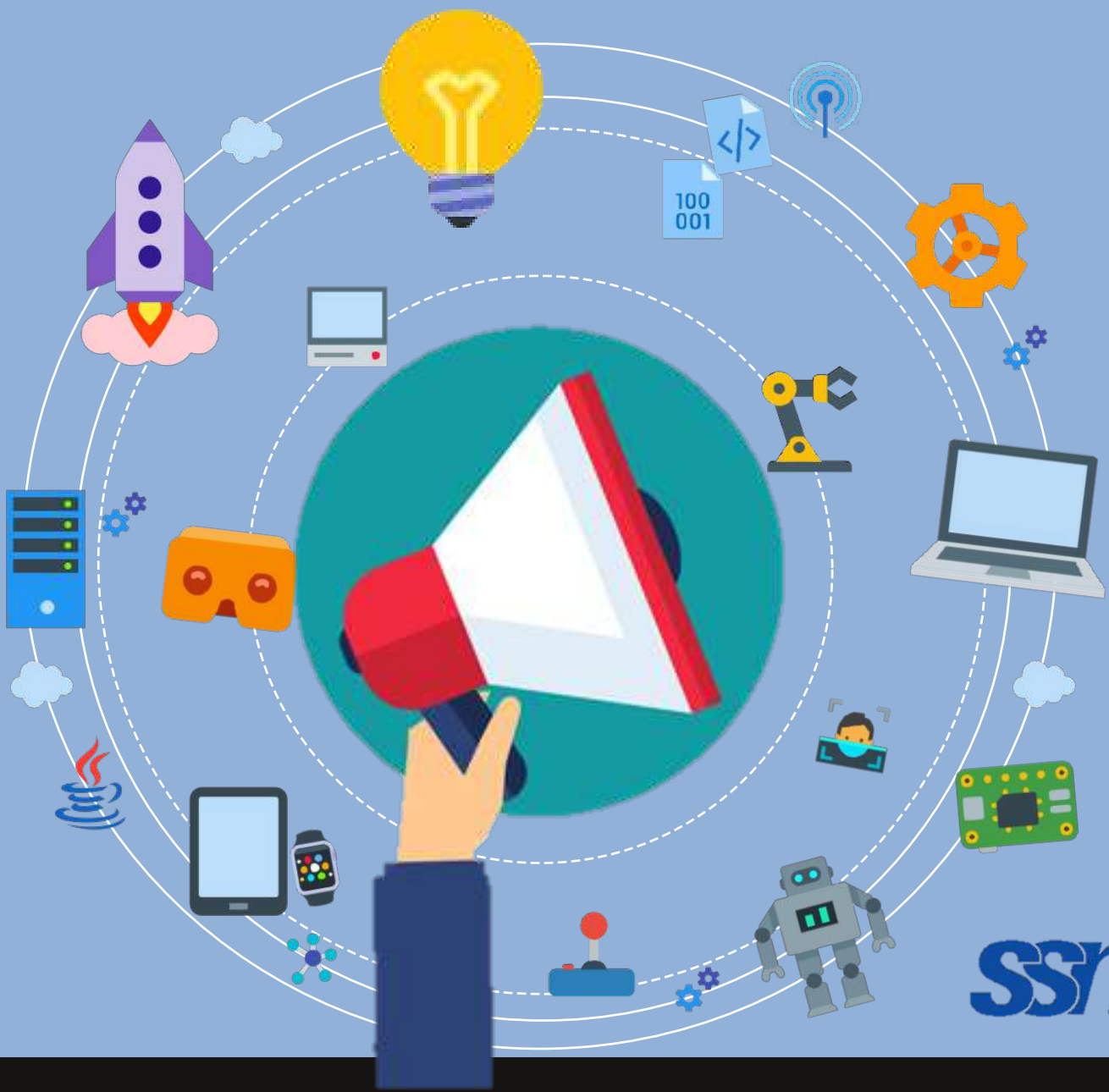


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# SMRITI

DEPARTMENT OF COMPUTER  
SCIENCE AND ENGINEERING



SSN



# SNEAK PEEK

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## HOD'S DESK



It has been a little more than seven months since the Covid-19 pandemic struck us resulting in online teaching. This is the first semester where the flipped classroom model had been partially adopted and asynchronous videos prepared by faculty members were made available to students to watch and learn on their own. A lot of experimentation has gone into determining effective ways of assessment as well as conducting lab courses using LMS and virtual lab simulators. We all have learnt to organize events such as webinars and workshops online too!

Our college served as one of the 40 nodal centers for the first ever virtual Smart India Hackathon (SIH) 2020 software edition Grand Finale. As the nodal center head, it was a very exciting experience organizing this event successfully along with an energetic and diligent team.

Our ACM-W chapter also had an opportunity to organize the ACM-W India Regional celebrations event jointly with ACM-W Chennai professional chapter and the ACM-W Chapters of VIT, SRM Easwari and SRM University. The panel discussion on “How to prepare for a successful career in AI, ML and Data Science” that was a part of this event received wide acclamation from the participants.

I would like to convey my heartfelt gratitude to Kaarthik Sivakumar and Shyam Ramaswamy of Cisco for working with us in offering the 1-credit value-added-course named “Forensic Analysis”. They appropriately fixed the course topics to cover within 15 hours spread across 2 months. As the course content was taught in such a phased manner with lots of hands-on assignments/projects, the students benefited significantly. This course received a huge positive feedback from the students who had enrolled for this.

Congratulations to Sarathchandran for successfully defending his Ph.D thesis. Best wishes for him to have a productive research career.

I am very happy that five of our final year students, Nanda, Rohit, Naveen, Reshma and Jahnvi were selected for the Google Research summer school and had the unique experience of listening to top-notch experts in ML, image analysis and NLP. The admission to this summer school was the outcome of a highly stringent selection process and I am proud to inform that these five were one among 150 across the country to attend the summer school.

It is heartwarming to see that our students are receiving coveted job offers and internships from prestigious companies even amidst the prevailing pandemic scenario. Congratulations to all the students who have been placed so far and best wishes for the remaining ones to land in a job of their dreams soon.

**Dr. Chitra Babu**  
HoD/CSE

## FACULTY ACTIVITIES

1. Selection process to employ 4 JRFs for the BIRAC funded project was initiated by **Dr. R. Kanchana**. A panel of two PIs **Prof. S. Selvakumar IIIT Una, and Dr. R. Kanchana along with Dr. T.T. Mirnalinee** interviewed the candidates on 26th Sep 2020 and selected the candidates. An online written / coding test was also conducted prior to the interview.
2. **Dr. D. Thenmozhi** attended a DC meeting for the scholar of SRM institute held on 10 September 2020.
3. **Dr. D. Thenmozhi** attended a meeting on "mobile based attendance system using face recognition" conducted by FieldProxy at SSN held on 18 September 2020.
4. **Dr. B. Bharathi** attended a DC meeting for the scholar of VIT Chennai on 17 September 2020.
5. **Dr. T. T. Mirnalinee** served as a DC member at Jerusalem Engineering College, Anna University on 23 September 2020.
6. **Dr. Mirnalinee T T** convened DC meeting for the research scholar Mr. N. Sujaudeen on 10 September 2020.
7. **Dr. D. Venkata Vara Prasad** attended a virtual DC meeting held on 13 August 2020 for Ms Deepanjali at SRM University, Chennai.
8. **Dr. Chitra Babu** served in one of the 10 interview panels for the management quota counseling for the First year B.E/B.Tech admissions from 24th to 27th Aug 2020. She also participated in the counseling of NRI/Vidya Gyan students on 17th Aug 2020.
9. **Dr. R. Kanchana, Dr. D. Thenmozhi, Dr. J. Bhuvana** served as jury members in SIH 2020 that was held from 1st - 3rd August and evaluated the projects
10. **Dr. D. Thenmozhi, Dr. B. Bharathi , Ms.S.Angel Deborah, Dr.J.Suresh, Dr. S. Kavitha, Dr. P. Mirunalini, Ms. S. Rajalakshmi, Mr. K. R. Sarath Chandran, Mr. N. Sujaudeen, Ms. S. Lakshmi Priya** served in help desk team for SSN admissions and conducted the orientation program on SEB installation during 20-21 August 2020.
11. **Dr. J.Bhuvana** manned the helpdesk for admission 2020 from July 20 to 10 August on

Mondays and on Wednesdays.

12. **Dr. Chitra Babu** attended the event "Data Science in India" organized by ACM India KDD Chapter on 28th August 2020.
13. **Dr. R. Kanchana, Dr. J. Bhuvana** attended a Panel Discussion on Online Education Challenges in Assessment and Open Book Examinations on 27th Aug 2020. It was organized by ACM Chennai, CSI Chennai, IEEE CS Madras.
14. **Dr. D. Venkata Vara Prasad, Dr. V. S. Felix Enigo, Dr. Raghuraman G., Ms. A. Beulah,** acted as faculty coordinators for 1st year admission test conducted in CSE labs held during Aug 24 2020 – Aug 27 2020.
15. **Dr. V. Balasubramanian** participated in the ACM-W Chennai Regional Celebrations 2020 held virtually on 10th October from 2 - 5:30 PM. Attended the talk on "WHAT IS RESPONSIBLE AI" by Dr. Mukta Paliwal, AWS Certified ML Specialist, Persistent Systems.
16. **Dr. D. Thenmozhi** served as an IQAC External Auditor for the Department of Mechanical Engineering, SSNCE on 13 October 2020 .
17. **Dr. Chitra Babu, Dr. V. Balasubramanian, Mr. N. Sujaudeen and Ms. S. Lakshmi Priya** attended a ACM India Live Interaction on "Recent Advances in AI/ML in Networked Systems: Opportunities and Challenges" on 22.10.20. Seven eminent people from industry and Research labs were part of this panel discussion.
18. **Dr. Chitra Babu** attended the second conference on "Computational Thinking in Schools(CTiS) organized by ACM India CSPATHSHALA during 2 & 3 October.
19. **Dr. Chitra Babu** attended a virtual CIO Leadership session on "Cloud Security: Conquering the Next Frontier of Digital Transformation" organized by IDG Media Pvt. Ltd. on 22 October 2020.
20. **Dr. Chitra Babu** attended the SCIPE meeting on 5th October to discuss the best practices adopted by each department and also to talk about the strategies going forward.
21. **Dr. J. Bhuvana** attended 6-Days IBM Hack Challenge and Academic Initiative program- "GuruCool" from 28.9.2020 to 3.10.2020.
22. **Dr. D. Thenmozhi and Dr. J. Bhuvana** coordinated the submission of CSE data for AQAR.
23. **Dr. Chitra Babu had a meeting with Prof. Viraj Kumar, IISc and Prof. Neeldhara Misra of IIT Gandhinagar** regarding a possible proposal regarding a large-scale multi-institutional study on the Gender diversity and participation ratio of female students in competitive programming/coding contests/hackathons on 22nd Oct 10 to 11 AM.
24. **Dr. Chitra Babu had a meeting with Dr. Arati Dixit, Chair, Standing Committee.**



**ACM-W Leadership team and the volunteers** from Europe on 22nd October 9 - 10 PM regarding the project on documentation of virtual activities that can be organized by the ACM-W Student Chapters worldwide.

25. **Dr. R. Kanchana** attended data.world summit that included talks on latest innovations in data practices, technology, and leadership on 23 September 2020.
26. **Dr. V. Balasubramanian & Dr. T.T. Mirnalinee** submitted the AICTE-CII survey data of CSE department in the AICTE portal.
27. **Dr. Chitra Babu & Dr. V. Balasubramanian** along with Kaarthik Sivakumar, Cisco Shyam Sundar Ramaswami, Cisco started a 15 Hours / 1 Credit, 8 Week Value added Course on "Cyber Forensics" for III Year CSE Students.
28. **Dr. Chitra Babu** attended the ACM India Education Committee meeting on 21st September between 11:30 AM - 12:30 PM on 21st September along with the other 7 members. The discussion was mainly on the Computing Curriculum 2020(CC 2020) report.
29. **Dr. Chitra Babu** had submitted a proposal for organizing an ACM-W Regional Celebrations event(Chennai region) on 10th October with a budget of Rs. 15000. This was a joint proposal by the ACM-W Chennai Professional chapter and the ACM-W Chapters of SSN, SRM University, SRM Easwari and VIT Chennai. This proposal has been approved by ACM India Council on 18th September.
30. **Dr.A.Chamundeswari** submitted Institutional membership form for renew to Computer Society of India, and certificate of the same was received.

## WORKSHOPS/FDPS ATTENDED

1. **Dr. K.Valli Devi, Ms. S. Rajalakshmi, Ms. S. Lakshmi Priya** attended the Two Day National Open Workshop on "Getting Aligned to the Publishing Process" conducted by Researcher Academy On Campus, Elsevier on 25th and 28th September, 2020.
2. **Dr. R.Kanchana , Dr. D. Thenmozhi, Dr. B. Bharathi** attended a Panopto workshop at SSN. The training was given by Prof.Valen Ng, Panopto held on 11 September 2020.
3. **Dr. J. Suresh and Dr. P. Mirunalini** attended FDP organized by AICTE "Incorporating Universal Human Values in Education (An AICTE Initiative)" from 5-10-2020 to 9-10-2020.
4. **Dr. Chitra Babu** attended the second RBCDSAI - Latent View Colloquium on "META - LEARNING A Roadmap for Few-Shot Transfer Learning" by Dr. Hugo Larochelle, the lead of the Montreal Google Brain team on 15th October between 6 and 7:30 PM.

## WEBINARS ATTENDED/ ORGANIZED

1. **Dr. R. Kanchana** attended a webinar on "Effective Presentations using Outlines in PowerPoint" on 1st Sep 2020. The speaker was Mr. Geetesh Bajaj, Microsoft PowerPoint+ MVP, Head of Indezine.com. The event was organized by ACM Chennai, IEEE CS Madras, and CSI Chennai
2. **Dr. R. Kanchana** attended a webinar on "Online classes made effective with Microsoft Teams" on 8th Sep, 2020. It was organized by Microsoft India and covered the topics on setting up channels, building and uploading contents for online classes.
3. **Dr D.Venkata Vara Prasad** attended a webinar on "Skills on Data Analytics For Modern Day Engineer" by Mr. Umesh Ramakrishnan , Data Analytic Lead,Traveloke pvt ltd, Singapore on 19 September 2020.
4. **Dr. Mirnalinee T T** Participated the webinar on "Continuing Professional Development" organized by English department of SSNCE held on 29 September 2020.
5. **Dr. Mirnalinee T T** attended a webinar Blockchain Enabled DESy Skill Chain for Decentralized Education System", to be presented on Saturday 12 September 2020 at 11 am IST by Mukesh Mohania, Professor and Dean at IIIT Delhi.
6. **Dr. R. Kanchana** attended the webinar on "How Apache Spark 3.0 and Delta Lake Enhances Data Lake Reliability" from Databricks on 27th Aug 2020.
7. **Dr. Chitra Babu and Dr. R. Kanchana** attended an ACM India Webinar Series on Education: "Repetition and Recursion" on 29th August 2020. The speaker was Dan Garcia, Teaching Professor, UC Berkeley. The talk was interesting and useful.
8. **Dr. R. Kanchana** attended a webinar on "Open Book Exams - Not A Paradigm Shift" by Prof. S.P. Venkateshan, Professor (Rtd.), IIT Madras on 8th August 2020. It was organized by the Dept of Mechanical, SSNCE
9. **Dr. Chitra Babu, Dr. T.T. Mirnalinee, Dr. J. Bhuvana, Dr. V. Balasubramanian, Ms. S. Rajalakshmi, Ms. A. Beulah, Ms. Angel Deborah S.,** participated in the Webinar on "Digital Transformation Powered by AI" by Biswajit Biswas, Chief Data Scientist, Tata Elxsi, Chennai on 16.10.20 during 11.30AM to 12.30 PM.
10. **Dr. K. R. Sarath Chandran** attended a webinar on "Running Multiple OS using XEN Hypervisor for Zynq US+ MPSoC" organized by PLC2 on 14-10-2020.
11. **Dr. Chitra Babu, Dr. J. Bhuvana, Dr. V. Balasubramanian, Ms. A. Beulah, Ms. Angel Deborah S.,** participated in the Webinar on "5G & Open Source- Today" by Ramesh Ramanathan, Principal Architect, Tata Elxsi, Chennai on 29.10.20 during 11.30AM to 1.00 PM.

12. **Dr. Chitra Babu** (as a member of the ACM India Education Committee) hosted the ACM India Education Webinar focused on Faculty members on 12th September. This was given by Dr. Mukesh Mohania from IIIT Delhi The topic was "Decentralized Education System Powered by Blockchain".
13. **Dr. Chitra Babu** (as a member of the ACM India Education Committee) hosted the ACM India Education Webinar focused on Students on 19th September. This was given by Prof. Pankaj Jalote of IIIT Delhi. The topic was "Preparing for a career in IT". More than 1300 students across the country attended this webinar.
14. **Dr. Chitra Babu** attended a webinar on "Smart Manufacturing" that was organized by IEEE Blended learning on 29th October 2020 from 3:30 - 5:00 PM. The speakers were Mr. Swanand Saraf, Consulting and Delivery, MES & IIoT and Mr. Prashant Iyer, IIoT architect from L&T Infotech.

## EXTERNAL RECOGNITIONS

1. **Dr. Chitra Babu** has been nominated as ACM-W India Chapter Chair. In this role, she would be liaising with all the ACM-W Professional and student chapters all over India.
2. **Dr. Chitra Babu** has been nominated to arrange and host the ACM India Education webinars once in every 2 months, one series focused on Faculty members and another one focused on students.
3. **Dr. Chitra Babu** has been serving as a member in the ACM India Education Committee from 2015 with Mr. R. Venkatesh of TCS as Chair. Recently, the committee has been reconstituted with Prof. Abhiram Ranade as chair. She has been invited to continue as a member of this committee.

## EXTERNAL INTERACTIONS

1. **Dr. V. Balasubramanian** Participated in the Joint Group Meeting - Tata Elxsi - SSN held virtually on 30.9.20 @ 10.00 to 11.00 AM to explore specific ways in which the collaboration can be pursued.
2. **Dr. V. Balasubramanian** Interacted with Dr. Sudarsan Parthasarathy, Director, Grey To Green Technology & Solutions and explored internships in the following research areas
  1. Web crawlers and database,
  2. Ranking Algorithm & NLP,
  3. Front end and market intelligence report.



## ONLINE KNOWLEDGE BASE

1. **Dr. V. Balasubramanian** has successfully completed online course on "Basic Cryptography and Programming with Crypto API" by the University of Colorado in Coursera [4-week course]
2. **Ms.S.Rajalakshmi** has successfully completed online courses on "Recommender Systems: Evaluation and Metrics" provided by University of Minnesota and "Python Data Structures" provided by the University of Michigan in Coursera.
3. **Dr. V. Balasubramanian** successfully completed a 5 Week Programme in Coursera on "AWS Fundamentals: Going Cloud-Native"
4. **Mr. H.Shahul Hamead** has completed the following courses in Coursera.
  - a. "Software Defined Networking" by The University of Chicago.
  - b. "Mathematical Thinking in Computer Science" by the University of California San Diego.

## WORKSHOPS ORGANIZED

1. The **SSN ACM and ACM-W student chapter** organized a Expert talk on Role of AI in the Financial Service Sector by industry expert Dr Ranadhir Ghosh, AI/ML Quantitative Specialist at FIS Global on 11th September 6:00 - 7:00 PM IST.
2. **Dr. R. S. Milton, Dr. R. Kanchana, Dr. B. Bharathi, Dr. J. Bhuvana, Dr. D. Thenmozhi, Dr. B. Prabavathy** conducted a workshop on "Flipped class, open book assessment and online lab: Issues and Plan" to the faculty members of CSE on 19 August 2020.
3. **Dr. R. Kanchana** organized a 6-day workshop on Isha Yoga in challenging times for the second year UG students of SSNCE as a part of YRC and NSS activity , SSNCE during 24 - 29 August 2020.
4. **Dr. D. Thenmozhi** organized DST-SERB sponsored workshop on deep learning for healthcare. This workshop happened on 9 October 2020.
5. **Dr. Chitra Babu** as Member of ACM-W India Council member organized the ACM-W Chennai Regional celebrations event along with **Dr. K. Madheswari**, Faculty mentor of SSN ACM-W student chapter as well as the student office-bearers of the chapter.

## PAPER REVIEWS

1. **Dr. R. Kanchana** is a TPC member of IEEE TALE 2020 Embarking on a new era of learning with transformative technologies - Int. Conference to be held in Japan during Dec 8-11, 2020 and reviewed three research articles.
2. **Dr. R. Kanchana** served as a reviewer for the IEEE Transactions on Services Computing and reviewed a research article titled A Correct-by-Construction Model for Verifying Transactional Composite Services Configuration.
3. **Dr D.Venkata Vara Prasad** reviewed a paper titled " Representative Null Space LDA for Discriminative Dimensionality Reduction" for Pattern Recognition Journal.
4. **Dr. A. Chamundeswari** reviewed the research paper titled, "FORMAL METAMODELING FOR SECURE MODEL DRIVEN ENGINEERING," for the journal, International Journal of Systems and Software Security and Protection (IJSSSP), IGI Global, Sept 2020.
5. **Dr. D. Thenmozhi** reviewed a paper titled " Improving Arabic Sentiment Analysis in the Education Domain by One-Way ANOVA" for the journal Elsevier-Heliyon.
6. **Dr. R. Kanchana** is a TPC member IEEE TALE 2020 Embarking on a new era of learning with transformative technologies and reviewed 2 technical papers.
7. **Ms. A. Beulah** reviewed the following research papers for 2020 IEEE Region 10 Conference,Osaka Japan:
  - a. "Unmanned Ground Vehicle for Detection of Permissible Exposure to Crude Oil Fume"
  - b. Skin Diseases Detection Using Image Processing And Convolutional Neural Networks
8. **Dr. D. Thenmozhi** reviewed an article titled" Machine Learning-based Author Profiling from Texts Analysis in Social Networks: Taxonomy, brief synthesis of the literature and new directions" for the Journal of King Saud University - Computer and Information Sciences.
9. **Dr. J. Bhuvana** reviewed "Prediction of hypertension risk with integrated feature selection and XGBoost," for Journal of Medical Imaging and Health Informatics journal.
10. **Dr. V. Balasubramanian** reviewed a paper on "A Field-Sensitive Security Monitor for Object-Oriented Programs" for Computers & Security - A Elsevier Journal.
11. **Dr. Chitra Babu** is serving as A Technical Program Committee member for the ACM India Annual COMPUTE conference. As a program committee member, She reviewed 3 papers.

## FACULTY PUBLICATIONS / PAPER PRESENTATIONS

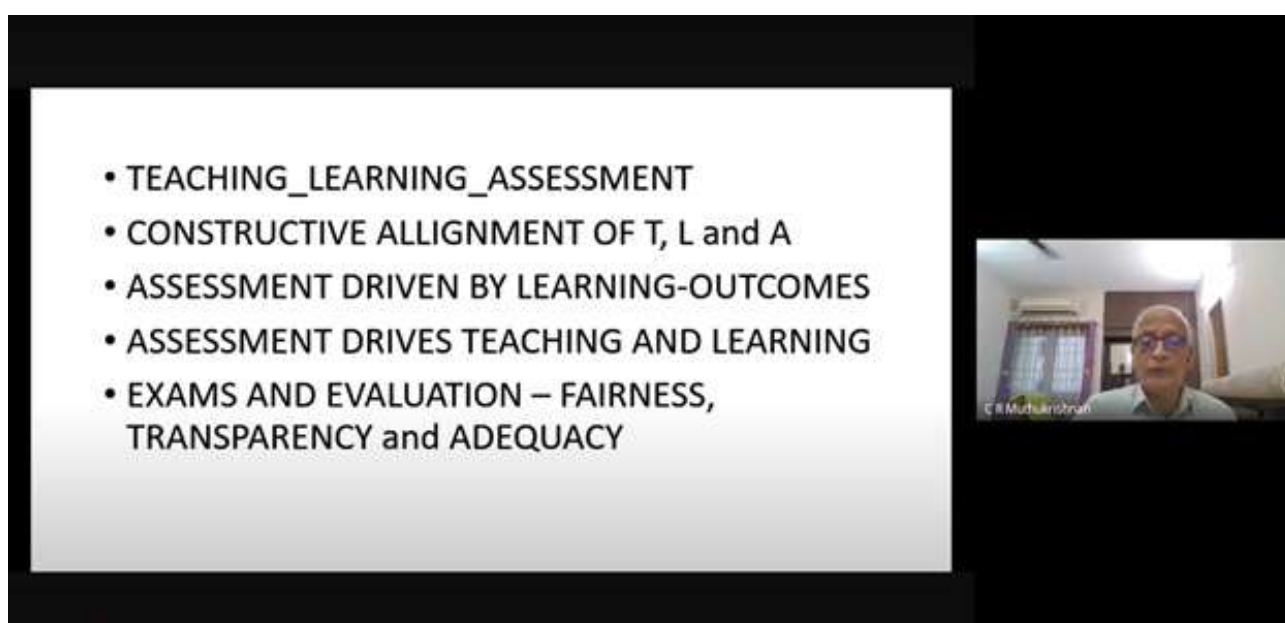
1. The paper titled, "Virtual Fashion Mirror" authored by **Deepthi Prakash, Jay Vishal J, Sourav Ghosh, Stephen Niranjana B, Angel Deborah S and K.R. Sarath Chandran** was presented in the 4th IEEE International Conference on Computer, Communication and Signal Processing (ICCCSP 2020), held during 28 -29, September 2020 organized by Department of IT, Sri Sivasubramaniya Nadar College of Engineering, TamilNadu. The paper will be published in IEEE Xplore.
2. **Rajalakshmi S., Dineshraj G., Brindha Priyadharshini R., Divya Brindha R.** (2021) Automatic Wheat Grain Grading System Using Physical and Chemical Characteristics. In: Suresh P., Saravanakumar U., Hussein Al Salameh M. (eds) Advances in Smart System Technologies. Advances in Intelligent Systems and Computing, vol 1163. pp. 359-374. Springer, Singapore. [https://doi.org/10.1007/978-981-15-5029-4\\_30](https://doi.org/10.1007/978-981-15-5029-4_30)
3. **Rajalakshmi S., Angel Deborah S., Soundarya G., Varshitha V., Shyam Sundhar K.** (2021) Safety Device for Children Using IoT and Deep Learning Techniques. In: Suresh P., Saravanakumar U., Hussein Al Salameh M. (eds) Advances in Smart System Technologies. Advances in Intelligent Systems and Computing, vol 1163. pp. 375-390. Springer, Singapore. [https://doi.org/10.1007/978-981-15-5029-4\\_31](https://doi.org/10.1007/978-981-15-5029-4_31)
4. The paper titled as "Classification of Lung Tuberculosis using Non Parametric and Deep Neural Network Techniques", authored by **Kavitha S, Poornima S, Sheerin Sitara N and Sarada Devi A**, has been accepted and presented in 4th ICCSP 2020, SSN College of Engineering held during 28-29 September 2020, will be published in IEEE Xplore.
5. **Kavitha Srinivasan, Shanmuga Velayutham V, Vignesh G, Subash R.** "Object Recognition for Visually Impaired People", International Journal of Computer Trends and Technology, 68(8), 33-38, September 2020, E-ISSN: 2231-2803, P-ISSN: 2349-0829
6. The paper titled, "Student Attendance Manager Using Beacons and Deep Learning" authored by **Mohanasundar MK, Kevin J Thelly, Pranav Raveendran, Rajalakshmi S and Angel Deborah S** was presented in the First International Conference on Advances in Physical Sciences and Materials (ICAPSM 2020) held during 13 -14, August 2020 organized by the SNS College of Technology, Coimbatore, TamilNadu.
7. The paper titled, "Smart Warehouse Management System" authored by **Sai chitti V, Vasantharaman A, Sharrik Krishna S L, Sitharthan I, Shaheen Basha S, Prabavathy B and Angel Deborah S** was presented in the First Virtual International Conference on Renewable Energy systems (ICRES 2020), held during 26 -28, August 2020 organized by Department of EEE, Sri Sivasubramaniya Nadar College of Engineering, TamilNadu. The paper will be published in the Springer proceedings in Energy.

8. **D. Thenmozhi, Rishivardhan K, Kayalvizhi S, Sachin Krishan, Aravindan Chandrabose** published a paper titled "Transformers in Semantic Indexing of Clinical Codes", In 11th CLEF conference, CEUR, Vol.2696, pp.116(1-6), Sep 22-25, 2020.
9. **D. Thenmozhi, Sachin Krishan , Kayalvizhi S , Rishivardhan K** published a paper titled "SSN NLP at CheckThat! 2020: Tweet CheckWorthiness Using Transformers, Convolutional Neural Networks and Support Vector Machines", In 11th CLEF conference, CEUR, Vol.2696, pp.180(1-7), Sep 22-25, 2020.
10. **Sheerin Sitara Noor Mohamed and Kavitha Srinivasan**, published a paper titled "ImageCLEF 2020: An approach for Visual Question Answering using VGG-LSTM for different datasets", In 11th CLEF conference, Thessaloniki, Greece as CLEF 2020 Working Notes, Vol.2696, paper 94. pp.1-10, Sep 22-25, 2020.
11. **Sarada Devi Arul and Kavitha Srinivasan**, published a paper titled "ImageCLEF 2020: Image Caption Prediction using Multilabel Convolutional Neural Network", In 11th CLEF conference, Thessaloniki, Greece as CLEF 2020 Working Notes, Vol.2696, paper 107. pp.1-8, Sep 22-25, 2020.
12. **Ujjwel Balwal, Srinivasa Arun Yeragudipati, Bhuvana Jayaraman, Mirnalinee TT** published a paper titled, " Deep Learning based TB Severity Prediction " In 11th CLEF conference, CEUR, Vol.2696, paper 96. pp.1-7, Sep 22-25, 2020.
13. **Ganapathy, Hariny, Geetika Bandlamudi, L. Yamini, J. Bhuvana, and T. T. Mirnalinee** published a paper titled, "Deep learning models for estimation of flood severity using Satellite and News Article Images." (2019). In MediaEval 2019, Multimedia Benchmark Workshop, 27-29 Oct, Sophia Antipolis, France, Working Notes Proceedings of ceur-ws.
14. **Siddharth Sriraman, Srinath Srinivasan, Vishnu K Krishnan, Bhuvana J, T.T. Mirnalinee**, published a paper titled, MediaEval 2019: LRCNs for Stroke Detection in Table Tennis, In MediaEval 2019, Multimedia Benchmark Workshop, 27-29 October, Sophia Antipolis, France, Working Notes Proceedings of ceur-ws.
15. **Ambika, M., Raghuraman, G., SaiRamesh, L. and Ayyasamy, A.**, published paper titled "Intelligence-based decision support system for diagnosing the incidence of hypertensive type". Journal of Intelligent & Fuzzy Systems, vol.38,no.2, pp. 1811-1825, 2020 DOI:10.3233/JIFS-190143
16. **Ambika, M., G. Raghuraman, and L. SaiRamesh.** published paper titled "Enhanced decision support system to predict and prevent hypertension using computational intelligence techniques." Soft Computing, February 2020, pp.1-12. <https://doi.org/10.1007/s00500-020-04743-9>

## ONLINE EDUCATION CHALLENGES IN ASSESSMENT AND OPEN BOOK EXAMINATIONS

I attended a Panel Discussion on Online Education Challenges in Assessment and Open Book Examinations on 27th Aug 2020. It was organized by ACM Chennai, CSI Chennai, IEEE CS Madras.

Mr. HR Mohan, Chair, ACM Chennai gave a welcome Note and introduced the Panel members. Prof. CR Muthukrishnan, Former Deputy Director & Prof. of CSE, IIT Madras set the stage for panel discussion.



Prof. C.R. Muthukrishnan moderating the panel discussions

Prof. S Sadagopan, Director IIIT, Bangalore talked about the landscape of online examination and highlighted teacher centric thoughts on giving feedback on best answers and sharing corrected copies and solution set; setting out-of-syllabus questions or individualized question paper to avoid copying; out-of-box thinking to make the students correct their answers.



**Online examination landscape**

- Nature of assessment
  - Competitive exams (JEE GATE NEAT)
  - Exams integrated into learning (Assignment, Mid Term/ End-term exam)
- Key stages
  - Evaluation unit design (questions) – individual items, assembly, single / multiple variants
  - Delivery / administration of examination – Exam Hall PC, Any device, Any location, Home, LAN / Internet, Proctoring, Fairness checking
  - Assessment (correction, grading, feedback) – Human aid (totaling, checking, tabulation, comments, sharing answer books)
  - Lot of effort goes into overcoming students actions – copying, plagiarism, impersonation, stealing, group effort, extra time..
  - Specialized areas – HSS subjects, Programs, Lab experiments
- Tools (Moodle, BigBlueButton, ExamPad, Radix Learning, DOMjudge)

Prof. S Sadagopan on Online examination landscape

Dr. M Sasikumar, Executive Director, CDAC, Mumbai & Head, Educational Tech Unit, CDAC, Mumbai elaborated the challenges in flipped classrooms especially in automated proctoring. He talked about some innovative ideas on correlational analysis with learning pattern, other tests, writing style, writing errors

**Proctoring: Technological solutions**

- A lot of expectation from AI
  - Face orientation checking (false alarms!)
  - Presence of objects like camera (not always!)
  - Presence of book (not always)
  - Face recognition (no person change)
- Behaviour models from detailed logs
  - Answering pattern (for MCQ)
  - Question order, retries
  - Language pattern
  - Time taken...

Automated Online Exam Proctoring  
Joseph Anson, Liping Chen, Alex X. Liu, Stephen D. H. Fiu, and Xiaoming Liu

Dr. Sasikumar on challenges in proctoring

Prof. NJ Rao Former Prof. & Chairman, CEDT & Dept. of Management Studies, IISc, Bangalore elaborated on Question Banks and Quality of Learning. He justified question banks over other assessment instruments as it can overcome the issues like language ambiguities and technical inaccuracies, incompatibilities between assumed time required to respond and the scope of the question, uneven distribution of questions across COs

(Units/topics) and cognitive levels, and uneven difficulty levels

Mr. Janardhan Santhanam, Global Head, Talent Development, TCS talked about a tool developed by TCS for automated question paper generation from a given spec and question bank, keeping design ahead of technology to make the students addict of taking the tests

The video recording of the panel discussion is available in <https://bit.ly/3m4sMia>

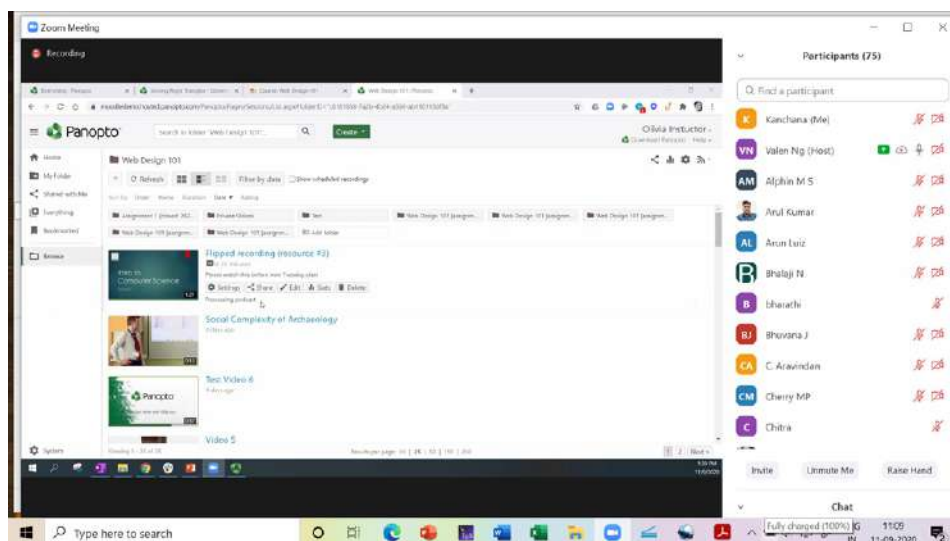
**Dr. R. Kanchana,**  
Associate Professor,  
Dept of CSE

## PANOPTO - KEY USER ONLINE TRAINING

After SSN signed up with Panopto for their enterprise services, Panopto arranged key user online training on 11th Sep 2020 from 10 am to 11:30 am. The session was handled by Dr. Valen Ng from Panopto.

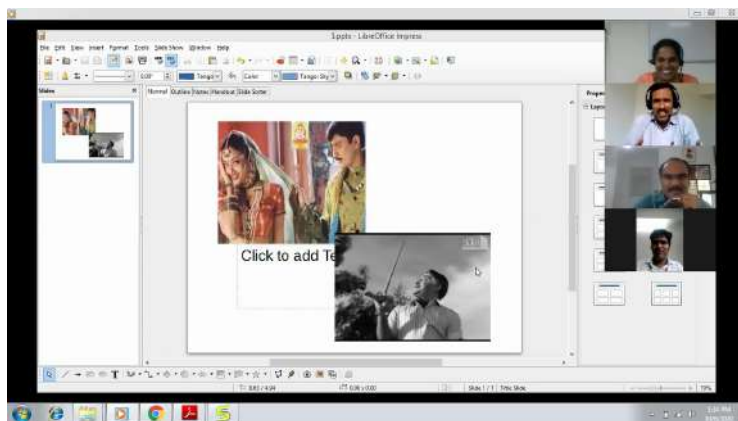
The training session covered the details of how to use Panopto for recording, sharing, and streaming videos. The training also covered how to use Panopto directly from our LMS and Dr Valen Ng explained the common editing tasks, creating a quiz to make the video interactive, and analytics. The Q&A session was very effective clarifying most of our doubts.

**Dr. R. Kanchana,**  
Associate Professor,  
Dept of CSE



## TEACHERS DAY CELEBRATION

1. **Dr. D. Thenmozhi** organized Anthakshari event as part of teachers day celebration 2020 on 18 August 2020.. **Dr. Chitra Babu** participated along with **Dr. K. Vijayshekhar** and **Mr. A. Balasubramanian** in the Anthakshari competition conducted as part of the Teachers' Day cultural and won the first prize.



2. **Dr. D. Thenmozhi** organized Sing a song event as part of teachers day celebration 2020 on 20 August 2020.

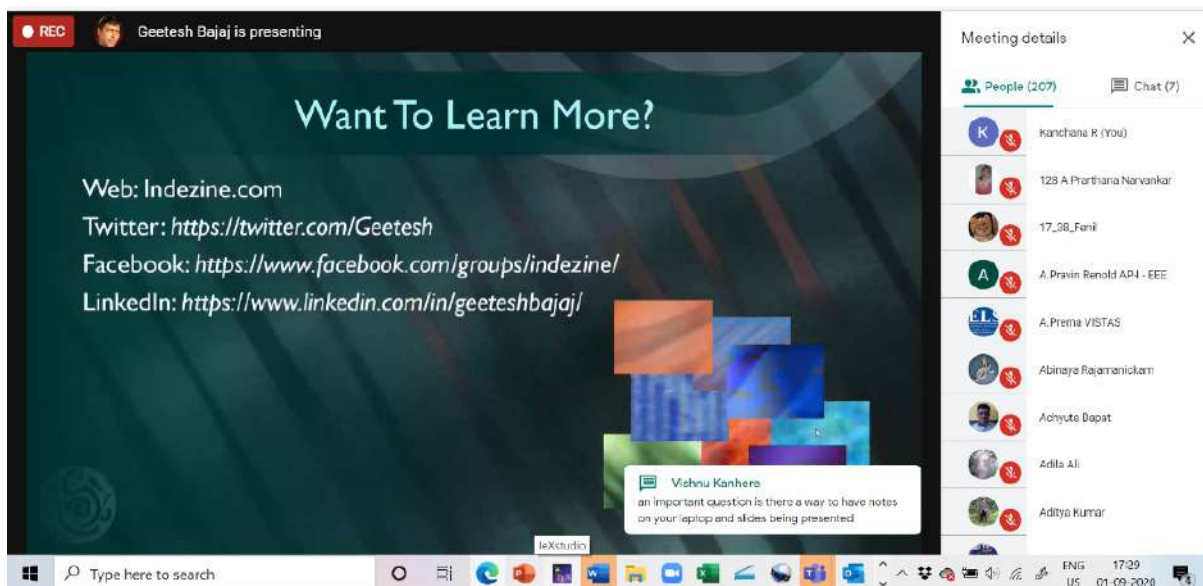


3. **Dr. D. Thenmozhi** and **Dr. B. Bharathi** received the Best Teacher's award, for the academic year 2018 – 2019.

# EFFECTIVE PRESENTATIONS USING OUTLINES IN POWERPOINT

Dr. R. Kanchana attended a webinar on “Effective Presentations using Outlines in PowerPoint” on 1st Sep 2020. The speaker was Mr. Geetesh Bajaj, Microsoft PowerPoint MVP, Head of Indezine.com. The event was organized by ACM Chennai, IEEE CS Madras, and CSI Chennai.

In this talk, a demo was given about how an effective presentation can be created using outlines – a feature in MS-PPT. The other features that were explained are: how to insert an image, how to choose a design layout for slides.



To import Outlines in PowerPoint

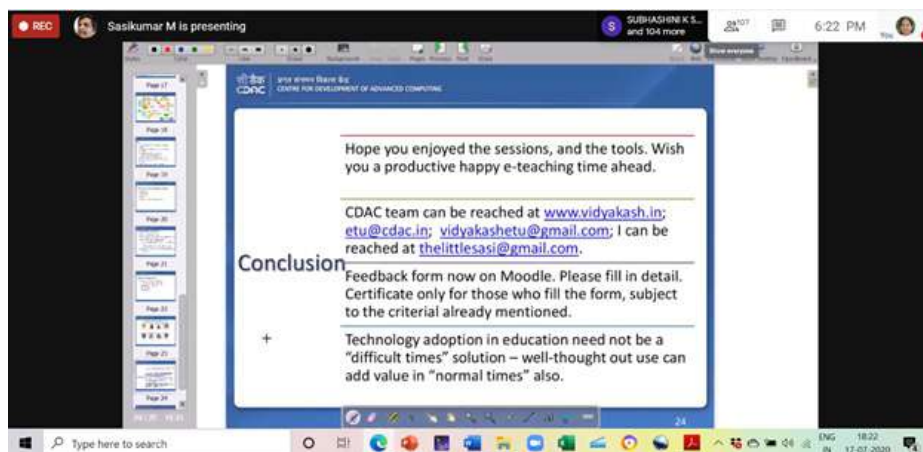
<https://presglossary.indezine.com/outlines-import/>

- Dr. R. Kanchana,  
Associate Professor,  
Dept of CSE

## E-LEARNING CONTENT CREATION

I attended the workshop on e-Learning content creation during 13 - 17 July 2020. It was organized by CSI Chennai, IEEE CS Madras and ACM Chennai in association with CDAC Mumbai.

The resource persons from CDAC includes Dr. Sasikumar, Dr. Archana Rane with his team. A variety of tools were introduced in this workshop which are useful to prepare for flipped classrooms. Everyday there was a homework involving the tools learnt and the next day it was assessed, and the feedback was given. It helped me to develop my skills. All the lecture presentations, tool installers, demo videos, discussion forums, etc were available in moodle platform.



Apart from video-recording & animation in powerpoint presentation, Moodle for LMS, Open Office Draw, the tools which I learnt are Free online diagramming software, Video recording and live streaming tool OBS Studio, Video editing tool openshot, Audio editing tool audacity, Add interactive contents to video H5P, Video Transcoding tool Handbrake, Mind mapping tools VUE - Visual understanding Environment, Story map creation tool StoryMapJS, Timeline creation tool Timeline JS, Wikisource Dokuwiki, Brainstorming and collaboration Padlet, Online quiz and assessment, Interactive lecture Openboard, Interactive presentation Kahoot.

**Dr. R. Kanchana,**  
Associate Professor,  
Dept of CSE



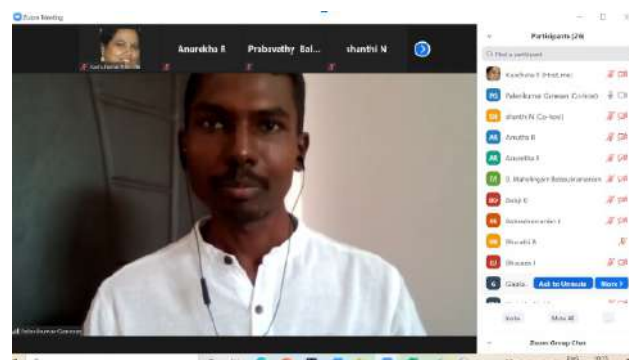
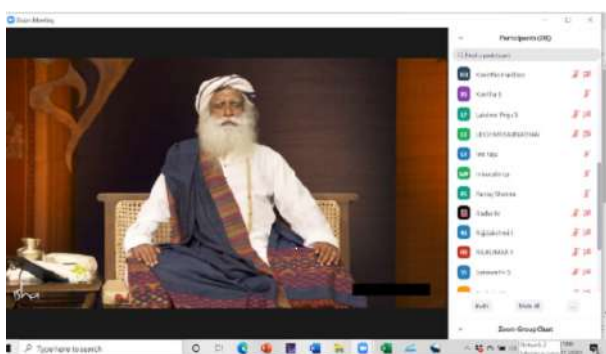
## THE SADHGURU TECHNIQUE

### *Yoga Sessions for faculty and students*

SSNCE organized Yoga sessions for second year UG students. Dr. R. Kanchana coordinated the 8-day event with a certified Isha Hatha Yoga practitioner Shri. Palani. During this workshop, simple but powerful tools of UPA Yoga, Kriyas and Meditation offered by Sadhguru, Isha Foundation were taught. It integrated students and faculty from the institution. Several spheres of the college- the NSS coordinated by Dr. P. Balaji, and the YRC headed by Dr. Joseph Gladwin came together to conduct the event. It spanned for 8 days from 22.07.2020 to 30.07.2020 as well-organized modules namely Yoga for Immunity, Yoga for Health, Yoga for Success, Yoga for Wellbeing, Yoga for Peace, Yoga for Joy and Love, Yoga for Inner Exploration, Meditations for Mental Health.

Upa Yoga activates the joints, muscles, and energy system. Based on a sophisticated understanding of the body's mechanics, Upa Yoga dispels inertia in the body's energy and brings ease to the whole system. Just five minutes of Upa Yoga, a day, can transform your life! These simple practices are designed to help anyone cut through the struggle and walk through life with ease.

The benefits of these session include: Enhances vitality, focus, memory, and productivity, Strengthens and stabilizes the spine, Stabilizes the body, mind, and emotions, Can relieve back pain, stress, anxiety, and tension, Can relieve from chronic ailments and improves overall health, Enhances teamwork and communication, Imparts a lasting sense of joy, peace, and fulfillment.



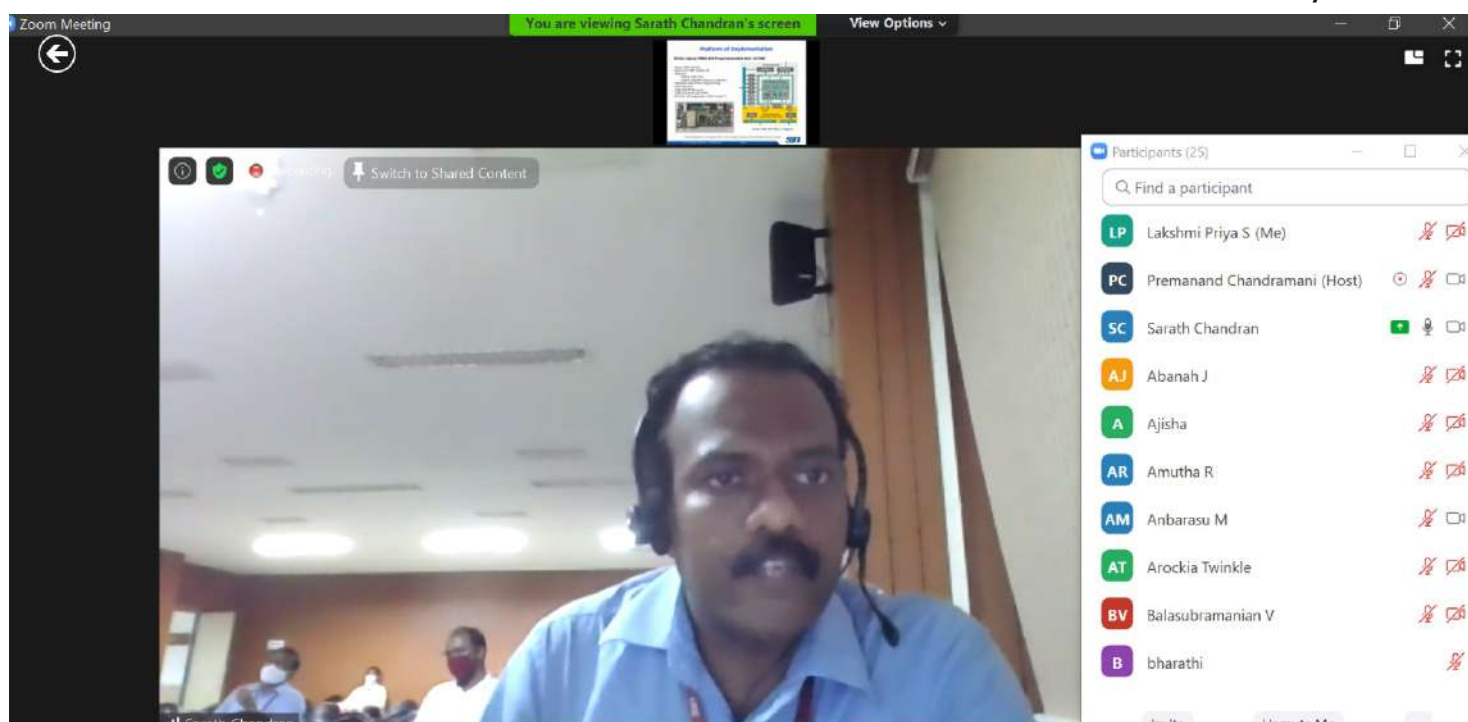
The sessions were well received with an average of 180 students every day. The audience also included faculty members, non-teaching staff and research scholars. The practices were noted to be incredibly supportive to the student community in this pandemic situation. This set fruitful session was organized by Dr. R. Kanchana.

## REACHING THE MILESTONE...

I successfully defended my thesis on "Improving Energy Efficiency through Configurable System-on-Chip Block Matching Architectures for Motion Estimation in Video Encoding" under the supervision of Dr. Premanand V. Chandramani, Professor, Department of ECE, SSN College of Engineering. The public Viva Voce examination was conducted on 28.09.2020 in ECE Seminar Hall and through zoom online platform, in the online presence of Dr. M. Anbarasu, Associate Professor, Department of Electrical Engineering, IIT Madras (Internal Examiner) and Dr. G. Lakshmi Narayanan, Professor, Department of ECE, NIT Trichy (subject expert).

I would like to express my gratitude to my supervisor, Dr. Premanand V. Chandramani for his continuous motivation and timely guidance throughout the period of my work. I thank SSN management for providing the grant under the faculty research funding scheme. I am grateful to my doctoral committee members Dr. R. Srinivasan, Dept of IT, SSN College of Engineering and Dr. A. P. Shanthi, Professor, Dept. of CSE, Anna University for their valuable suggestions and corrections during various stages of the work. I would also like to thank Dr. Chitra Babu (HoD, Dept of CSE, SSNCE), Dr. S. Radha (HoD, Dept of ECE, SSNCE), my colleagues, friends and family members for their support in reaching the milestone.

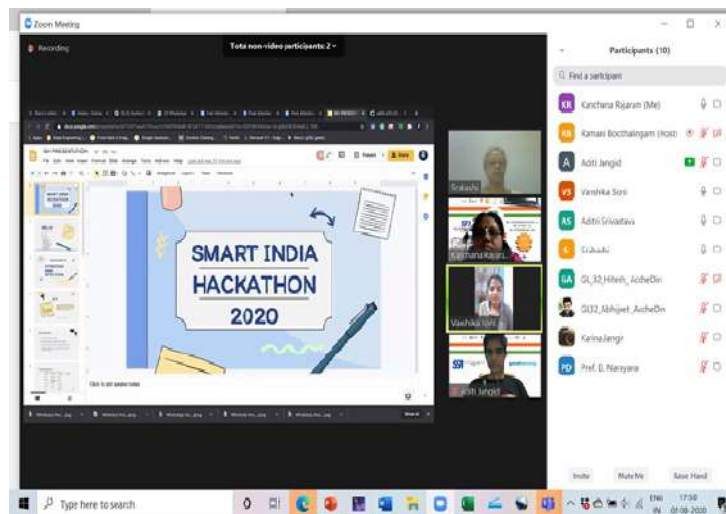
**Dr. Sarath Chandran K. R.**  
AP/CSE



## EXPERIENCE AS AN EVALUATOR IN SIH 2020

I was one of the evaluators in SIH 2020 for the problem statement given by Great Learning. The problem was Attention Span Detection in Online Instructor Led Sessions.

I was in a panel along with Dr. Srabashi Basu and Dr. Narayana from Great Learning. We had 5 teams working on the problem. The evaluation sessions on all the three days were fruitful and we could provide a lot suggestions to the teams. All the teams showed involvement and put in their efforts.



The winner was the team meraki and the reasons for their success are the following: They had a clear view about the problem, process of solving and techniques. Furthermore, they thought about the future requirements and made their solution extendable and adaptive. They could work on the dataset given by GL and show the output as well as incorporate all the suggestions of the evaluators in their final solution. Finally, team coordination was good, and every member of the team demonstrated a part of the solution.

The other teams could have done better if more handholding had been there, though they had a few special features or innovative ideas. Though the entire event happened in online, everyone turned it as a learning opportunity to adapt to the new technologies and we could see that students were excited solving the problem. I enjoyed my evaluation process and interacting with the students. I thank the organizers for giving this opportunity to me.

**Dr. R. Kanchana,**  
Associate Professor,  
Dept of CSE

## THE FIRST EVER VIRTUAL SMART INDIA HACKATHON AT SSN

SSN hosted the virtual inauguration ceremony at the institutional level to mark the beginning of the 3-day Grand Finale of World's Biggest Open Innovation Model i.e. Smart India Hackathon 2020 Software Edition (Virtual), an initiative by All India Council for Technical Education (AICTE) under the aegis of Ministry of Human Resource Development (MHRD) and in collaboration with Inter-Institutional Inclusive Innovations Center (i4c), MyGov, Persistent Systems, and MIC.

SSN is one of the nodal centers across India that has been chosen for the 3rd time (second consecutive year) to conduct this 3-day national-level mega event. This year, SSN represented 5 problem statements by 22 teams comprising of 138 participants. SSN had been assigned with five problem statements from Great Learning, TCI, FIS Global and Autodesk. Autodesk seeking a solution for personalized flying vehicle called "Personal Air Vehicle (PAV)" to solve traffic problems in India. FIS global was seeking solutions for two problem statements: 1. Data Mining Robot using AI / ML, 2. Jarvis (software robot assistant) for corporations. TCI was seeking a solution for predicting the tariff rate for next session (monthly/weekly/daily/hourly) for part truck load (Sundry and LTL).

Great Learning (GL) has academic collaboration with leading Indian and global institutes like Great Lakes institute of management, Purdue University, UT Austin's McCombs School of Business, Stanford University and so forth to deliver technical programs. The problem statement is to create a mechanism to monitor and measure the attention span of the learners in the instructor led online sessions. Ministries allocated to SSN Nodal Centre and the problem statements are listed below.

Ministry	Problem statement	No. of teams
Great Learning	Attention Span Detection in Online Instructor Led Sessions	5
TCI	Prediction of tariff rate	2
FIS Global	Data Mining Robot using AI / ML	5
FIS Global	Jarvis (software robot assistant) for corporations	5
Autodesk	Ultra compact personalized flying vehicle	5

Dr.Chitra Babu Prof & Head/CSE (SIH 2020-SSN Nodal Officer), Dr. Joseph Gladwin Associate Professor (SPOC) along with faculty members from CSE, IT and ECE had successfully conducted the first-ever virtual online Smart India Hackathon.



### Inauguration : Institute Level

The inauguration function of the virtual Grand Finale of the Smart India Hackathon Software (SIH) 2020 Edition started at SSN Nodal Centre between 8 - 10 AM on 1st August (Saturday) morning. There is an exclusive YouTube Channel is created for SIH 2020 @ SSN Nodal Centre and a live relay of the inauguration and valedictory function is broadcasted on this Youtube channel (<https://www.youtube.com/channel/UCvajBUwKbawD5DEA6PB9AOw>).

Our President, Dr. Kala Vijayakumar and our principal Dr.V.E. Annamalai highly motivated and encouraged the participants in their address and also conveyed the heartiest wishes to all the participants. The Chief Guest for the institutional inauguration Captain TS Ramanujam CEO, Logistics Sector Skills Council extended his warm wishes to all the participants. Mr. Kewyn George Director - IS, Expeditors, Mr. Conway Goh, APAC Education Head, Autodesk and Dr. Ranadhir Ghosh, AI Quantitative Analyst, FIS Global were the Guests of Honour. Nodal officer Dr. Chitra Babu, proposed the Vote of Thanks. The institutional inauguration was followed by national inauguration that took place virtually from New Delhi wherein dignitaries including, Hon'ble Minister of HRD, Shri Ramesh Pokhriyal 'Nishank', Chairman AICTE Prof. Anil Sahasrabudhe, and Secretary MHRD Sh. Amit Khare, Abhay Jere Chief Innovation Officer at Ministry of HRD, Dr.Mohit Gambhir Innovation Director MHRD Innovation cell.



*Mrs. Kala Vijayakumar, Dr.V.E. Annamalai, Dr.Chitra Babu, Mr. Conway Goh and Mr. Kewyn George*



## Grand finale SIH 2020

Later, the grand finale SIH 2020 went on live, and continued till 10 PM of 3rd August 2020. On each day of grand finale, mentoring and evaluation were executed successfully and the evaluation scores were entered on the evaluation portal within the scheduled time by all the evaluators. The entire Hackathon process was monitored by Mr. Sant Ranjan, Vigilant Officer, MHRD's Innovation Cell.

## Leadership talk

As a part of SIH 2020. Leadership talk was arranged on August 2, 2020 from 7.30 AM to 8.30 PM, which was broadcasted live on the YouTube channel. Talk was given by Mr. Ganesh Sankaralingam, Director, Data Science & Machine Learning, Latentview Analytics .

## Valedictory: 4th August 2020, 2:30 PM

The valedictory function was scheduled on 4th August afternoon(2.30 pm) to announce the winning teams of Smart India Hackathon 2020. The function was graced by Guests of Honour Mr. Arjun Nair, Director and Co-Founder, Great Learning, Mr. Deepankar Bhattacharyya, India Education Lead Autodesk Education, Mr. Puran Gupta, Asst. Vice President, Information Technology, Transport Corporation of India Ltd and Mr. Anudeep Jain, FIS Global Senior Manager, Product Development. The winning teams for each of the 5 problem statements were announced. The cash prize of Rs. 1 Lakh was awarded for each winning team.

World's largest Hackathon Organised by the Ministry of HRD & AICTE Nodal Centre: Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, between 1-3 August 2020.

**Dr.K.Madheswari**  
Associate Professor,  
CSE/SSNCE.



## SIH Organizing Team 2020



### Feedback from MIC-SPOC, Vigilant Officer, and Head of the Organizing Technical Partner



**Ms. Disha Singh,**  
Persistent Systems  
MIC-SPOC

Thank you so much for your unrelenting support in the last few weeks to make SIH 2020 a grand success. You really have great team and all your preparations were so well organized and well planned. Even though there were last minute changes/ additions, you all took it a stride and made seamless arrangements. Your team is very hardworking and enthusiastic and most importantly very accommodating. It's been my privilege to be associated with you and your institute.



**Mr. Sachin Gaur**

**Director Operations, InnovatioCuris**

**Partner of SIH 2020**

I appreciate your organisational abilities during the program and definitely your center was one of the best managed Nodal Centers!



**Mr. Sant Ranjan,**  
Principal Solution Architect,  
KPIT Technologies, Vigilant Officer

I must say that the whole SIH 2020 at SSN went flawless, focused and well managed, I never found any moment where I felt necessity of improvement and that too when this whole event was conducted virtually. The energy and commitment from your team was tremendous and I enjoyed whole event.

## INCORPORATING UNIVERSAL HUMAN VALUES IN EDUCATION

The workshop on Incorporating Universal Human Values in Education was organized by AICTE during 05-10-2020 to 09-10-2020.

On the first day, Pre-workshop survey is opened and filled the pre-requisite questions regarding the workshop. Chairman of AICTE, Dr. Anil D Sahasrabudhe, shared his thoughts about the workshop and its importance, the Prof. Rajiv Kumar, Member Secretary, NCC-IP as member at AICTE, gave a introduction to workshop and explained when it was started and its motivation. Totally 1576 members were registers for the workshop and nearly 1000 members were present. Randomly we introduced and workshop presentation started sharply at 9:30AM.

Topics covered during the workshop are : Importance of Human Values, Skills - how to interact with other human beings, Harmony and Peace, Harmony in continuity, Holistic view of Teaching and Learning process, Right Understanding, Peace of Mind, Living in Harmony, respecting other feelings, Relationship, Living without ego, understanding other feelings, maintaining good relationship, Physical Facility, Healthy food, travelling around the world, Money, Appreciation from others, Human Consciousness, Justice in Relationship, Participation with Nature, Knowing oneself, Intention and Competence, Right evaluation, over-evaluation, under-evaluation, or otherwise-evaluation, Differentiation - Age, Body, Physical Strength, Mutual Happiness, Mutual Prosperity, Self-Exploration, Natural Acceptance, Consciousness, Right Motivation and understanding, Mutual Fulfilment with Nature,.

Every day we must submit an assignment related to the topics and in between talks polls and quizzes will get popped and we must answer it. On last day, test session started, three tests are conducted, all are multiple choice questions related to the topics discussed in all days.

The organizers called upon every participant to share their views regarding the induction program. Participants were asked to prepare these things: brief introduction about them, personal achievement through the workshop, thoughts before and after the workshop, potential and possibility you see in this content and process, improvements needed in this workshop.

Presentation of participants went on till 7PM. Then Self Evaluation, Post-workshop Survey and Feedback form opened, and we submitted it. Overall, this workshop made us to understand the importance of Human values and taught us how to seed these values to the younger generation.

**Dr Suresh Jaganathan,**  
**Dr. P. Mirunalini**  
**Associate Professor,**  
**Dept. of CSE**

## **WORKSHOP ON PUBLISHING PROCESS**

We attended the two-day National open workshop on “Getting Aligned to the Publishing Process” conducted by Researcher Academy On Campus, Elsevier on 25th and 28th September, 2020. Mr. Vishal Gupta, Customer Consultant-South Asia, Elsevier delivered the presentation on both days. He delivered a talk on “Learning Basics of Publishing in Quality Journals” on 25th September, 2020. He explained the various issues in understanding the research, the publishing workflow and how to improve the research writing skills. On 28th September, he gave a demo on how to install the Mendeley Desktop software and how it can be used in managing the references while writing a research paper. Mendeley can be used to download and store articles of interest and organize them according to our needs. Added as a plug-in to Microsoft office, it proves very useful in citing the references and writing bibliography in standardized formats. He also discussed about the publishing ethics, impact factor and cite score.

Taken from his presentation, the following are the tips to be followed for writing a good manuscript: Think before writing, Choose the right journal and article type, Use the right process to write paper, Proper Language, Ensure paper is up-to-date and in right context, Use the correct article structure, Be prepared for common questions of reviewers.

Also, the web version of Mendeley has a forum for researchers and academicians to connect and collaborate in common areas of interest. Mr. Gupta emphasized on the importance of how the research community should come together, brainstorm ideas which will ultimately lead us to fruitful research in new and upcoming fields.

**Dr. Valli Devi K.**  
**Ms. S. Rajalakshmi**  
**Ms. S. LakshmiPriya**  
**CSE Department**



## WORKSHOP ON DEEP LEARNING FOR HEALTHCARE

A workshop titled “DST-SERB Sponsored Workshop on Deep Learning for Healthcare” has been organized by Dr.D.Thenmozhi during the academic year 2020. Rs.10,000/- has been sanctioned by Department of Science and Technology (DST) - SERB scheme for conducting this workshop. The workshop was conducted on 09.10.2020 from 8.30 am to 4.30 pm. About 69 students, 42 faculty members and 24 research scholars, in total of 135 participants participated in the workshop.

Eminent speakers from academic institutions, research centres and industry gave talks in the workshop. Logesh Kumar umpathi and Venkatesh from Saama Technologies gave talks namely NLP in healthcare and Confidentiality & privacy in healthcare respectively. Dr. Mayuri A Mehta from Sarvajanic College of Engineering & Technology, Gujarat delivered a talk on applications of deep learning in healthcare. Dr. Dorren Robin from Computational Intelligence Research Foundation explained Disease analysis and prediction using deep learning tools. A hands-on session about Simple transformers for detecting anorexia was conducted by Dr. Thenmozhi D and Kayalvizhi S in the workshop. The workshop benefited the research scholars, faculty members and students by exploring research problems and deep learning solutions in healthcare.

**Dr. Thenmozhi D.**  
CSE Department





## ACM-W CHENNAI REGIONAL CELEBRATION OF WOMEN IN COMPUTING 2020

ACM-W Chennai Regional celebration of women in computing 2020 was organized by ACM-W Chennai Professional Chapter along with the ACM-W Student Chapters of SSN College of Engineering, SRM Institute of Science, VIT Chennai and Easwari Engineering College on 10th October 2020 with the theme "Artificial Intelligence for Social Good". It was mainly intended for Indian women undergraduate students to provide specialized knowledge and career advice in the field of Artificial Intelligence, Machine learning and Data Analytics. Due to the prevailing pandemic scenario, the event was organized in virtual mode on the Zoom online platform. The event was live streamed on YouTube: <https://www.youtube.com/watch?v=xEu0YMFUb0>

The event was started by Dr. Chitra Babu, Professor & Head, Department of Computer Science and Engineering, SSN College of Engineering (Autonomous), Member of ACM-W India Council.

### Inaugural Address

Dr Heena Timani, ACM W India Council Chair, Data Scientist, Co-Founder & Director of iAnanya Datalytix Pvt. Ltd. delivered the inaugural address. Dr. Heena highlighted the entire spectrum of benefits of ACM-W membership and took the opportunity to brief about past events as well as upcoming events that are going to be held under the banner of ACM India. She talked about ACM E-learning resources, ACM Digital library, and organization of summer/winter schools, Hackathon and programming contests that are specifically targeted for female students.

**What is ACM-W?**

Association for Computing Machinery Council on Women in Computing!

Part of a **1,00,000** members organization, the world's largest educational and scientific computing society.

Join ACM, Work with ACM-W!

zoom

## Keynote Talk

Dr. Mukta Paliwal, Persistent Systems, AWS certified ML Specialist, ACM India Eminent Speaker, delivered the keynote address on the topic "What is Responsible AI". She explained the Responsible AI framework that consists of methods and practices that should be adapted while developing AI based systems and software. Dr. Mukta showed several examples such as Deep Fake videos illustrating why Responsible AI is important while building AI based systems. Also, she covered the application of AI in various sectors such as Healthcare and Medicine, Banking and Finance, E-commerce, Social Media, Agriculture, Autonomous Vehicles, Robotics, Astronomy and Entertainment. The session was very useful and informative for the young minds. The feedback of the audience was collected through Mentimeter.



Dr. Mukta Paliwal, Persistent Systems, AWS certified ML Specialist, ACM India Eminent Speaker



Dr. Chitra Babu, Moderator

## Panel discussion

Following the keynote talk, there was a panel discussion on the topic "Preparing for successful careers in AI, ML and Data Science". This panel was moderated by Dr. Chitra Babu. She set the context for the panel discussion with the following narrative: Over the past decade data in every consumable field data has grown exponentially in terms of volume and variety. The availability of huge archival and historical data has opened up fresh opportunities for every business to analyse the data, finding interesting patterns and drive valuable insights for the future decision-making. Artificial Intelligence and machine learning have made huge strides in the past decade. Especially deep learning, a sub field of machine learning has made phenomenal inroads in solving problems in the area of image analysis, language translation and speech recognition.

This has created significant interest in devising and deploying AI and ML based solutions in most of the industry verticals such as healthcare, finance, retail, energy, manufacturing, agriculture and education. This has created a huge demand for workforce that is well trained in areas such AI, M. As different industries are attempting to maximize their productivity through data analytics, it has also become important for the work force to be adequately trained in these technologies.

Dr. Chitra Babu introduced the panel members:

1. Dr.Kalika Bali, Principal Researcher, Microsoft Research Labs, Bangalore.
2. Ms. Neelima Vobugari, CEO, Tarah AI, Bangalore.
3. Ms. Shachi Dave, Research Engineer and founding member of the Natural Language Understanding Group at Google Research India, Bangalore.
4. Mr. Anudeep Jain, Senior Manager - Product development, FIS Global, Pune.



During the first round, all the panel members shared their experiences about working in the area of AI, ML and Data Science as well as their thoughts on the potential career opportunities in these domains and how the students should equip themselves with the right kind of skills while they are in the college

Shachi discussed her career at Google focusing on NLP. She emphasized on three aspects that are important for any undergraduate student to distinguish themselves in career. 1. Curiosity: apart from theoretical background, she asked the students to equip themselves by

reading current literature on recent innovations. 2. Practice: She insisted the importance of practicing whatever was learnt and applying the theoretical knowledge to solve real world problems. She also advised the students to participate in Hackathon, implement project ideas, post the code in Github. 3. Mock interviews: She reiterated how important it is for the students to prepare well for the interviews so that they can confidently talk about the things that are mentioned in their resume.

Mr. Anudeep began with the very famous quote "In GOD we trust, all others must bring data" by Dr.W. Edwards Deming. He observed that AI, ML and data science is all about data as the new oil to be used for decision-making. He highlighted the career opportunities for the students in financial sector and emphasized how market sentiment Analysis is one of the important problems in the financial domain. He also reiterated that professional disposition and strong understanding of the problem are very important to succeed in career in addition to technical knowledge.

Dr.Kalika shared her experiences on interviewing candidates for research fellow programs at Microsoft. Nearly, MSR has been interviewing 1000+ students every year. The interview panel expects the broader perspective from students regarding why they are doing what they are doing.

Apart from practicing rigorous coding, she insisted the students to think about the problem, why the problem is important to solve. She observed that most of the times, the students have the technical knowledge, but they struggle with how to apply this to solve the real-life problems. She advised the students to break complex problems into smaller parts and attempt solving the smaller parts so that it becomes more concrete and tangible. Moreover, she also conveyed that the students have to understand the need of the user and be sensitive to the user implications as well as social implications while developing AI and ML based systems.

Ms. Neelima Vobugari, CEO, Tarah AI, pointed out how it is a very good time to get into this exciting field of AI, ML and Data Science. She also inspired the students by narrating her own experiences of launching a startup and how she efficiently manages her work and family. She urged the students to develop prototype projects using the current technologies. She also indicated that healthcare domain will be a top priority one to benefit from AI based

solutions. The panelists patiently answered the questions of enthusiastic audience.

It was concluded that the students should develop sound technical knowledge, skills in programming languages such as Python, ML/DL frameworks, passion for problem-solving and healthy professional attitude to land in successful dream careers in Data Science.

### ACM-W Regional Celebrations 2020: Coding League

As part of this event, a competitive coding contest named as "Coding League" exclusively meant for female students was conducted on HackerRank with over 600 registered participants from over 25 institutions all across India.

This competition was hosted in HackerRank on 2nd October. In the preliminary round that was conducted from 11.00 am to 1.00 pm, more than 250 female students participated. Among them, 40 were shortlisted and the final round was conducted between 3.00 pm to 5.00 pm on the same day.



The second prize winner for the CodingLeague event is Soumya Malgonde from Pune Institute of Computer Technology. She is a 3rd year B.Tech student from the IT department. She received an Amazon gift voucher worth of Rs. 2000/

And the winner is Avishree Khare from BITS Pilani, Goa campus. She's a 4th year B.Tech student from the CSE department. She received an Amazon gift voucher worth of Rs. 3000/

The prize-winners shared their positive experience with their participation in CodingLeague. Amidst the distressing pandemic, this celebration event invigorated everyone with its exceptionally well organised sequence of sessions and it received very good feedback from the participants.

**Dr.K.Madheswari**  
Associate Professor,  
CSE/SSNCE.



## ROLE OF AI IN THE FINANCIAL SERVICE SECTOR

The SSN ACM and ACM-W student chapter organized Expert talk on Role of AI in the Financial Service Sector by industry expert Dr Ranadhir Ghosh, AI/ML Quantitative Specialist at FIS Global on 11th September 6:00 - 7:00 PM IST

AI is transforming the financial service landscape in an unprecedented way of how we interact with money. Almost all business verticals from the credit, investment, risk management to customer experience are affected. In this talk, he focused on how frontrunners, followers and starters are using AI for different types of use cases which are mainly categorized into cost reduction, revenue enhancement and customer engagement. Discussed the types of roles required for implementing such programs and their short and medium-term demand for the market. Finally, the speaker discussed what kind of scientific solution will be required from the AI research community in the next 5 years, apart from the immediate need for many AI-based applied and engineering solutions.

**Dr.K.Madheswari**  
**Associate Professor,**  
**CSE/SSNCE.**



## GOOGLE SUMMERS

### NOTES FROM GOOGLE SUMMER SCHOOL

Google Research India hosted a three day AI summer school, the first of its kind, to discuss the state-of-the-art of ML Techniques and also to discuss their limitations and critiques. Our HoD Dr. Chitra Babu had disseminated this info to students and had strongly encouraged them to apply for the same. There were totally 150 students who were selected for this summer school. The selection process was highly competitive. 10-12 had applied from our college itself and 5 final year CSE students were selected to participate in the summer school. The summer school was divided into three tracks -

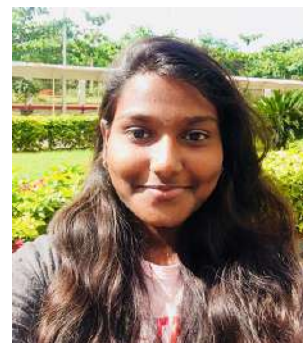
- AI for Social Good
- Natural Language Understanding
- Computer Vision

*S Jahnavi Srividya* from final year was selected as one of the 50 people selected for the AI for Social Good track.

There was a General ML track along with specialisation tracks in Natural Language Understanding, Computer Vision and AI for Social Good + Human Computer Interaction. I was selected for the Computer Vision track which had amazing lectures and discussions on Differentiable ranking and sorting, Large Scale Visual Representation Learning, Introduction to Deep Learning for Computer Vision etc. I was also lucky to get to attend Lectures from the other tracks and "Learning to Understand Language in Context" by Eunsol Choi from the NLP track was especially Intriguing. "Multimodal Architectures for Video Understanding" presented and discussed by Arsha Nagrani was supremely insightful and my favourite lecture, it addressed the significance of multimodality and the question-"When humans are processing multimodal information to draw inferences, why not machines?".

*"The Summer School was great exposure to the various realms of research in AI and an amazing experience networking with inspiring people in the field."*

Due to COVID-19 Pandemic, the Summer school happened virtually with lectures, discussions and social networking events throughout the day. The socials were hosted on Gather Town a video-calling space that lets multiple people hold separate conversations in parallel, walking in and out of those conversations just as easily as it would be in person. It was a brilliant virtual experience.



*S Jahnavi Srividya*

*Nanda Harishankar Krishna and Naveen Narayanan* from final year were selected as one of the 50 people selected for the Computer Vision track.

The programme began with a keynote address by Jeff Dean, Senior Fellow at Google, in which he discussed their latest and high-impact research projects. We then had talks delivered by eminent professors and researchers from Google on cutting-edge research in AI. Some talks include Neuroevolution by David Ha, Long-range dependencies by Nal Kalchbrenner and discussions on multi-agent systems by Prof. Toby Walsh and Prof. Sarit Kraus. We also had panel discussions on why one should pursue a career in research, and a keynote on the work done at Google India AI.



*Nanda Harishankar Krishna*



*Naveen Narayanan*

An interesting component of the programme was the social session, where all participants and organisers met each other and discussed ideas on gather town, a virtual conference platform. The lectures were informative and gave us a lot of inspiration and food for thought. It was a wonderful experience and we are glad to have been given this opportunity.

*“ We got to know some of the opportunities that are present that are not so talked about, like pre doctoral programs, research fellows in places like microsoft, google etc.”*

The conversations that we had with some of them who had a very similar research profile like mine, was extremely fruitful. we got to talk with people who were far superior than me, involved in varied domains that we had no idea of. You get to know the labs that some of them work in, the work they are doing, the profs with whom they are working with etc.

*“ We would strongly recommend everyone to apply to summer schools like this, even if you are unaware as to how research works, because the exposure that you get from places like this can help you sort out what you want to do.”*

Reshma Ramesh Babu and Rohit Midha from final year were selected as one of the 50 people selected for the Computer Vision track.



*Reshma Ramesh Babu*



*Rohit Midha*

**Day 1** consisted of two lectures. The first lecture was by Professor Jean-Phillipe Vert, who spoke about differentiable ranking and sorting. Neil Houlsby then presented a great talk on Large Scale Visual Representation Learning and how Google has come up with solutions to some classical problems. These lectures were followed by a social hour which was conducted on gather.town, a virtual conference space walk-through.

*“It was a new experience to most of us and we were able to seamlessly move around and talk to many of our peers as well as senior researchers at Google effortlessly, much like in person.”*

Day 2 started off with a talk delivered by Vineet Gupta, a research scientist at Google Brain. His talk was titled Adaptive Optimization and he gave us an insight to the general optimization problem and its various caveats. This lecture was followed by a presentation that was much awaited by all. The famous Cristian Sminchisescu, who is a Research Scientist leading a team at Google, and a Professor at Lund University, then presented a talk titled End-to-end Generative 3D Human Shape and Pose models.

*“He gave us massive insight to generative human modelling and the end to end training pipeline that Google uses for the same.”*

Day 3 had an amazing line up of lectures by Rahul Sukthankar, a research scientist at Google Research and an Adjunct Professor at Carnegie Mellon University and Arsha Nagrani, a recent Ph.D. graduate from Oxford University’s VGG group, and an incoming research scientist at Google Research, Rahul Sukthankar. The day was wrapped up with a closing keynote and a long social hour.

## GOOGLE SUMMER OF CODE 2020

Every year, Google organises the Summer of Code, commonly known as GSoC, to help students contribute towards enriching open source software and earn a stipend at the same time. Students are required to choose or propose a project idea in consultation with the members of the organisation, and prepare a detailed proposal for the same. Members from the organisation then choose the students they would like to work with.

This summer, I had the opportunity to work with Homebrew, a popular package manager for macOS. I was working on creating a domain-specific language for Livecheck, a feature which identifies the latest version of software from upstream. My project also went beyond its initial goals, and I ended integrating the entire Livecheck functionality within the main codebase.

While I had little experience with Ruby, the lingua franca of Homebrew, I managed to pick up a good working knowledge of it during the summer, at least in the context of Homebrew. This would not have been possible without the support of my mentors, who were quick to respond, and motivated me all along.

It was a wonderful opportunity to be mentored by seasoned developers, work on open source software and get rewarded at the same time. I strongly encourage others to take up GSoC next summer, it is a wonderful experience one shouldn't miss.

Google Summer of Code



--Nanda H Krishna  
IV Year CSE



## CMU INTERNSHIP

This summer, 8 students from SSN had the opportunity to intern at CMU under Dr. Raj Reddy. Two students were selected from each of CSE, IT, ECE and EEE for the program. From our department, current final year students Nanda and Pavya were selected.

While the internship would have originally been at Pittsburgh, USA, it was converted into an online internship due to COVID-19. The interns had the opportunity to learn the fundamentals of Machine Learning and also implement and present the findings of some breakthrough papers in AI and Deep Learning. Every week, the interns presented the findings of a highly influential paper in the aforementioned fields as a team, and were graded on their presentation skills, team work and coherence.

At the end of the internship, the students once again collaborated in teams to work on a Data Science capstone project, taking up a tough real-world problem to solve. The experience of working with other interns from different regions was also memorable. Overall, it was a great learning experience – the interns were introduced to many new concepts and ideas, and they also gained confidence and interest towards research in ML.



--Nanda H Krishna  
IV Year CSE



**Pavya S**  
**IV Year CSE**

I had an opportunity to do my online summer internship in Machine Learning with Carnegie Mellon University(CMU) under Prof. Raj Reddy. This Internship was for Six weeks. Though Six weeks is a short period for an Internship, we learnt a lot and I am grateful to have had such an opportunity. This experience was different and enriching, especially in an online environment. The faculties were very much approachable and always available to give us valuable suggestions and clear our doubts.

I specifically would like to acknowledge and extend my sincere thanks to CMU and SSN for giving me the wonderful opportunity. During this six weeks of Internship, we had an opportunity to learn following topics in Machine Learning and Data Science: Theoretical Foundations of Machine Learning, Exploratory Data Analysis and Dimensionality Reduction, Unsupervised/supervised Machine Learning Paradigms, Model Selection/Evaluation and Optimization, and Introduction to Deep Learning.

We also gained insights into researching, analyzing and presenting key findings of some of the most influential papers in Artificial Intelligence. Every Saturday we present a Research paper as a team. After each presentation the valuable feedback about our presentation was given by the CMU faculties, which helps us to improve ourselves. The weekly presentation helps me to have a great confidence level.

We are also given an opportunity to implement some key concepts in Machine Learning using the tools like Numpy, Matplotlib, Pandas, Scikit-learn. We were given weekly assignments based on the topics we have learnt. These assignments help us to apply our skills. And these assignments were evaluated by the CMU faculties and the valuable feedback was given.

As a part of this internship, we did a project as a team, where we applied the ML techniques that we have learnt. We are a team of four members and our project is "Streamlining Job Requirement Through Machine Learning". In this project we built a Machine Learning model to predict the placement status (placed/not placed) of the candidate based on the qualification and performance. We also built a Machine learning model to predict the salary range of the candidate based on the qualification and performance.

Overall, I had a great internship experience with CMU. This internship boosted my interest towards Machine Learning. I would like to thank the department as well as SSN Management for providing me this valuable opportunity.

**--Pavya S**  
**IV Year CSE**

## INFOSYS SUMMER OF IDEATHON

Infosys Summer Of Ideathon is an eight week global Ideathon powered by Infosys. This opportunity came in through college. I was curious about this program and decided to apply to it. I was shortlisted and had a couple of tests before I was selected. I was one of the 400 students selected out of 1 Lakh+ applicants.

I am currently working on a module to test cognitive systems. I am glad to share that I have also been selected as the team lead. Besides this project, I am also mentored by the Senior tech leads from Infosys. In addition to project innovation, we are also provided access to Infosys's exclusive education program Wingspan, where the emerging technologies are being taught by experts. I am looking forward to another 7 weeks of learning and ideating!

*Srinithyee S K*  
*3rd Year*

## WEBINAR ON MICROSERVICES

The Guest Lecturer for the day, Dr. J. Baskaran. He is a Cloud Practice Head at Tata Consultancy Services and primarily works on managing large cloud transformation programs in the area of migration, transformation, modernization and automation. He obtained his Doctorate in Multicloud management using Machine Learning and Optimization techniques from Vels University, Chennai. His key areas of focus include a) Data Centre management with Predictive and Operational Analytics and b) Cloud Monitoring and management with Machine learning and Deep Learning to name a few. The event happened on 19 September 2020.

During the course of the webinar, Dr. Baskaran addressed the overview of Microservices and its applications. The major topics covered in the lecture were: Introduction to various types of services, Service oriented architecture, Microservices design & deployment, The various patterns available in microservices. He also addressed the various models of deployment with containers, kubernetes etc and about the development frameworks for microservices like spring boot and spring cloud.

The lecture primarily covered the application of microservices in the industry today and how companies are getting benefited by application modernization as part of their digital transformation using containers and microservices.

**Shriya Baskaran,**  
**5th Semester,**  
**CSE**

## TWITTER DEVELOPHER 2020

DevelopHER is a 2 day interactive program conducted by Twitter. This is the first time the event went virtual and it was one filled with loads of learning and fun!

I was one of the 30 attendees selected out of a competitive pool of 1000+ applicants to attend this program focused on professional and technical development including networking, personal branding, resume writing and coding challenges.

I was given an enriching opportunity to learn about the technologies used in Twitter and invaluable insights on how to build the perfect resume. There was also an extremely interesting and inspiring Fireside chat featuring the CEO of Twitter, Jack Dorsey.

The most interesting part of the program was the Coding Challenge curated specially by the Engineers at Twitter. The problems were based on real world challenges faced at Twitter and it kept us on toes. I am extremely proud to share that my team won the first prize which included a hefty cash prize. It was indeed a sweet gesture from Twitter to send me several swags (notebooks, water bottle, T shirt, laptop stickers), something that I would cherish for long, remembering the several lessons taken back from this event.

I feel overwhelmed and grateful to have been selected to this program because it was extremely insightful. Besides, it has also given me an opportunity to network with not only the Tech Leads at Twitter, but also several smart students across the globe!



*Srinithyee S K*  
*3rd Year*

## INTERN @ ANANTARA SOLUTIONS



**VasanthaRaman.A**



**Kevin J Thelly**

Anantara solutions offered internships to our batch during the summer of 2020. It was a sister company of Leancloud headed by Mr. Vasanth Balakrishnan. The selection process started by January 2020 when we received a mail notification from CSE department regarding the internship offers for pre final years from Leancloud.

Once we registered for the process, a task was assigned to us develop an application with python's flask framework. After completion of the requirement, we had a code review session with their company IT head. After this round, the selected people got a telephonic call from Mr. Vasanth himself who described the job in detail. Different students were given different roles at different companies. Kevin J Thelly and I were offered analyst roles at Anantara solutions that was headed by Mr. Sudharsan. Anantara solutions is an international new generation outsourcing firm that combines business services and IT services to deliver unprecedented business value. Its prime tenet is to partner with clients using innovative models of engagement and provide best in class business solutions. They provide a variety of services including: Business solutions, Microsoft Business Applications, Logistics and supply chain management and Analytics. The internship was reduced to a period of one month and was made virtual due to covid-19. We were guided by Mr. Madhusoodhanan Srinivasan who assigned us the task of converting the code in R language into python while achieving the stated objectives producing same results.

The internship was systematic and professional from the start. Their Human Resource head Mrs. Saraswathy contacted us and gave an overview about the company policies. She mailed us the non-disclosure agreement which we had to digitally sign and send them along with a Bonafide certificate. They had created as a Microsoft account with their company domain, providing us the access to required datasets. We had to login to company portal with ids provided to us which also served as our attendance. Though the timings were flexible, we were monitored to ensure we maintained a log in log out interval of seven hours. At the end of every day, we were required to update today's work done into an excel sheet. This was used in the discussion we had at every weekend, wherein our performance for that week was evaluated and our doubts if any were cleared. This mentoring helped us get better clarity on our tasks at hand.



The dataset provided to us were about one of their clients and were highly confidential. The R codes were used to mine some useful knowledge from the abundant dataset like the most profitable branch, best customer relations, seasonal fluctuations in sale etc. The aim was to translate the codes from R to python with most optimal solutions while achieving some new knowledge in addition to those already mined from R. We were allowed to choose our own environment for python execution and we used pycharm IDE and Jupyter notebooks for different tasks. We also had to depend on few external libraries in case of python as it was not built for the purpose of data analytics only. The major libraries we used for our task were pandas, numpy, calendar and datetime.

The workflow throughout was quite simple, given different stores of a spectacles-based retail chain located at different locations and their data collected all over the past year, different business solutions for improving the sales and profit margin by localised spending should be provided. The dataset contained four clients with similar kind of objectives we allocated. The data as CSV file was imported into pandas data frames, over which the required filtering, grouping and aggregate functions were applied to get valuable knowledge from the data. After processing the data, the output had to be stored in a given JSON format for which we used pretty print in JSON library. This JSON file was collected and transmitted over APIs to client and for verification purposes.

This internship provided me with a great opportunity to enhance my data analytics skills with python. I had earlier done an introductory course on data analytics from Udemy and that proved really useful for solving the task at hand. This was also the first time I got to experience R and learn how powerful it was for big data analytics. I had a great experience learning how different R is from python while doing similar tasks. R was little cleaner and easier to code since it was built for the sole purpose of data analytics. Though python can very much do all tasks of R, it depends on quite a number of external libraries. At the end of internship, we had another code review session where Mr. Madhusoodhanan reviewed our code, suggested some improvements for optimal methods and showed us the format of how comments in python should be done for a production ready code. We also had a casual chat about how the times are changing with the advent of pandemic, employment rate and higher studies opportunities amidst the challenging times. He was always available, friendly to approach and was a great mentor throughout. Overall, this was a great experience with a lot of positive take-away.

**-VasanthaRaman.A and Kevin J Thelly,**

**IV year, CSE**

## VALUE ADDED COURSE - FORENSIC ANALYSIS

The concept of one or two credit value added courses being offered to students taught by the industry professionals was introduced in the AU 2017 Regulations Curriculum. I was part of the AU Syllabus Committee and Board of Studies at that time. It was one of the ideas which very much caught my attention and I really wanted to use this appropriately to bring a unique learning experience to our students.

Back in 2018 December, when I arranged a talk by Kaarthik Sivakumar of Cisco Systems for ACM-Chennai Professional Chapter, his talk on Security and Trust was really very insightful. I was thoroughly impressed with his clarity and interesting ways of conveying complex concepts in a very simple and engaging manner. Following that, I had several discussions with him regarding how our students can be given specialized knowledge in this field of cyber security. He introduced me to the Capture the Flag(CTF) contest which requires comprehensive knowledge about security vulnerabilities and how they are exploited. However, setting up this contest locally was not that simple. When we discussed the possibility of him offering a value-added-course, due to administrative glitches in obtaining permission from Anna University in conducting the Value Added Course, we were not able to offer this for the current final year students(when they were in third year). Notwithstanding this hurdle, last year, Kaarthik and his colleague Shyam Sundar Ramaswamy visited our campus and conducted sessions on security and the related malware analysis for 2 days.

Since the SSN autonomous curriculum had adopted the concept of Value-added courses from the AU 2017 curriculum, I once again mooted this idea of offering a specialized course to the present third year students. With covid-19 pandemic striking us early this year in March and the subsequent lockdowns, I was sceptical whether this whole plan would materialise, but nevertheless followed up relentlessly. However, Kaarthik and Shyam were willing to make it happen virtually. In fact, they even brought additional people from Cisco (Prapanch Ramamoorthy, Sreenidhi Ramadurgam, Bhavik Shah, Akshay Dubey and Manoj Papisetty) to handle some of the sessions and provided lots of hands on exercises and projects.

I would like to express my deep gratitude to Kaarthik, Shyam and the other 5 professionals



**Mr. Kaarthik Sivakumar**  
Principal Engineer, Cisco



**Mr. Shyam Sundar Ramaswamy**  
Lead Security / Threat Researcher, Cisco

they brought in for their unconditional commitment in imparting knowledge and skills in a very sought-after niche domain. They did not do this as Cisco employees, but did it out of sheer passion to nurture good talent and to create skilled human resource in this domain,

I would like to profusely thank our department faculty member Balasubramanian for working along with me in taking care of all the necessary paperwork and logistics related to conducting this course virtually over Google Meet.

I received great feedback from Kaarthik regarding our students. He said that they actively interacted by asking lots of questions and also expressed his appreciation that the students made considerable effort in doing the assignments diligently. Of course, the students are also thrilled with the sessions by Kaarthik, Shyam and other Cisco professionals. Feedback from a couple of students are included below.

These positive feedback from both the ends has made all the efforts worthwhile.



**Dr. Chitra Babu**  
HoD / CSE

**Feedback from students:**

The value-added course provided us with an excellent opportunity to get introduced to the world of cybersecurity. The course was informative and insightful, and the hands-on experience helped us relate to the real-world scenario. The professors handling the course helped us in working with various domains of the field and introduced us to a variety of tools and concepts. Throughout the course, we did learn concepts like Network Forensics, Malware Analysis, Data Forensics, OSINT to site a few.

**Srivathsan**  
**III YR C Sec**



Sahir Rahaman



Srivathsan S

The topics that were taught were very informative and very interesting. I mainly loved how little theory and more of hands-on work was given to us, giving us a much-needed break from the usual theory related studies students do every day. The professors were kind and always eager to clear our doubts as well as talk about career options in the field of cyber forensics. To be able to work on real-world malware that are actually fatal for our systems was a surreal experience, and the professors very well knew about the potential risks of giving such dangerous hands-on work, especially when classes are being held remotely. They made sure that our systems were secure by introducing us to virtual machines and false DNS systems to protect our systems from malware attacks over the internet. The career choices explained to us was very helpful as it gave us another field in the computer science domain to work on. Overall one of the best subjects I've had the privilege to be in and learn the concepts from industry leaders themselves.

**Sahir Rahman**  
**III Yr-B Sec**

## PLACEMENT STATISTICS - 2020

### Marquee



1) Vignesh Suresh



1) Praveen Kumar  
2) Rohit Midha  
3) Shraddhaa Mohan  
4) Shreya S

### Super Dream

1) Avantika Balaji  
2) S Gokul SAHAR  
3) Harini K  
4) Harini R  
5) Jahnavi Srividya S  
6) Jayaraman N R  
7) Kanishq Sunil  
8) Saadhana Lakshmi Narasimhan



9) Sadhana Smruthi Srinivasan  
10) Sai Chitti Subrahmanyam  
Valasapalli  
11) Sneha V  
12) Srinidhi S  
13) Stephen Niranjana Bennett  
14) Sudhish Sridhar  
15) Uma M  
16) Vaishali Rajendran





- 1) Amlan Sengupta
- 2) Harish B
- 3) Kandavel A
- 4) Pratheep S
- 5) Sharrik Krishna S L
- 6) Sujeet Togo A
- 7) Talapala Sneha
- 8) Yadhukrishnan P



- 1) Akshay Ramakrishnan
- 2) Mohamed Musaraf P
- 3) Musunuru Ysaswi
- 4) Pooja S
- 5) Thejasini Adaikkalaraj



- 1) Karthik Viswanath S
- 2) Santhosh S
- 3) Ssneha Balasubramanian

## Dream



- 1) Arumugam I
- 2) Arunima S
- 3) Deepthi Prakash
- 4) Infant Sneha S
- 5) Janet Reshma J
- 6) Rohinidevi S V



- 1) Arumugam I
- 2) Avantika Balaji
- 3) Barathan G
- 4) Pratheep S
- 5) Sanjay Thiruvengadam V

- 1) Aanoosh Muhil Dev
- 2) Abishek Balaji T
- 3) Aparna K
- 4) Aravind Kumar
- 5) Arvind N
- 6) Balaji Jegadeesh V
- 7) Bhavithra V
- 8) Ehtesham Hussain
- 9) Gerard Anto Celestine S
- 10) Harish Balaji
- 11) Mithumary C M
- 12) Pranathy M S
- 13) Pranav Raveendran
- 14) Pratheep S



- 15) Preethi S
- 16) Sanjana K
- 17) Shivani S
- 18) Sitharthan I
- 19) Sourav Ghosh
- 20) Sree Hari
- 21) Sri Krishna M
- 22) Sudhamsu Datta Sai Gurijala
- 23) Sujeet Togo A
- 24) Sujin K
- 25) Swetha B
- 26) Swetha Sri T S
- 27) Ujjwel Balwal
- 28) Vasantha Raman A
- 29) Vignesh Suresh



- 1) Ashwin Kumar J
- 2) Clement Smith R
- 3) Esakki Mathy U
- 4) Mohamed Musaraf P M
- 5) Prathish E
- 6) Rakshanaa R
- 7) Shaheen Basha
- 8) Sharath Bhadrinath
- 9) Sharon Julia S
- 10) Shri Sathvika V.A.
- 11) Vinushiya B
- 12) Ganesh S



- 1) Barathan G



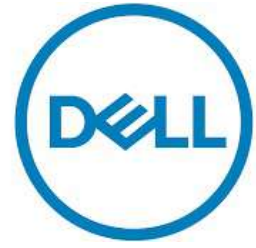
- 1) Dhinesh S
- 2) Sanjay Thiruvengadam V



- 1) Nakul Krishnan
- 2) Pranav Vijay



- 1) Hemanth Satheesh
- 2) Ranjana S



- 1) Vignesh Hariharan K

**amadeus**

- 1) Shankar Narayanan S
- 2) Vasantha Raman A



- 1) Amogh Gupta
- 2) Harish Balaji

**Sahaj**  
software

- 1) Dakshinamoorthy Karthikeyan

## Emerging Companies



- 1) Amogh Gupta
- 2) Arumugam I
- 3) Harshana S



- 1) Jay Vishaal Janarthanan



- 1) Ferran Sulaiman



- 1) Krishnakanth Eswaran
- 2) Nandhini R
- 3) Sreeram K

**Avalara**

- 1) Vignesh R C

## PLACEMENT DIARIES

*Amogh Gupta of CSE A, IV Year narrates his placement experience-*

Buddi.AI is a company that provides automation solutions of the clinical and revenue cycles for healthcare by leveraging Machine Learning. To put it simply, the company aptly structures the patient records and documents it, to greatly improve patient care.

They came to our campus for placement in the last week of August. There were 5 rounds: an online quiz on ML concepts, an online coding round, 2 coding/ technical rounds, and finally a managerial round.

The quiz was about an hour long and had questions on topics (but not limited to) overfitting/underfitting, precision/recall, neural networks, different evaluation metrics. The online coding round was about an hour and a half long, and contained 4 easy-level questions.

In the first interview round, they asked questions on different scenarios to apply machine learning techniques, to test the basic knowledge in the domain. These were followed by a couple of easy-medium coding questions. Finally, the interview ended with a database design question. In the second interview, I was asked two fairly simple questions mostly focussing on the approach - a straightforward application of the data structure tries. Both my interviews were each about an hour long.

Finally, in the managerial interview round, the interviewer surprisingly wanted me to talk about the mathematics of machine learning! This came to me as quite a surprise. I gave a satisfactory answer, after which the interviewer talked about the company, my role if I were selected, and the technology they work on. Finally, the results were announced the next day and I was really happy that I had made it!

At last, I would like to thank my department, seniors, classmates, and friends for guiding and supporting me.

### *Take-aways:*

- Data structures and algorithms is by far the most important subject for a computer science student. The best way to prepare is not overnight, but by consistent practice on platforms such as codechef and codeforces.
- LeetCode is an amazing platform for interview questions oriented towards data science.
- Andrew NG's courses on ML were particularly useful.
- Other important subjects (in decreasing order of importance) would be system design, databases, and operating systems.

*Indhu Priya M from CSE A shares her take on the virtual placement drive being conducted under the current extraordinary circumstances*

The placement drive was initiated by Six Phrase in the month of May. They held up classes on important topics like data structures, algorithms and their time complexity, etc., which got over by the end of July. As soon as the online webinars were over, the dream, marquee companies started recruiting by the start of the August month. There are 4 slots namely Marquee, Super Dream, Dream, Mass Recruiters. Based on the package the companies were classified.

The virtual interviews are a bit different than the usual one we used to have in colleges. The procedure involved applying for the recruiting position in the company via Campus Interaction Portal. Then the online test and interview dates will be announced. On the day of the assessment, system check is to be done. Later test is to be written. After evaluation the selected students are called for the interview. All these processes are done in a virtual environment. This is quite a weird and different experience for all of us. But now I've gotten used to it.

Here, now coming to my placement drive it is similar to the way Edison took to invent a bulb.

The first I sat was CitiBank in the first week of August, but to my luck I was not selected for the next round interview. Similar process took place for the forthcoming companies. Initially I felt very bad for not getting selected for even the next round. But I slowly started learning from my mistakes I did in my previous interviews. Over 50 companies visited the campus- I sat through them and recently got selected for the next stage interview in Cognizant. Looking forward to the interview eagerly. Maybe just like Edison I may get placed in the 101th company that visits our campus.

Placements are stressful- With added societal expectations, experience gap and a raging pandemic, it can be even more so.

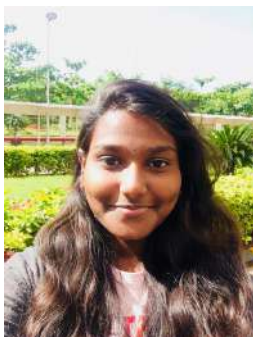
- Know that you cannot fit into everyone's expectations.
- It is okay to take breaks and blow off some steam.
- To sum up my placement experience in a few words- Good things take time. You either wait or you settle for less.

The main disadvantage of virtual interviews is the very shaky stakes the interview hangs on. Poor internet connectivity and inadequate system configurations cause unforeseen inconveniences. You can never be too careful in the virtualscape. Being extra early and super prepared is the only possible solution.



## ACE OFFICE BEARERS 2020-2021

**Jahnavi Srividya S is our first-ever female  
President of ACE**



**Jahnavi Srividya S**  
President



**Ujjwel Balwal**  
Vice President



**Gokul Sahar S**  
Secretary



**Sitharthan I**  
Joint Secretary



**Shaheen Basha S**  
Treasurer



**M.S. Pranathy**  
Joint Treasurer

## ART CORNER



*Pencil sketches by Varsini. S, II<sup>nd</sup> year CSE*

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HOD/CSE

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AP/CSE

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