest were builders. The customer would give the requirements for his zoo to the designers who would design the zoo and explain it to the builders and leave. The customer, designers and builders are not allowed to talk after that. The time limit for this was 18mins and the builders were given doh, chart, sketches and tape. This was the first iteration. Then there was a security check. In the next two iterations the customers, the designers, the builders sat together and made the improvements which led to a much better model. Finally, there was a presentation and activity on "Elevator Pitching" by Ms. Nithya. Elevator pitching is a way of convincing an investor to invest in an idea in a short period of time by making use of good presentation skills.

A project was given to each of the colleges. In the subsequent months, four rounds of review were conducted. In the first round a basic idea was expected. In the second, 70% implementation had to be done. In the third round, a full working model had to be presented. Final round was the crowd testing round, where people from Cognizant tested the model. Each round was an elimination round. After Testing, on May 15, 2017 we heard that we have been selected as one of the finalist among the top 9 colleges all over the India. The other colleges are Hindustan College of Engineering – Coimbatore, Mepco Schlenk Engineering College – Sivakasi, Lakshmi Narain College of Technology – Bhopal, Sinhgad Group of Institutions – Pune, Lovely Professional University – Gurgaon, Future Institute of Engineering and Management – Kolkata, BIT Mesra – Lalpur & Kolkata Campus. We were very happy and eagerly waiting for the finale.

On 28th May, the finale started with the speech of Rakesh Bharadwaj, Global CIO, Cognizant. Each of the teams were given 13 minutes to present their application - 2 minutes, to explain the problem statement and the innovative solution, 8 minutes, to provide a demo of the application, 3 minutes, to answer the questions posed by the judges. All the students presented well and we had a tough competition. We, the students representing SSN College of Engineering presented a solution for Intent Parser. Based on the natural language text given by the user, the intention of the user should be captured and the respective details should be displayed. The Panel members appreciated our work and said that our problem is still a research problem and it's difficult to get better accuracy. When the results were announced, we got third prize, while BIT Mesta – Kolkata got first prize. We were little disappointed that we could not get back the first prize which our seniors did. Anyway this project work gave us a good experience of working with a company.

We would like to thank Dr. Chitra Babu, the HOD of the CSE department and Ms. S. Rajalakshmi, our mentor for the Cognizant CIOs Challenge and Mr. V. Balasubramanian for their tremendous support. We would also like to thank the Cognizant team for giving us this great experience.



S. Varshini and Balavenni,

2013-2017 Batch

Innocent Expectations!



Ву,	
M.R.Sudha	
Batch [2013-2017]	

National Programme on Technology Enhanced Learning

In this present era of high competition and thirst to gain knowledge, students are always motivated to explore new opportunities and innovate new products that could meet the growing demand in the market. There are various platforms available to the student wherein one could learn and implement one's knowledge. One such platform is online education which provides online courseware in the form of web courses and video lectures. In India, one of the most popular online education is provided by the National Programme on Technology Enhanced Learning (NPTEL) which is a joint initiative by seven IITs, IISc Bangalore and other selected premier institutions which act as Associate Partner. All the course material is free of cost for enthusiastic students and a certification examination could be taken up for a nominal fee. Students use NPTEL not only to prepare for technical jobs and competitive exams but also as a platform for constant learning and updating knowledge for the ever-changing environment and market realities.



Our college has been a local chapter of this initiative for the past two years. Our students enroll in various courses offered in NPTEL. Our department students who are currently in their second year enrolled in 'Programming, Data Structures and Algorithms using Python', offered by Dr. Madhavan Mukund, Professor of Chennai Mathematical Institute, during their second semester and have emerged successfully with commendable performance. Around 50 students audited this course and 10 students took up the certification examination. All through this 8-week course, there was constant testing of concepts via assignments and quizzes.



We feel proud to announce that two of our II year students, **Kalaivani Kumaran and Athreya C**, are in the top 5% all over India with excellent performance. Also, an internship opportunity was provided to them by VuNet Systems. The main reason for any student's success is their mentors and NPTEL recognized **Ms. M. Saritha**, Assistant Professor for her role as mentor and awarded her with a certificate of appreciation. She was constantly engaged in motivating the students to take up different courses and explore the diverse opportunities.





Topper's Note:

At the outset, I would like to thank Saritha Madam for introducing me to this wonderful platform of knowledge. It seemed so impossible to manage curriculum and the course all at once but due to her encouragement, I was successful in completing it. The learning experience was quite rich. Madhavan Mukund sir simplified the full course and explained even the smallest intricacies of the subject. I loved the way the course was delivered. Monotonous lectures may feel boring but this was totally a different experience. Only the key points were covered; thus, encouraging us to learn through experimentation and exploration. Moreover, there were many practical demonstrations of where things could possibly go wrong due to some small mistakes, and hence any absolute beginner could take up this course. The assignments were simple but highly conceptual and it required a great deal of commitment to complete them. After the course was over, there was an online test that tested programming and debugging skills. It was followed by a main exam conducted across India which aimed at testing syntactical knowledge and logical reasoning. On the whole, it was one of the most fruitful learning experiences.

Kalaivani. K

5th International conference on Advanced Computing, Networking and Informatics (ICACNI-2017)



NIT Goa and NIT Rourkela jointly organized an International conference on Advanced Computing, Networking and Informatics (ICACNI-2017) at National Institute of Technology (NIT), Goa during 1-3 June, 2017. Keynote talks were given by Dr. Bimal Kumar Roy from Indian Statistical Institute, Kolkata, and Dr. Manoj Singh Gaur from Malaviya National Institute of Technology, Jaipur on 1st June. On 2nd June, Dr.K.Chandrasekaran from National Institute of Technology, Surathkal gave a talk on Trust aware Cloud (computing) Services.

Dr. Dhiren R. Patel from Veermata Jijabai Technological Institute, Mumbai delivered a keynote talk on 3rd June 2017.

In the conference, several papers were presented by students and researchers from India. Papers were presented in three parallel tracks on all three days. I had presented a paper titled "RCE-OIE: Open Information Extraction using A Rule-based Clause Extraction Engine for Semantic Applications" in the "Data Mining, NLP, Text Mining, Social Media Analysis" track on 3rd June, 2017.

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

"50 Years of Turing Award - Talk"

1976 Turing Award Winners - Michael Rabin & Dana Scott

ACM India- Chennai Professional Chapter had organized a talk on the contributions of 1976 Turing Awardees - Dr. Michael Rabin and Dr. Dana Scott by Prof. R.Ramanujam at the Institute of Mathematical Sciences.

Dr. Rabin considered several search strategies simultaneously and explored the possibility of providing a solution to a given problem. Dr. Rabin obtained his doctorate degree in 1975 and worked on a research problem titled **"Unsolveability of Group Theoretical Problems"**. He introduced Middle Square Method to solve Guards and Spies Puzzle. He worked on Degree of Difficulty of Computing a Function and a partial ordering of Recursive sets in Graph Theory. Rabin along with Miller came up with an efficient **Primality Testing Algorithm**. He introduced Randomized Algorithm for Disjoint Path Problem (DPP) that is symmetric, fair and distributed. He proposed the **Rabin Tree Theorem** which states that **"The monadic second-order theory of the infinite binary tree is decidable."** His career gave importance to both Teaching and Research.



Dr.Michael Rabin



Dr. Dana Scott learnt λ -Calculus of Church and obtained his doctorate degree in 1958. Scott raised many questions while pursing research and asked "What for are the spaces that computable functions live in?" Later Scott devised a theorem which states "The computable functions on a space D are exactly the continuous functions over D", F = [F - > F]. Scott's dream was to make Program Analysis to be as sophisticated as Calculus. Scott contributed towards Recreational Mathematics.

Finally, Dr. Ramanujam concluded the talk with a quote "Learn as much as you can while you are young, otherwise life becomes very busy later".

SECURITY AND PRIVACY IN THE CLOUD

ACM India Chennai Professional Chapter organized an expert lecture by Dr. Sriram Rajamani, Managing Director, Microsoft Research, India on "Security and privacy in the cloud" at Chennai Mathematical Institute, SIPCOT. He elaborated on the various avenues of security breaches in Cloud such as IBM 7094 Multics, Robert Morris virus 1998, Buffer over run, Code red 2001, Inside the windows security push, data deluge the economist, Top 10 biggest data breaches and bing privacy conditions.

He also briefed about the privacy breaches such as propositional logic scope, hive, dremel, boostrap privacy compliance in big data systems, keys in hardware and portion of app Intel SGX, ARM TZ enclave, SHAL, VC3, hadoop, block chain provable security guarantee.

It was an enlightening talk that provided an overview on the various security and privacy issues in cloud.

Ms.S.V.Jansi Rani & Mr.V.Balasubramanian

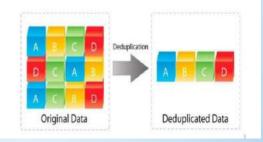




Ph.D Defence

Ms. B. Prabavathy, successfully completed her Ph.D Oral Examination by defending her thesis titled "A Distributed File System for Deduplicated Primary Cloud Storage". She pursued her Ph.D under the guidance of Dr. Chitra Babu, Professor & Head, Department of CSE. Her doctoral committee members were Dr.S.Selvakumar, Professor, Department of CSE, NIT Trichy, Dr. V. Uma Maheswari, Professor, Department of IST, Anna University, Chennai and Dr. D. Janakiram, Professor, CSE, IIT Madras (Former). The Ph.D Viva Voce was convened on 19.07.2017 (Wednesday) in the CSE Seminar hall and was attended by PG students, research scholars and faculty members from various departments. The oral examination committee members were Dr. M.S. Rajasree, Professor & Director, IIIT, Thiruvananthapuram (Indian Examiner) and Dr. Chandrasekar Ramanathan, Associate Professor, IIIT Bangalore (Subject Expert). She was recommended for the award of the Ph.D. degree in the Faculty of Information and Communication Engineering.







Dr. B. Prabavathy

CORNER

BATCH 2012-2016



Aishwarya S will be joining MS program at North Carolina State University while Abishek R will be pursuing the MS course at Arizona State University.



Abishek R





Four alumni Mayanka P, Naren T Kesh, Privanka S and Privanka R of the 2012-2016 batch have obtained internships at Amazon while pursuing their MS at North Carolina State University.

BATCH 2010-2014



Aditya Seshadri, has completed his M.S at North Carolina State University and is working as Senior Software Engineer at Samsung Research America, San Francisco.

Mahati Kumar has completed her M.S at University of California, Los Angeles and is working as Software Engineer at Facebook.





Manasvini Sethuraman has completed her M.S at Georgia Institute of Technology and is working as Software Development Engineer at Bloomberg LP at Greater New York City.

BATCH 2009-2013

Ajay Bhargav B has been working as Software Engineer in Microsoft Corporation, Redmond. Washington from 2014.





Anubhav Siddarth Sudhakar as Software Engineers.

Anubhav Siddarth Sudhakar has completed M.S at New York University while Aswin Bharadwaj Ramesh has graduated from State University of New York,Buffalo. Both of them are currently working with Factset Research Systems at NewYork as Software Engineers



Aswin Bharadwaj Ramesh

BATCH 2008-2012



Arvind Krishnaa Jagannathan has completed his M.S at Georgia Institute of Technology and is working as Soft-ware Engineer II at Microsoft Corporation, Redmond, Washington.



YOUNG TALENT PATH

Samiya Nasim attended a one week long bootcamp at IESE Business School, Barcelona between August 10th-14th, as part of the application process for the Young Talent Path(YTP). Based on her performance in the bootcamp, and her initial application, she was granted admission into the YTP. This allows her to secure a spot in the MBA Program along with a scholarship for 20,000 Euros that she can take up 2-4 years from now.



☆ ☆

 $\frac{4}{2}$

☆



Samiya Nasim (2012-2016 Batch)

* Intriguing Mathematics: Your age + Your Year of Birth = 2017??

* Shampoo was invented in India, not the commercial liquid ones but the method by use of herbs. The word 'shampoo' itself has been derived from the Sanskrit word champu, which means to massage.



SSN SNACKDOWN

SSN CSE acted as a hub for SnackDown - a multi round programming competition held around the world. The hub coordinator was

Mr.V. Balasubramanian, Asst.Prof./CSE. Four teams participated in the hub on 22nd May, 2017 at 10:00 AM. Three teams were from the IT department and one team was from CSE (1st year).

Two teams were doing the Qualifier round for the first half an hour. Of the four questions, teams needed to solve at least one to qualify for the next round. 30 teams had qualified for the Elimination round of Snackdown. Three out of the four teams solved all the four problems by the end of the first half an hour.

This was followed by a discussion on competitive programming, some advanced data structures, such as persistent segment tree, and persistent tree, along with algorithmic approaches like Heavy Light Decomposition.



Further details are available at https://www.codechef.com/snackdown/2017/hubs/list-of-hubs

ASSOCIATION OF COMPUTER ENGINEERS (ACE) Office Bearers: 2017- 2018



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Embedding Minds with Embedded Systems

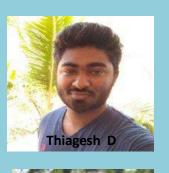
Hands on with Robo Hands – A truly amazing experience of a three-day workshop on "Embedded Software Development" was organized by the joint efforts of Mr. Thiagesh and Mr. Seshan, the alumni of our college. The workshop was conducted from July 20 to July 22, 2017.

The workshop was a great platform for exploring various intricacies of Arduino based embedded programming and sensor interfacing. Throughout the workshop, all students were working on their boards with a healthy and competitive spirit to implement small applications based on sensors. Mr. Thiagesh and Mr. Seshan, along with the volunteers from the 3rd year, were constantly on their heels to help students learn new concepts and implement them. It was very heart-warming to see great enthusiasm for teaching. This motivated students to gain knowledge and solve real life problems.

The first two days of the workshop were aimed to familiarize students about various sensors and their interfacing. Small tasks were given to us to strengthen the learned concepts. Each team was given a practical application to solve and prizes were awarded to the winning teams. The exceptional efforts put together by the students to solve the problem within the stipulated time of four hours was the highlight of the workshop. Many even skipped their lunch to do so.

Practical applications implemented by students included line following robots, obstacle detecting robots, robot hand following human hand motion, production of ripple effect in LED using LDR and various applications using IMU sensor. Personally, I never expected that I could simulate a robot hand. It was only made possible by the combined efforts of the volunteers and the tutors. Help was provided in the form of hint; thus, encouraging us to learn by experimenting and exploring. Each and every second spent was worth the time. At the end of the workshop, all teams were ready with a raw protocol of a real time project. Through this workshop, we gained hands-on experience and a new platform to explore the immense and diverse opportunities in the field of hardware. I would love to thank Mr. Thiagesh, Mr. Seshan, the volunteers, the faculty in-charges and our HOD, Dr. ChitraBabu, for organizing this amazing and informative workshop and providing the most incredible learning experience.

K.Kalaivani, II-CSE- 'A'







INDUSTRIAL VISIT TO MANATEC ELECTRONICS PVT. LTD, PONDICHERRY

We, the students of third year CSE 'A' were taken on an industrial visit to Manatec Electronics Pvt. Ltd , Pondicherry on 25-07-2017. The visit was arranged such that we left college at 08.30 am with two faculty members who accompanied us. We reached their Production Plant around 11.00 am.

To start with, we were given an overall brief presentation about the company, their establishment, achievements and milestones. Following which we were addressed by their MD-Operations. We were then split into batches of 15 students each and were taken to the plant where the staff members gave a brief description of the working of each of the department and its equipments.

The first section was wheel balancing, followed by wheel alignment, Fox 3D wheel alignment software and equipments related to Pollution Under Control (PUC). In each section, we were explained about the principles and mechanisms involved in the working of wheel garaging equipments.

In all the departments, the automation software was used to reach a greater level of precision and producing zero defect products, thereby saving time and mechanical efforts. Though it was an automobile company, as CSE department students, we were thrilled to learn that software plays a major role in machine automation. We found many prospective project ideas in the area of software development using sensors, microprocessors and microcontrollers.

III rd yr CSE - A



Guest Lectures

An insight into the industrial applications of IOT

The students of second year B.E.-CSE were happy to attend the guest lecture delivered by an industrial personality, **Mr. Nathanael Theophilus Easterson who works as an IT Architect at Capgemini Technology Services India Limited, Chennai**. He is a Senior IT Architect and a subject matter expect in IoT area. The topic of the guest lecture was "**Overview of Predix with IoT use cases in Industry**". The full session was an enlightening talk that gave us a deep insight into the different industrial aspects of IOT. There was an extremely interactive Q & A session where Mr. Nathaneal cleared all the doubts put forth by the students with utmost patience. On the whole, we had a lot to take back after the talk.

> Edison M. K. Kalaivani CSE-2nd year



Data Science and Applications

The students of final B.E.-CSE and 2nd year ME (CSE) were introduced to the latest tools and techniques in Data Science by **Mr. Hari Krishna, Senior Manager – Data Science, Cognizant,Chennai**. The topic of the guest lecture was "**Trending Tools and techniques in Data Science**". The speaker introduced us to the current trends and tools that is making great innovations and discoveries in data science. He spoke about his experiences both during his tenure as a student and now as manager in the industry. He concluded that data science takes us to new challenges on every discovery. He very eagerly answered all the questions and interacted in a manner that raised our enthusiasm.

B.E (CSE) – Final year students



நளபாக நல்விருந்து - NN 1.0



Objective

To strengthen the bonding of SSN-CSE family: Date: 22.07.2017 - 11.00 a.m. onwards		
Venue:	CSE Seminar Hall	
11.00 a.m.	Welcome Drink	
	1. Floor Test	
	2. Luck Streaming	
	3. பாடல் Processing	
12.15 p.m.	படப்பிடிப்பு	
12.25 p.m	கூட்டாஞ் சோறு	



Outcome

Guaranteed rejuvenation of mind, body and soul.

- A grand faculty and staff get-together was organized with a potluck.
- Various fun games were conducted and every participant enjoyed to the core.
- The menu for potluck was decided earlier and all the participants volunteered to bring dishes and other required items like plates.
- The highlight of the event was a 7 course lunch which satisfied the taste buds of everyone.
- The expected outcome was achieved.

Organizers

Dr. R. Kanchana, Dr. J. Bhuvana, and Ms. S. Lakshmi Priya



Having solved many problems on online competitive coding platforms, the first round in the Amazon interview process was a bit easy for me to solve. We had 20 MCQs of 1 mark each and 2 Programming questions of 100 marks each. So, I started with the programming questions and was able to solve one almost immediately. The second question was more challenging as I could only think of a brute force solution, but I went on to submit the solution as individual test cases carried marks. Regarding the MCQs, my practice from "geeksforgeeks" helped me out.

I was told that we would be having four more technical rounds. All the four technical rounds were similar. At the start of each round I was asked to describe myself, so I took this opportunity to draw the interviewer's attention towards Data Structures and Algorithms, as it was my forte. Every round was a pen-paper test, wherein I was given a problem statement and was asked to solve it logically at first, and then to write down the pseudo code. The interviewers in each round were friendly and gave clues whenever I was stuck. Most of the questions were concentrated on Trees (Data Structure). Practicing for placements included learning data structures from "geeksforgeeks" and problems from "*InterviewBit*".

"InterviewBit" was of great help and I would personally recommend it to others for practicing Data Structures and Algorithms in a structured way. I was not satisfied with my performance in the final round of the interview. I was asked to rate myself on a scale of 1 to 10 on data structures, and also list out my strengths and weaknesses. My weaknesses were exploited so much that I could not answer two out of the five questions in total. The last problem was very challenging and the interviewer checked if I could solve the problem given some clues, and luckily I managed to use the given clues effectively. The placement process for Amazon is heavily concentrated on Data Structures and Algorithms, in my opinion.



Satheesh. P IV Year CSE - B



Amazon's interview process lasted over two days. On the first, selection process happened in batches. It was an online test where we were given 20 MCQs worth 1 mark each and 2 programs worth 100 marks each. MCQs were on technical aptitude and the coding questions did not require any complicated data structure, arrays were sufficient. The coding questions were each checked against 10 system test cases and a score of 0-100 was generated. I would suggest checking the time limit as brute force solutions might be accepted. We had to code on HackerEarth and every question had to be individually submitted to be taken into account.28 of us were selected to proceed to the next day.

Day 2 was a barrage of 5 one-to-one technical interviews. The questions I was asked were based on trees, 1-D and 2-D arrays and strings. Each of my first two rounds had 2 programs. The third round was logical questions, HR questions, applications of different data structures and also a program on tree. The fourth focused mostly on theory. I was asked questions on OS and the rest was based on my resume. I was further asked to draw a class diagram for a calculator. In my fifth round I was asked to write a program to convert float to a string and that marked the end of my interview process. For each program, they look for code optimization with respect to time and space complexity. They expect you to be vocal with your ideas of approach. It's okay if your idea is not completely correct. They will provide you with hints and see how you proceed with it. I would suggest being frank about how sure you are of your answer. You will then be asked to write your code (just the function) on a paper which will be carried onto future rounds. They also see how you conduct yourself in front of them. It's important to be confident and polite.

~Vrithika - IV Year CSE B



2018 CSE Placements



Amazon		
Full Time Job offer	SATHEESH P	
	VRITHIKA M	
Internship	JAGAN KUMAR U	
	SOUNDERYAN B	
	VARUN RANGANATHAN D	

Coda Global

MUTHU ANNAMALAI

Mu Sigma

SHRISHTI PALIWAL SIMRAN MODI

VISHAL R

Zilker **ARJITH NATRAJAN**

Dell ANJANA S **ASHWINI RAJA SIVAGAMI S N SREENIDHI V**

	Trimble
APARNA A	
UTTAMRAJ K R	

Temenos

DHIVYA N DODDA SAI SUMA DOMMARAJU HARITHA

ChargeBee **RAGHAV NANDAKUMAR**



SUMMER INTERNSHIPS

S.No	Name	Class - year of study	Company
1	Nachiyappan N	IV	ByteAlly
2	Sahitya Sridhar		IIT Madras
3	Ashwini Raja		
4	Avanthika R		
5	Manav Rajiv Moorthy	III	
6	Simran Modi	IV	Metarvse
7	Vishal Gupta	III	
8	Thirumala Devi S	IV	Delicon
9	Vrithika M		
10	Rhea Marian G		
11	Satheesh P		TCS
12	Surya S		
13	Shanmuga		
	Velayutham V		
14	V Sundararaman	III	
15	Shailesh S	IV	Crayon Digital Pvt. Ltd.
16	Dhivya N		
17	Vishal R		
18	Mridhoula Ajagane		Tech Mahindra
19	Madhumitha B		
20	Karishma P		SPI Cinemas
21	Aathithya Sidtharthan		
22	B Aravind S		
22	Kirthana D		
23	Aakash S		
24	Raghav Nandakumar	IV	Hasura
26	Uttam Raj K R	iv.	
27	Vignesh Kumar M		Torp Systems
28	Vignesh G		Torp Systems
29	Muthu Annamalai Ct		Sigaram Technologies
30	Arjith N		
31	Shreyas Gopal		
32	Pranav G	IV	FLSmidth, Perfect
33	Selvendran K		Impressions
34	Senthil Kumaran S		
35	Kavya R	Ш	VisualBi
36	Sudha Parimala		VisualBi
37	Chudeep Shankar B		Access Health care
38	Kawshik Kannan		
39	Laxmaan B		Aban Scientific Reading
40	Hemapriyalakshmi R		
41	Kishore M		

42	Akshara S		
43	Prashant Chawla	IV	SPini
44	Sailesh Kumar Gajesh	III	
45	Kharthik Kumar C R	IV	Network Geek
46	Bala Sankar N	III	
47	Prasanna S	IV	U-Klickkit Enterprises
			Private Limited
48	Rithwin Siva		Ernest & Young
			Trivandrum
49	Sricharan R		Mozilla
50	Priyanka Bhaskar		AAUM Research &
			Analytics, IIM-Lucknow
51	Sreenidhi V		TermSheet
52	Anjana S		Mehra Computer
			Systems
53	Aparna A		Expanion
54	Karthik U		Gislen Software
55	Preetha K. Ganesh		Kerry Indev Logistics
56	Nethra Viswanathan		Telestax
57	Ramya Priyadharshini		Shortfundly
58	ARUN VIGNESH M		HP Enterprise
59	Nishant Mathew		Deloitte India
60	Vignesh		Citibank
	Veeraraghavan		
61	Abhay Krishna A		Internet techies
62	Sharanya Srikanth		McCann Erickson
63	Aditya Manoharan		ZoomRx
64	Rahul CH		Content Writing-Edgy
			Scribblers
65	Arthi K		Awign Company
66	Varun Suresh	Ш	LyfeNet Solutions
67	Tarun R K		Qualcomm
68	Apoorva N		Hexaware Technologies
69	Daniel Jeswin		GeoSpoc
70	Nallathambi Aarif Noordeen		Vakil Search
70	Skanda Suresh		Wabco India
71			
72	Himanshu Singhal Arul Thileeban S		Chiksoft technologies
			YNOS Venture Engine
74	Varsha Bhargavi Dwarakanathan		LUTICITIBUX
75	J Vigneshwara		World Community
/5	Prakash		Service Centre
	110/03/1		Service Centre



ACM-W India Celebration of Women in Computing. It is hosted by ACM-W Chennai Chapter.

What is this??

Join us for three days of interactive session, announcements, and best practices that will keep vou lookina ahead.







September 11th-13th, 2017 9.00 AM - 5.00 PM

Work in Progress

Female researchers can present their ongoing research in Work in Progress (WIP) forum through oral/poster presentation. This would be a great opportunity for all the aspiring female researchers to discuss, share, collaborate and network with peers in their research areas. The ideas can be presented either in the form of research papers or as technical posters.

Registration and Full paper submission: 10th August 2017Results Announcement: 17th August 2017

Programming Contest

Round 1: August 5, 2017 Round 2: August 12, 2017 (Skype) Finals : September 11, 2017.

For More Details:

Registration Form Link: https://goo.gl/forms/pNScvPGCWZkIrmFw2

Send your submissions to: acmwic.wip2017@gmail.com

Catch our latest updates on:http://www.aicwic2017.com/



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Student Team

IV YEAR

Selvendran K Shailesh

III YEAR

Gajesh S Siddharth Divi