

# SMRITI

*Department of  
Computer Science and Engineering*

**VOLUME : 12      ISSUE : 2**

The logo for Sree Siddaganga Institute of Technology (SSN) is located in the bottom right corner. It consists of the lowercase letters 'ssn' in a bold, blue, sans-serif font. The 's' and 'n' are connected, and the 's' has a distinctive shape with a curved top and a vertical stem.

# TABLE OF CONTENTS

## EDITORIAL DESK

## EXTERNAL INTERACTIONS AND RECOGNITIONS

N.Mahalingam Tamil Research Centre

ACM India

DC Members

ACM-W

Tamil virtual Academy

## INDUSTRY COLLABORATION

Caterpillar, India

Senquire

Altair

Regenboog India Foundation

Tyqee Solutions

TCS, Chennai

PLASKON Plastics Eco Circular Pvt Ltd

## MOU BETWEEN SSN AND TYQEE SOLUTIONS

## PUBLICATIONS

Patents Granted

Journal Publications

Conference Presentations / Publications

## SCHOLAR INFORMATIONS

## FUNDED PROJECTS APPLIED

## SANCTIONED INTERNALLY FUNDED FACULTY PROJECT

## PAPERS REVIEWED

## EVENTS ORGANIZED

## EVENTS ATTENDED

## OTHER ACTIVITIES

## STUDENT ACHIEVEMENTS

Internally Funded Student Projects

## CO-CURRICULAR ACTIVITIES

Participation in International Competitions

Athena Hacks 2023

SIH 2023 grand finale

Team SeedShare Triumphs at Smart India Hackathon 2023

## PLACEMENT OFFERS

## EXTRA - CURRICULAR ACTIVITIES

HOUR OF CODE

Industry Visit to Regenboog India Foundation, Thiruvannamalai

## ALUMNI CORNER

## EDITORIAL DESK

Warm New Year Greetings to All!

As we step into a new year, the pages of **Smriti**, our quarterly newsletter, unfold to capture the dynamic pulse of the Computer Science and Engineering (CSE) Department. The past three months have been filled with intense activity, and we are excited to present the highlights that reflect the vibrancy of our department.

We are delighted to see our department signing an MoU with Tyqee Solutions. We appreciate the effort taken by Dr. T. T. Mirnalinee, Dr. K. R. Sarath Chandran, Dr. S. Angel Deborah and Dr. K. Satheesh Kumar to obtain a consultancy project based on the MoU.

This period witnessed patent grants for Dr. R. Kanchana, Dr. S. Kavitha, Dr. A. Beulah, Dr. S. Rajalakshmi and Dr. S. Angel Deborah. We express our sincere appreciation to the inventors of the patent. We extend our heartfelt congratulations to Dr. V. S. Felix Enigo for securing the third prize in the International Conference on Tamil Computing.

SSN has always been generous and bounteous in sanctioning funds towards research projects. In this regard, the department received 39 student projects and 2 faculty projects. We commend all the students and faculty members who have received the projects.

We appreciate Dr. B. Bharathi, Dr. D. Thenmozhi, Dr. S. Angel Deborah for playing the roles of Volume Editor, General Chair and Workshop chair of Second International Conference on Speech And Language Technologies For Low-Resource Languages (SPELLL 2023) conducted in collaboration with many universities and colleges in India and abroad. We also extend our appreciation to Dr. T. T. Mirnalinee and Dr. S. Rajalakshmi for conducting the Second International Workshop on Fake News Detection in Low-Resource Languages (Regional-FAKE) as part of SPELLL 2023.

Our students consistently exhibit commendable accomplishments in various co-curricular and extra-curricular activities. It was great to see three student teams of our department getting shortlisted to participate in the SIH 2023 grand finale. We applaud all the students and mentors who got selected for the grand Finale. In particular, we congratulate the team "SeedShare" mentored by Dr. Chitra Babu and Mr. Kiran of Presidio for obtaining a special prize in the SIH grand finale. The effort taken by the team comprising Swetha J, Sathvika V S and Sushmithaa P mentored by Dr. S. Rajalakshmi in obtaining the second runner up position in Athena Hacks 2023 conducted by ACM-W is complimented.

It is great to see our student Shankari S R being selected from our college NSS team to be part of the Yuva Sangam Phase 3. We are looking forward to much more fruitful and abundant laurels in the next quarter.

**SMRITI Editorial Team**

# EXTERNAL INTERACTIONS AND RECOGNITIONS

## N.Mahalingam Tamil Research Centre

**Dr.V. S. Felix Enigo, ASP/CSE** secured third prize for presenting the paper titled "Tamizhi Inscriptions Lexicons for Machine Translation" in the International Conference on Tamil Computing which was organized collaboratively by NMTRC, Kumaraguru Tamil Mandram, Nithilam, KSI in association with INFITT.



## ACM India

**Dr. Chitra Babu, Prof/CSE**, as Program Chair for ACM India Annual COMPUTE conference was invited to attend the 6th edition of the conference that was organized at the University of Hyderabad during 9-11 December 2023. She was also invited to attend the co-located Global Education Conference, CompEd 2023 that was organized in the International Institute of Information Technology(IIT) Hyderabad during 7-9 December 2023.

## DC Members

1. **Dr. Balasubramanian V., ASP/CSE** Attended the First Doctoral Committee Meeting for Mr.G.Pradeep, (Reg.No: 23154697227) - Research Scholar (Part-Time), Anna University on December 27, 2023 through Online mode between 1.30 PM to 2.30 PM.
2. **Dr. D.Venkata vara prasad Prof/CSE** attended DC meeting of M.Rajeswara Rao, VIT University on 13-12-2023
3. **Dr. Mirnalinee T T, Prof & Head/CSE** conducted the first DC meeting for her part-time research scholar, Ms. G. Abirami on 18.01.2024.
4. **Dr. Bharathi B., ASP/CSE**, conducted DC meeting for the Full time scholar at SSN College of Engineering
5. **Dr. Kavitha S., ASP/CSE** attended a Synopsis meeting on 24.01.2024 in online mode for a Part time Scholar of SRM University
6. **Dr. Balasubramanian V., ASP/CSE** attended a DC meeting for the research scholar Ms.R G Charumathi, Scientist E, National Informatics Centre, Chennai on 29.1.24 at 1.00PM to 2.00 PM.
7. **Dr. Saraswathi S, ASP/CSE** attended online DC meeting on Thursday, 04th January 2024 at 3 p.m. in CSE department, Velammal Engineering College through online mode.

8. **Dr. Saraswathi S,ASP/CSE** attended online DC meeting on 11.01.24 at 1.30pm in the Department of Computer Science and Engineering, SRM Valliammai Engineering College,Chennai.

## ACM-W

**Ms. Lakshmi Priya S,AP/CSE** evaluated project proposals for ACM-W Women India Hackathon AthenaHacks on October 7 2023.

## Tamil virtual Academy

**Dr. Bharathi B., ASP/CSE**, served as the mentor for the boot camp during the hackathon event organized by the Tamil Virtual Academy on December 22, 2023.

# INDUSTRY COLLABORATION

## Caterpillar, India

1. **Dr. Mirunalini P. and Dr. R. Priyadharsini** along with the students **Subramanian, Sathvika and Raghul Yadhav** of third years attended a meeting for consultancy project discussion with Dr.Girish Koneru, caterpillar. Chennai on 23/11/2023 and 27/11/2023.
2. **Dr. Chitra Babu, Prof/CSE** along with **Dr.P.Mirunalini, Dr. R. Priyadarasini, Dr. D. Thenmozhi and 6 students** attended the year-end progress meeting on two Caterpillar consultancy projects where the progress was presented to the manager Mr. Nikil Singh on the 14th December 2023.
3. **Dr. Chitra Babu, Prof/CSE** along with **Dr. T. T. Mirnalinee Prof & Head/CSE, Dr. J. Bhuvana ASP/CSE, Dr. K. R. Sarathchandran AP/CSE, Dr. S.M.Dhannya AP/CSE and 7 students** attended the year-end progress meeting on two Caterpillar consultancy projects where the progress was presented to the manager Mr. Nikil Singh on the 21st December 2023.

## Senquire

1. **Dr. T. T. Mirnalinee Prof & Head/CSE, and Dr. R. Kanchana ASP/CSE** attended an online meeting with Mr. Sripada raja, Senquire on 7th Nov 2023 and 21st Nov 2023. Senquire demonstrated their testbed and basic and advanced versions of EaglAI ACAD kit.
2. **Dr. R. Kanchana, ASP/CSE and Dr. T. T. Mirnalinee, Prof. & Head/CSE** had a meeting with Dr. Vinayak Prabhu, Dr. Hannah and Dr. Sripadaraja ACAD managers of Senquire Academics on 9th Jan 2024 regarding collaborative projects and setting up a lab based on ACAD kits. Dr.

Sarathchandran and Dr. Shahul Hamead interacted with them regarding a project on customized FPGA for AI applications.

## Altair

1. **Dr. T. T. Mirnalinee Prof. & Head/CSE and Dr. R. Kanchana ASP/CSE** attended a meeting with Altair, a multinational company to discuss academic collaboration and free lab licence on 24th Nov 2023.
2. **Dr. R. Kanchana ASP/CSE** coordinated with Altair Engineering Inc., Hyderabad to receive 70 numbers of free managed-Altair University (AU) license for AU Data Analyst v2023 as well as AU Data Analyst v2023 on 12th Dec 2023.

## Regenboog India Foundation

Ms. Pradhiksha, Technical head, Regenboog India Foundation and Mr. Madhan Mohan, Founder and Mr. Gowtham visited the department of CSE and had interaction with **Dr. T. T. Mirnalinee Prof. & Head/CSE and Dr. R. Kanchana ASP/CSE** regarding their initiatives for rural well being and possible collaboration on 5th Oct 2023. Student teams involved in the projects presented their ideas and Mr. Madhan elaborated their requirements.

## Tyqee Solutions

1. A Consultancy project titled, "Glass cleaning Robot for High-Rise Buildings" has been approved by Tyqee Solutions for funding on 2nd December 2023. **PI: Dr. T. T. Mirnalinee, Professor & Head/CSE, Dr. K. R. Sarath Chandran, AP/CSE, Dr. Angeldeborah S, AP/CSE and Dr. Satheesh Kumar Gopal, Associate Professor/Mech.** A meeting was arranged with Mr. Mohamed Arief, CEO of Tyqee Solutions at Hotel Ambassador Pallava, Egmore on 2nd December 2023. Dr. T.T.Mirnalinee, Professor & Head/CSE, Dr. K.R. Sarath Chandran, AP/CSE, Dr. Angeldeborah S, AP/CSE and Dr. Satheesh Kumar Gopal, Associate Professor/Mech attended the formal consultancy project approval meeting.



2. **Dr. T. T. Mirnalinee, Professor & Head/CSE, Dr. K.R. Sarath Chandran, AP/CSE, Dr. Angeldeborah S, AP/CSE** attended an online meeting with Mr. Mohamed Arief, CEO of Tyqee



Solutions on 21st January 2024 to discuss about the progress of the consultancy project titled "Glass cleaning Robot for High-Rise Buildings"

## TCS, Chennai

1. **Dr. R. Kanchana, ASP/CSE Dr. R. S. Milton, Prof./CSE, Dr. Chitra Babu, Prof./CSE and Dr. T.T. Mirnalinee, Prof./CSE** interacted with Dr. Manohar from TCS, Chennai to get his suggestions on 5-year integrated MTech(CSE) curriculum on 10th Jan 2024.
2. **Dr. Mirnalinee T T, Prof./CSE along with Dr. Chitra Babu, Prof./CSE Dr. R. S. Milton, Prof./CSE and Dr. R. Kanchana, ASP/CSE** had a discussion on M Tech curriculum with Mr. Manoharan, TCS.

## PLASKON Plastics Eco Circular Pvt Ltd

**Dr.R. Kanchana, ASP/CSE, Dr. K.R. Sarath Chandran, AP/CSE, Dr. Angel Deborah S, AP/CSE** attended an online meeting with PLASKON Plastics Eco Circular Pvt Ltd on 25th January 2024 to discuss about the proposal titled "Unveiling the Potential of AI to Combat Plastic Pollution"

# MOU BETWEEN SSN AND TYQEE SOLUTIONS

SSN College of Engineering has an existing Memorandum of Understanding (MOU) with Tyqee Solutions, which led to SSN securing a consultancy project. Tyqee Solutions approved funding for a consultancy initiative named "Glass Cleaning Robot for High-Rise Buildings" on December 2nd, 2023.



# PUBLICATIONS

## Patents Granted

A patent with the following details got granted on 22nd Dec 2023. Inventors: **Dr. R. Kanchana ASP/CSE and Dr. S. Selvakumar (Director, IIIT, Una, HP)** Applicants: SSNCE and IIIT Una Title: A System and Method for Unification of Heterogeneous Immunization Systems and Improvement of Data Quality (UniHISID) Application No. 202241040203.



**Kavitha S, ASP/CSE & Thyagarajan K. K**, patent titled as "Multimodality Medical Image Fusion with Optimal Parameter Estimation in Disease Diagnosis" got awarded on 18.01.2024

A patent with the following details was granted on 29/01/2024. Inventors: **Rithwin Siva, Nishant Mathew, R Nidhi Bhandari, Varsha Bhargavi Dwarakanathan, Dr. Beulah A., AP/CSE, Dr. S. Rajalakshmi, AP/CSE, Dr. S. Angel Deborah, AP/CSE**, Title: Braille Interpretation Pad. Application No. 202241037782.





## Journal Publications

1. **Dr. Dhannya. S. M., K. K. Nisha, and Dr. N. S. Narayanaswamy** - "Exactly Hittable Interval Graphs" (Discrete Mathematics and Theoretical Computer Science - <https://doi.org/10.46298/dmtcs.10762>).
2. **Bharathi BHAGAVATHSINGH Aarthi Vilapakkam SATHISH Akilan KALAISELVAN Christina Eunice JOHN**, Build Your Own Band (BYOB): Generating instrumental accompaniments for a melody, Romanian Journal of Information Technology and Automatic Control, Vol:33, issue:4, Clarivate, IF:Nil, Quartile:Nil, DOI:<https://doi.org/10.33436/v33i4y202308>, ISSN:1220-1758.
3. **Dr. Saraswathi S,ASP/CSE** Published the following paper , International J Lightweight Hybrid CAE-ELM and Enhanced Smote Based Intrusion Detection for Networks, International Journal of Intelligent Engineering & Systems, International Journal of Intelligent Engineering & Systems, Vol:16, issue:6, Scopus, IF:0.28, Quartile:Q3, DOI:<https://oaji.net/articles/2023/3603-1698223687.pdf>, ISSN:2185-3118
4. **Dr. Felix Enigo V. S.,ASP/CSE Mrs. Monisha Munivel, Research Scholar**, MLIBT: A multi-level improvised binarization technique for Tamizhi inscriptions , Expert Systems With Applications, Vol.236, Clarivate, IF:8.5, Quartile:Q1, DOI:<https://doi.org/10.1016/j.eswa.2023.121320>, ISSN:1873-6793
5. **Lakshmi Priya Swaminatha Rao, AP/CSE Suresh Jaganathan, ASP/CSE**, Adaptive Bayesian contextual hyperband: A novel hyperparameter optimization approach, International Journal of Artificial Intelligence , Vol:13, issue:1, Scopus, IF:0.402, Quartile:Q2, DOI:10.11591/ijai.v13.i1.pp775-785, ISSN:2252-8938
6. **Dr. Shahul Hamead H, Assistant Professor/CSE Dr. Mirnalinee T.T, Professor & Head/CSE Kavipriya D, Research Scholar/CSE**, A novel eviction policy based on shortest remaining time for software defined networking flow tables , Wiley International Journal of Network Management, Vol:Online First Edition, Clarivate, IF:1.5, Quartile:Q2, DOI:<https://doi.org/10.1002/nem.2257>, ISSN:1099-1190
7. **S.V.Jansi Rani, ASP/CSE S. Ganesh, M .Gayathri and S .Harshini**, Wearable Safety Device for Women with Voice Recognition, Indian Journal of Natural Sciences, Volume 14(8),2023. IF 1.733
8. **Veerappan Sundari, Jansi Rani Sella Veluswami, ASP/CSE** "Fish counting through underwater fish detection using deep learning techniques." Romanian Journal of Information Technology and Automatic Control 33, Vol. no. 4 (2023): 69-80. IF:0.09 <https://doi.org/10.33436/v33i4y202306>.

## Conference Presentations / Publications

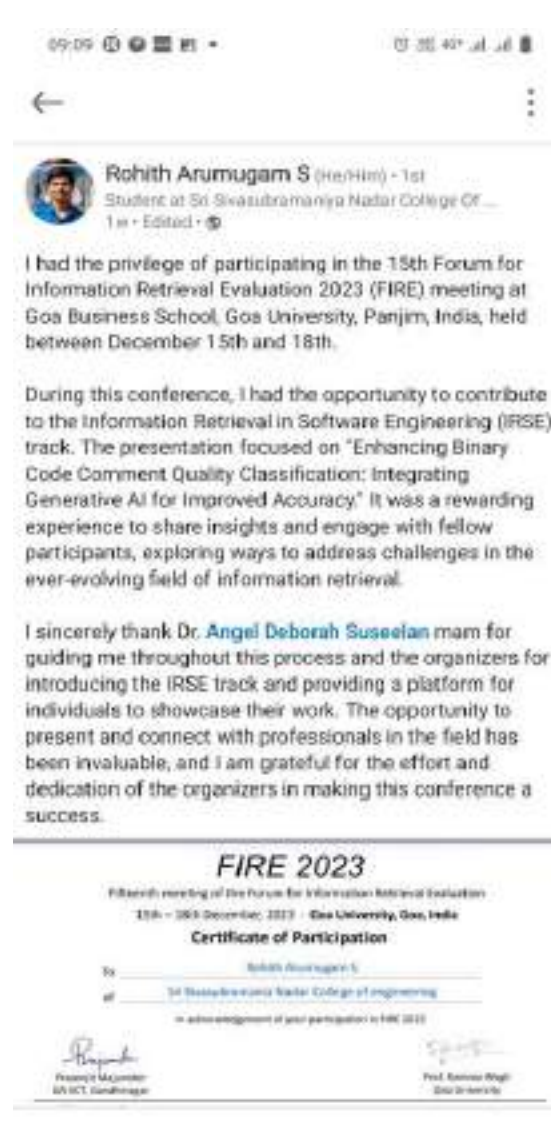
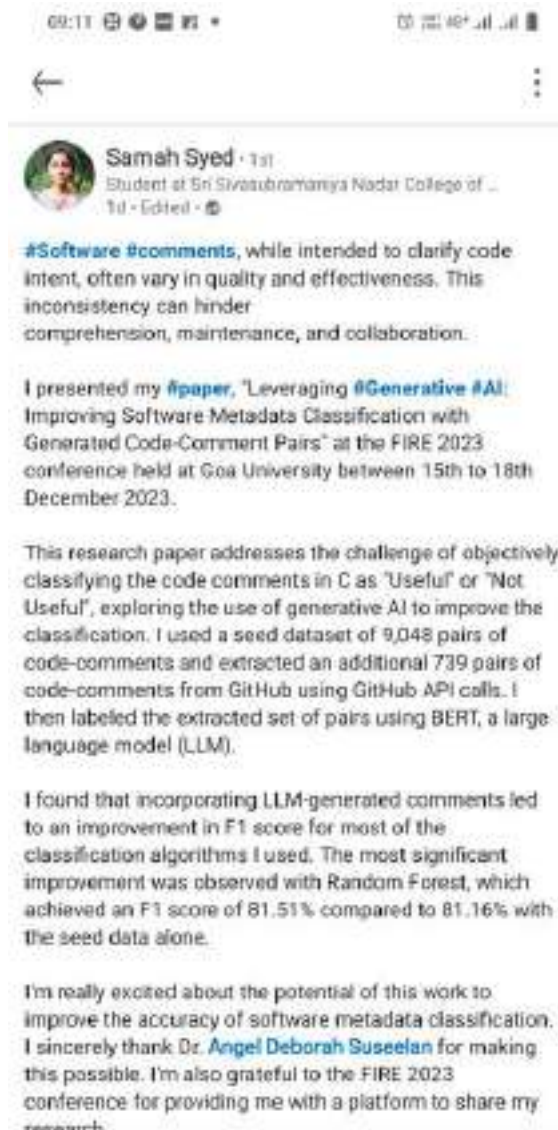
1. **Saranya S and Bharathi B.** 2023. SANBAR@LT-EDI-2023:Automatic Speech Recognition: vulnerable old-aged and transgender people in Tamil. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 155–160, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.23>,(Available online: 14-11-2023).
2. **Bharathi B, Bharathi Raja Chakravarthi, Subalalitha Cn, Sripriya Natarajan, Rajeswari Natarajan, S Suhasini, and Swetha Valli.** 2023. Overview of the Second Shared Task on Speech Recognition for Vulnerable Individuals in Tamil. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 31–37, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.5> (Available online: 14-11-2023).
3. **Suhasini S and Bharathi B.** 2023. ASR\_SSN\_CSE@LTEDI- 2023: Pretrained Transformer based Automatic Speech Recognition system for Elderly People. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 161–165, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.24> (Available online: 14-11-2023)
4. **Varsha Balaji, Archana Jp, and Bharathi B.** 2023. CSE\_SPEECH@LT-EDI-2023Automatic Speech Recognition vulnerable old-aged and transgender people in Tamil. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 204–208, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.31> (Available online: 14-11-2023)
5. **Priyadharshini Thandavamurthi, Samyuktaa Sivakumar, Shwetha Sureshnathan, Thenmozhi D., Bharathi B, and Gayathri Gl.** 2023. TERCET@LT-EDI-2023: Hope Speech Detection for Equality, Diversity, and Inclusion. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 257–261, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.39> (Available online: 14-11-2023)
6. **Shwetha Sureshnathan, Samyuktaa Sivakumar, Priyadharshini Thandavamurthi, Thenmozhi D., Bharathi B, and Kiruthika Chandrasekaran.** 2023. Tercet@LT-EDI-2023: Homophobia/Transphobia Detection in social media comment. In Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pages 266–271, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.ltedi-1.41> (Available online: 14-11-2023)
7. **Premjith B, Jyothish Lal G, Sowmya V, Bharathi Raja Chakravarthi, Rajeswari Natarajan, Nandhini K, Abirami Murugappan, Bharathi B, Kaushik M, Prasanth Sn, Aswin Raj R, and Vijai Simmon S.** 2023. Findings of the Shared Task on Multimodal Abusive Language Detection and Sentiment Analysis in Tamil and Malayalam. In Proceedings of the Third

Workshop on Speech and Language Technologies for Dravidian Languages, pages 72–79, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.dravidianlangtech-1.10> (Available online: 14-11-2023)

8. **Varsha Balaji, Shahul Hameed T, and Bharathi B.** 2023. NLP\_SSN\_CSE@DravidianLangTech: Fake News Detection in Dravidian Languages using Transformer Models. In Proceedings of the Third Workshop on Speech and Language Technologies for Dravidian Languages, pages 133–139, Varna, Bulgaria. INCOMA Ltd., Shoumen, Bulgaria. URL: <https://aclanthology.org/2023.dravidianlangtech-1.17> (Available online: 14-11-2023)
9. **Madhumitha, M., C. Jerin Mahibha, Durairaj Thenmozhi,** "TechWhiz@ LT-EDI: Transformer Models to Detect Levels of Depression from Social Media Text." Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pp. 198-203, Sep 2023.
10. **Hegde, Asha, Bharathi Raja Chakravarthi, Hosahalli Lakshmaiah Shashirekha, Rahul Ponnusamy, Subalalitha Cn, S. K. Lavanya, Durairaj Thenmozhi, Martha Karunakar, Shreya Shreeram, and Sarah Aymen.** "Findings of the shared task on sentiment analysis in tamil and tulu code-mixed text." In Proceedings of the Third Workshop on Speech and Language Technologies for Dravidian Languages, pp. 64-71. Sep 2023.
11. **Avanthika, K., Mrithula Kl, and D. Thenmozhi.** "SSN-NLP-ACE@ Multimodal Hate Speech Event Detection 2023: Detection of hate speech and targets using logistic regression and svm." In Proceedings of the 6th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text, pp. 66-70. 2023.
12. **Kayalvizhi S, Thenmozhi D., Bharathi Raja Chakravarthi, Jerin Mahibha C, Kogilavani S V and Pratik Anil Rahood,** "Overview of the shared task on Detecting Signs of Depression from Social Media Text", Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pp. 25-30. Sep 2023.
13. **Priyadharshini Thandavamurthi, Samyuktaa Sivakumar, Shwetha Sureshnathan, Thenmozhi D., Bharathi B and Gayathri GL,** "TERCET@LT-EDI-2023: Hope Speech Detection for Equality, Diversity, and Inclusion", Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pp. 257-261. Sep 2023.
14. **Shwetha Sureshnathan, Samyuktaa Sivakumar, Priyadharshini Thandavamurthi, Thenmozhi D., Bharathi B and Krithika Chandrasekaran,** "Tercet@LT-EDI-2023: Homophobia/Transphobia Detection in social media comment", Proceedings of the Third Workshop on Language Technology for Equality, Diversity and Inclusion, pp. 266-271. Sep 2023.
15. **Sarika Esakkimuthu and Prabavathy Balasundaram,** "VerbaVisor@Multimodal Hate Speech Event Detection 2023: Hate Speech Detection using Transformer Model", Proceedings of the 6th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text, Varna, Bulgaria, Sep 7, 2023, pp. 79–83.

16. **Dr. Balasubramanian V.,AsP/CSE**, presented a paper titled "Early Prediction Of Stock Market Movements Using News Analytics And Deep Learning" in IEEE 4th International Conference on Communication, Computing, and Industry 6.0 (C2I6-2023) organized by CMR Institute of Technology in Bengaluru during 15-16 December 2023.
17. **Dr. Venkata vara Prasad Prof/CSE**, GowriGanesan presented a paper titled "Generating creative classical music by learning and combining existing styles" in 4th IEEE International Conference on Communication computing and industry 6.0 (C2I6-2023) organized by CMR Institute of Technology, Bengaluru on 15-16 December 2023.
18. **Dr. Chamundeswari A.,Prof/CSE, Sowmya Ramesh, Subhiksha Selvarayan, and Vaishnavi Mavalli Raghav**, presented a paper titled, A Multistage Malware Detection and Classification Model using Visual Features in IEEE 4th International Conference on Communication, Computing and Industry 6.0 (C2I6 - 2023) Dec 15 - 16, 2023.
19. **Dr. Chitra Babu,Prof/CSE along with Dr. Yogesh Simmhan, Associate Professor, Indian Institute of Science, his Ph.D research scholars, Dr. S.P. Abhinandan, Assistant Professor, IIT Ropar and nine III year students of CSE, SSN CE** has published a poster paper titled "Towards a Cross-Platform Benchmark Suite for FaaS Workflows" in the 30th International Conference on High Performance Computing, Data and Analytics" that was organized in Goa during 18-21 December 2023. This poster paper has been given the "Best Lightning talk award". This paper will be indexed in IEEE Xplore.
20. **Dr. Chamundeswari A.,Prof/CSE,Sowmya Ramesh, Subhiksha Selvarayan, and Vaishnavi Mavalli Raghav**, presented a paper titled, A Multistage Malware Detection and Classification Model using Visual Features in IEEE 4th International Conference on Communication, Computing and Industry 6.0 (C2I6 - 2023) Dec 15 - 16, 2023.
21. **S.Dhivya Bharkavi, S. Kavitha, ASP/CSE, M. Harini and M. V. Harish Kumar** published a paper titled as "Emotion Classification Using Optimized Features and Ensemble Learning Techniques for EEG Dataset" in IEEE International Conference on Sustainable Communication Networks and Application (ICSCNA), 15-17 Nov 2023, Theni, India, pp.845-851. Date Added to IEEE Xplore: 01 January 2024, DOI: 10.1109/ICSCNA58489.2023.10370380.
22. The paper titled "Enhancing Binary Code Comment Quality Classification: Integrating Generative AI for Improved Accuracy", authored by **Rohith Arumugam S, II Year CSE and Dr Angel Deborah S, AP/CSE** was presented in the 15th meeting of Forum for Information Retrieval Evaluation 2023 held at Goa University, Panjim, India during 15th-18th December 2023.
23. The paper titled "Leveraging Generative AI:Improving Software Metadata Classification with Generated Code-Comment Pairs", authored by **Samah Syed, II Year CSE and Dr Angel Deborah S, AP/CSE** was presented in the 15th meeting of Forum for Information Retrieval Evaluation 2023 held at Goa University, Panjim, India during 15th-18th December 2023.





## SCHOLAR INFORMATIONS

1. **Dr. Chamundeswari A., Prof/CSE** conducted the confirmation DC meeting for her full-time research scholar, Mrs.S.Manimegalai on 27-10-2023.
2. **Dr. Chamundeswari A., Prof/CSE** conducted the synopsis DC meeting for her part-time research scholar, Mr. K.A.G. Kapilan on 17.10.2023.
3. **Dr.Kavitha S., ASP/CSE** Conducted a Conformation DC meeting for her Full-Time scholar Ms. Ramyaa.D on 08.01.2024
4. **Dr. Kavitha S., ASP/CSE** conducted a Synopsis Meeting for her Full-Time scholar Ms. Sheerin Sitara N on 22.01.2024

## FUNDED PROJECTS APPLIED

1. Project Title: AI-Enabled Smart Farming System for Water Conservation and Soil Fertility Maintenance, **PI:Dr. Angeldeborah S,AP/CSE, Co-PI: Dr. T. T. Mirnalinee, Professor and Head/CSE and Dr. S. Rajalakshmi, AP/CSE**, Total Budget(INR): 29,97,700, Funding Agency: DST-SERB SURE
2. Project Title: Guardians of Transit: Proactive Surveillance system for Women Passenger Safety at transportation hub Duration:3 years, Budget:29,84,285 INR submitted to DST SURE on 13-12-2023 with **PI: Dr. J. Bhuvana ASP, CSE and CO PI Dr. T.T. Mirnalinee Professor & Head, CSE.**
3. **Dr. Chitra Babu,Prof/CSE**, as Principal Investigator(PI) submitted a project proposal jointly with GUVI titled "Project E: Large Scale Employability-enablement of Under-privileged Students Using AI-powered Smart Learning Platform" for possible funding under the Shiv Nadar Foundation(SNF) collaboration grant on the 25th December 2023.
4. Project Title: Early Detection of Stress and Stress Management Recommendations using GenAI and XAI, **PI: Dr. S. Rajalakshmi,AP/CSE, Co-PI: Dr. Angeldeborah S, AP/CSE and Dr. T. T. Mirnalinee, Professor and Head/CSE**, Total Budget(INR): 29,97,700, Funding Agency: DST-SERB POWER.
5. **Dr. T. T. Mirnalinee, Professor and Head/CSE, Dr. R. Kanchana, Asst.Professor/CSE, Dr. K.R. Sarath Chandran, AP/CSE and Dr. Angeldeborah S, AP/CSE** are team members of the proposal titled "Unveiling the Potential of AI to Combat Plastic Pollution" of budget Rs.1,92,20,000/- applied under AI Centres of Excellence in Sustainable Cities invited by the Ministry of Education (MoE).
6. Project Title: Foreign object debris detection on runways using edge analytics and computer vision, **PI: Dr. R. Priyadharsini, ASP/CSE, Co-PI: Dr. A. Beulah, AP/CSE**. Total Budget(INR): 18,50,000, Funding Agency: DST-SERB POWER





# SANCTIONED INTERNALLY FUNDED FACULTY PROJECT

1. The project titled "Myocardial Infarction Detection from ECG using Deep Learning Techniques" with **PI: Dr. P. Mirunalini** and **CO-PIs Dr. R. Kanchana** and **Dr. R. Priyadharsini** got sanctioned under Internal Funded Faculty project 2023 for a duration 2years with a budget of 0.50 lakhs.



2. **Dr. S. M. Dhannya AP/CSE, Ms. Nilu R. Salim AP/CSE** and **Mr. S. Raghavendra Kumar AP/CSE** has received sanction for Internally Funded Faculty Project 2023 titled "Aiding the real-time surface navigation of drones during landing phase on unknown surfaces using deep learning algorithms on FPGA" for a duration of 2 Years with a budget of Rs.2.0 Lakhs.



## PAPERS REVIEWED

1. **Dr. Saraswathi S, ASP/CSE** reviewed a chapter for IGI Global publications on 18-11-2023.
2. **Dr. Beulah A., AP/CSE** reviewed a paper for The Visual Computer on 18 November 2023.
3. **Dr. Beulah A.,AP/CSE** reviewed a paper for IEEE Journal of Biomedical and Health Informatics on 22 November 2023.
4. **Dr. R. Kanchana ASP/CSE** reviewed a research paper for the Int. journal on Multimedia Tools and Applications titled “MSFF-Net: Fingerprint Liveness Detection Network with Multi-scale Spatial Feature”on 21st Nov 2023
5. **Dr. R. Kanchana ASP/CSE** served as TPC member and reviewed a research paper for “The International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability” held during 18-20 Oct 2023.
6. **Dr. Felix Enigo V. S.,ASP/CSE**, Reviewed a paper titled "Density Based Regularization model for Effective Forecasting of Stage Transition in Chronic Kidney Disease" for Wireless Personal Communications, Springer.
7. **Ms. Nilu R Salim,AP/CSE** Reviewed a paper for Expert Systems with Applications.
8. **Dr. R. Kanchana ASP/CSE** reviewed a research paper for the Int. journal on Multimedia Tools and Applications on 21st Dec 2023.
9. **Dr. R. Kanchana, ASP/CSE** reviewed 3 research papers for the Int. journal on Multimedia Tools and Applications.
10. **Dr.S.Rajalakshmi, AP/CSE** reviewed 3 papers on January 13 and 22, 2024 for the Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024) to be held in Torino (Italia) on 20-25 May, 2024
11. **Dr.S.Rajalakshmi, AP/CSE** reviewed 5 papers on January 19 and 25, 2024 for ICCIDS 2024 · 7th International Conference on Computational Intelligence in Data Science to be held in SSN CE on 1–23 February 2024.
12. **Dr. K. R. Sarath Chandran, AP/CSE** reviewed an article for the Journal of Multidisciplinary Healthcare on 01-01-2024.

## EVENTS ORGANIZED

1. **Dr. T. T. Mirnalinee, Dr. R. Kanchana, Dr. Angel Deborah S, Dr. Sarath Chandran K. R, Dr. Rajalakshmi S.** organized a 3-day workshop on AR and VR application development held during 23-25 Nov 20023. The following resource persons from Tata Elxsi Bangalore prepared the workshop schedule and delivered the talk with hands on session:

- Mr. D.V.R.K Prasad , Head of Technology, VxR division in Tata Elxsi
- Mr. Rahul R, Senior Engineer - Application Developer, VxR division in Tata Elxsi
- Ms. Sonali Tripathy, Senior Engineer-Testing, VxR division in Tata Elxsi
- Ms. Selva Kumar, Engineer- Application Developer, VxR division in Tata Elxsi



2. The **SSN student chapter of ACM-W** organized a hands-on workshop on November 1st at the CSE seminar hall from 8:30 to 3:30, focused on Extended Reality (XR) and its potential within various fields of study. The session featured a hands-on introduction to Unity, conducted by Bharathan M, a 4th-year UG student at SSNCE. With 54 enthusiastic attendees, the event fostered an engaging and interactive atmosphere with great responsiveness from the participants.
3. **Dr. R. Kanchana and Dr.A.Chamundeswari** organized a one day workshop on User Experience Design for students of CSE Department in which 41 CSE students participated on 31-10-2023.
4. **Dr. S. Rajalakshmi AP/CSE, Dr. Angeldeborah S AP/CSE and Dr. T. T. Mirnalinee Prof and Head/CSE** along with Kongu Engineering College, India and Luleå University of Technology, Luleå, Sweden organized the Second International Workshop on Fake News Detection in Low-Resource Languages (Regional-FAKE) on December 7 and 8, 2023 conducted as a part of Second International Conference on Speech & Language Technology for Low-resource Languages (SPELLL 2023), held during 06-08 December 2023 at Kongu Engineering College, Erode, Tamil Nadu, India.
5. Ms. Vasanthi Babu, Student Counsellor, Anna University visited the CSE department to deliver a guest lecture on “Mental Well-being among Youngsters: Deduction and Solution” on 16th December 2023.



## EVENTS ATTENDED

1. **Mrs. Lakshmi Priya S, AP/CSE** attended One-week online Short Term Training Programme (STTP) on "Foundations and Frontiers: A Research Perspective on Deep Learning Applications" organized by Vardhaman College of Engineering, Hyderabad from 18.12.2023-22.12.2023.
2. **Dr. K. R. Sarath Chandran, AP/CSE** attended One-week online Short Term Training Programme (STTP) on "Foundations and Frontiers: A Research Perspective on Deep Learning Applications" from 18th to 22nd December, 2023 organized by the Department of CSE, Vardhaman College of Engineering, Hyderabad.



3. **Dr. Sujaudeen N.,AP/CSE**, attended One Week Short-Term Training Programme (STTP) on "Foundations and Frontiers: A Research Perspective on Deep Learning Applications" Conducted by Vardhaman College of Engineering, Shamshabad, Hyderabad from 18-12-2023 to 22-12-2023.
4. **Dr. Mirnalinee T T, Prof & Head/CSE**, has completed the NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC)
5. **Dr.V. S. Felix Enigo, ASP/CSE** has attended 1-day "Startup TN Healthcare and Life Sciences Forum Lanuched by Tamil Nadu Startup and Innovation Mission" on 24.02.24
6. **Dr.V. S. Felix Enigo, ASP/CSE** attended 3-days mega event Global Bio-India, 2023 scheduled from December 4 to 6, 2023, at Bharat Mandapam & Hall no 14, Pragati Maidan, New Delhi.

## OTHER ACTIVITIES

1. **Dr. A. Beulah, AP/CSE** acted as question paper setter for 2 subjects for Sri Shanmugha College Of Engineering And Technology, Salem on 22/11/2023.
2. **Dr. Dhannya. S. M, AP/CSE** was a jury member for the Envision Hackathon organized by the Dept of Information Technology at SSN College of Engineering on 16th November 2023.
3. **Dr. D. Venkata vara prasad Prof/CSE** acted as an External examiner for Mini project at Saveetha Engineering College on 2-12-2023
4. **Dr. R. Kanchana ASP/CSE** accompanied the 47 students of III sem BE (CSE) for an industry visit to Regenboog India Foundation, Thiruvannamalai on 19th Dec 2023. They visited a model school and 3 villages, interacted with the children, village people and panchayat presidents. They also had sessions on initiatives of Regenboog such as mobile clinic, mobile library, and evening school.
5. **Dr. Chitra Babu, Prof/CSE** completed a course on "Generative AI for Everyone" offered by Deeplearning.ai under Coursera by Prof. Andrew Ng on the 4th December 2023.
6. **Dr. Venkata Vara Prasad, Prof./CSE** acted as External examiner for Mini project on 5th and 6th January 2024 at Saveetha Engineering College.

# STUDENT ACHIEVEMENTS

## Internally Funded Student Projects

S.No	Name and Year of the Student(s)	Project Guide	Title of the Project	Budget
1	Prithivirajan D Rishab S Tarunraj R II year	Dr. K.R. Sarath Chandran CSE	Gesture Controlled Smart Suitcase	<b>Rs.20000</b>
2	Apurva Narayan Olirva M Charumathi P III year	Dr. K.R. Sarath Chandran CSE	Prototyping a Graph-Based Approach for Efficient Vehicle Tracking in a Cluster Controlled CCTV Surveillance systems	<b>Rs.23000</b>
3	Rohith Arumugam S Samah Syed Muhammed Aadhil A Abishna A Mathavaroopan S II year	Dr. V. Balasubramanian CSE	Smart Power Consumption Monitoring System	<b>Rs.18000</b>
4	Srivathsan S Harikumar G Rajesh G II year	Dr. K. R. Sarath Chandran CSE	Wall Cleaning Robot For High Rise Building	<b>Rs.23000</b>
5	Vaidhegi D Rajasekar Srilakshmi Sai Sruthi R III year	Dr. S. Rajalakshmi CSE	Speech-Enabled Server Robots for Restaurants	<b>Rs. 27000</b>
6	Dharunika S Hemalatha R Vishnu Praba A Vijay Srinivas S II year	Dr. S. Angel Deborah CSE	Detection of Dust on High-rise Building Glass Walls and Visualization using Quadcopter	<b>Rs.25000</b>
7	Raghul Yadhav K III year Harine Cellam N S Nandhine A II year	Dr. K.R. Sarath Chandran CSE	VR System for Interior Design	<b>Rs.32000</b>
8	Ranjit Kumar G II year Dilfina D III year	Dr. S. Angel Deborah CSE	AI-Enabled Smart Irrigation System for Precision Farming and Water Resource Management	<b>Rs.28000</b>
9	Sitaraman A Nikhil Narayanan S Anandharaj D Hannah II year	Dr. S. V. Jansi Rani CSE	IoT based Water Quality Monitoring System for Aquaculture	<b>Rs.24000</b>
10	Rohan Ravi Kumar Aswathy AR Shaun Allam V Vijay Karthick II year	Dr. K.R. Sarath Chandran CSE	Smart Automatic Windshield Wiper with Dust Detection	<b>Rs.21000</b>



11	S Jagrath Mithun K Harish Deepak M II year	Dr. T. T. Mirnalinee CSE	Navigation System for Vertical Glass Cleaning Robot	<b>Rs.24000</b>
12	Nandhalal S Prashanna Kumar S Micheal Berdianth M Pranav CM II year	Ms. S. Lakshmi Priya CSE	Smart Vehicle Security and safety System: Integration of Theft Detection and Accident Control	<b>Rs.15000</b>
13	Abhishek Reddy Lingareddy Akshatha Anbalagan Niranjana A Shreedevi Seluka Balaji II year	Dr. S. Angel Deborah CSE	Smart Braille Transcriber	<b>Rs.20000</b>
14	B Saathvik Nikilesh Jayaguptha Abhishek K R II year	Dr. D. Thenmozhi CSE	Automated Drug Dispensing Machine based on IoT and Image Processing	<b>Rs.14000</b>
15	Sanjay M Krithika M II year Kevin John Daniel III year	Dr. T.T. Mirnalinee CSE	3D Printer	<b>Rs.32000</b>
16	Shankari S R Kowshika S Keerthana K Keerthana. G. S II year	Dr. T.T. Mirnalinee CSE	Intelligent Robotic Arm for Recognition and Object Picking	<b>Rs.25000</b>
17	Sanjivan K.P B. Vansari Vignesh III year Anierudh HS Tharunithi TJ II year	Dr. P. Mirunalini CSE	Remaining Discharge Time Prediction For EV Batteries	<b>Rs.20000</b>
18	Varun S. Roshan IV year Harsh Pratap Singh Charan Balakrishnan Dhinesh Ram K II Year	Dr. S. Angel Deborah CSE	Red Weevil detection using sound detection	<b>Rs.22000</b>
19	Krithik Sathya M Aasish M Fabrizio J Naveed Buhari III year	Dr. B. Prabavathy CSE	Human Following Smart Trolley With Barcode Scanner	<b>Rs.12000</b>
20	V. Arvind J. Harish Amudhakavi Akshith Vishwanathan I year	Dr. R. Kanchana CSE	IoT-based Continuous Glucose Monitoring System	<b>Rs.28000</b>
21	S. Faatina I year	Dr. S. M. Dhannya CSE	Interactive AI-based Career Counselling Tool	<b>Rs.18000</b>

22	T. Mehanth I year	Dr. T. T. Mirnalinee CSE	IOT based intelligent system to detect the medicinal plants from the environment	<b>Rs.25000</b>
23	Sandhya Giribabu Shinigdapriya Sathish Vidarshanaa Saravanavel I year	Dr. J. Bhuvana CSE	Smart Navigation Assistance for the Visually Impaired	<b>Rs.24000</b>
24	Sathvika Kamali Shankar B. Saathviga Sharan Rajesh I year	Dr. S. V. Jansi Rani CSE	Women Safety Device	<b>Rs.21000</b>
25	M. Saipranav V. Yadushree I year	Dr. V. Balasubramaniam CSE	Blockchain based media verification system	<b>Rs.10000</b>
26	P. Vettri Chezhian S. Kamesh Dileep Ram I year	Dr. R. Kanchana CSE	Safe Strive Wearable	<b>Rs.26000</b>
27	Harsh Agarwal M. Mithun Kishore B. Prasana I year	Dr. S. Rajalakshmi CSE	Environment Monitoring and Disaster Management Using Drone	<b>Rs.27000</b>
28	Gopika Ganesan L.V. Harini Nandhika Saravanan I year	Dr. R. Priyadharsini CSE	Elevating Security beyond the Visible Spectrum	<b>Rs.20000</b>
29	M. Irfana Priya Verma Shubham Kumar I year	Dr. Chitra Babu CSE	Stress Detection in Students by analyzing sleep patterns	<b>Rs.8000</b>
30	A. Akash R. Arjun Olin Jeremiah Pierson I year	Dr. T. M. Rajalaxmi Mathematics	Burning Number of Certain Interconnection Networks	<b>Rs.10000</b>
31	Mahima Bhavana M. Lakshaya I year	Dr. B. Bharathi CSE	Development of multilingual smart scanner pen for visually impaired people	<b>Rs.15000</b>
32	K. Chandraprakash I year	Dr. V. Tamilmani Chemistry	Synthesis of Lead-Free Inorganic Halide Phosphors for Night Vision Imaging	<b>Rs.35000</b>

33	Adline J Elizabeth K. Anishka Abhimanyu Srinivasan I year	Dr. B. Bharathi CSE	Device to check for harmful chemicals in fruits and vegetables	<b>Rs.8000</b>
34	S. B. Balamurugan D. Pranav V.S. Rahul S. Rohith Kumar I year	Dr. S. Angel Deborah CSE	Red Weevil detection using image detection	<b>Rs.20000</b>
35	Tanisha Sriram Sowmya Anand Shriya Alladi Shrika Thota I year	Dr. B. Bharathi CSE	Sign Language Translator	<b>Rs.24000</b>
36	Mahadev Ramesh Ramya K.S. Keshav K. Vigneshar Anirudh Velupala I year	Dr. V. Thanikachalam CSE	Classification of Leaf diseases	<b>Rs.5000</b>
37	D. Gabriel Prince K. Kharihara Sudhan M.P. Arjun I year	Dr. R. Kanchana CSE	IoT based Health Monitoring System	<b>Rs.28000</b>
38	Kushaal Shyam Potta V.A. Praneeth M. Hema Varshni I year	Dr. V. Arulkumar IT	Improve Tourist Experience by generative AI	<b>Rs.28000</b>
39	S. Ramcharan I year	Dr. M. Srinivasan SSN RC	Investigation of the Effects of Pre-annealing on the Impurity Concentration in mc-Si Wafers for Solar Cell Applications	<b>Rs.32000</b>

## CO-CURRICULAR ACTIVITIES

### Participation in International Competitions

1. Pooja Premnath, Venkatasai Ojus Yenumulapalli and Parthiban M of Third Year CSE under the guidance of Dr. S. Rajalakshmi, AP/CSE and Dr. S. Angel Deborah, AP/CSE participated in the task titled “Emotion Discovery and Reasoning its Flip in Conversation (EDiReF)” in SemEval 2024 on Jan 25, 2024 and secured 7th rank.
2. Ravindran V of Second Year CSE under the guidance of Dr. S. Rajalakshmi, AP/CSE, Dr. S. Angel Deborah, AP/CSE and Dr.T. T. Mirnalinee, Prof./CSE participated in the task titled “Emotion Discovery and Reasoning its Flip in Conversation (EDiReF)” in SemEval 2024 on Jan 25, 2024 and secured 21st, 8th and 11th rank, in subtask a, b, c respectively.

3. Ravindran V of Second Year CSE under the guidance of Dr. S. Rajalakshmi, AP/CSE and Dr. S. Angel Deborah, AP/CSE participated in the task titled “Semantic Textual Relatedness (STR)” in SemEval 2024 on Jan 25, 2024 and secured 28th rank.
4. Rohith Arumugam of Second Year CSE under the guidance of Dr. S. Angel Deborah, AP/CSE, Dr. S. Rajalakshmi, AP/CSE and Dr. T.T. Mirnalinee, Prof./CSE participated in the task titled “Emotion Discovery and Reasoning its Flip in Conversation (EDiReF)” in SemEval 2024 on Jan 25, 2024 and secured 18th, 7th and 10th rank, in subtask a, b, c respectively.

## Athena Hacks 2023

Athena Hacks 2023 was the 8th edition of the national-level 24-hour hackathon organized by ACM-W India, hosted this year by PSG college of technology, Coimbatore. It is with immense joy and pride that we share our achievement in this All India Level Hackathon organized by ACM-W. Out of 272 participating teams in Round 1, our team not only clinched a place in the top 10 teams in Round 3 but also secured the prestigious position of Second Runner-Up.

This Hackathon, a challenging test of skills and innovation, brought together students from all corners of India, including the esteemed IITs. Our team dedicated an intense 24 hours to address a complex problem statement, showcasing unwavering commitment and technical prowess.

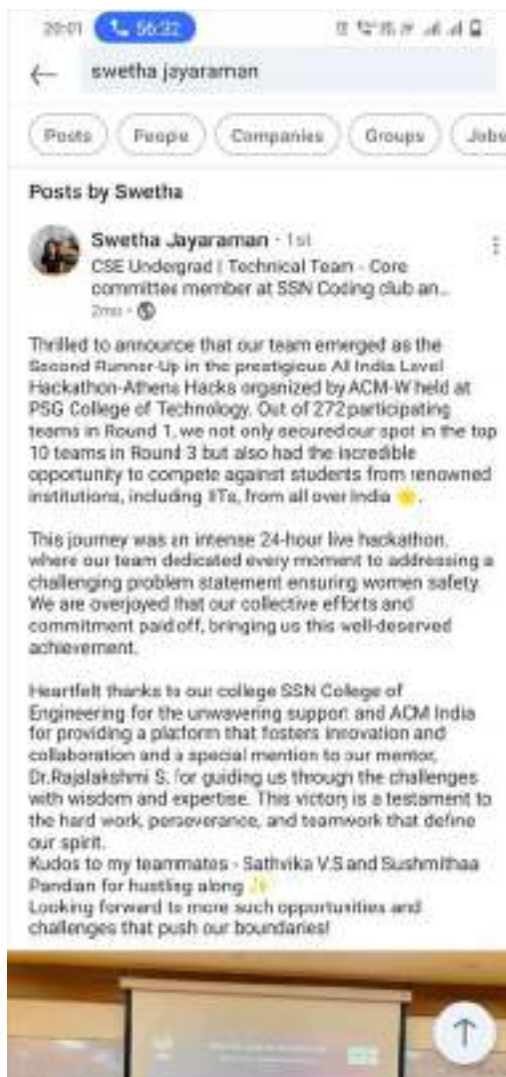
We built a full-fledged mobile application named VeloCity, which is not just an app, it's a solution that addresses two crucial aspects - ensuring the safety of women during nighttime travel and contributing to environmental sustainability.





Velocity is designed to cater to the specific needs of women who need safe and reliable transportation options during the night. The app provides a secure platform for booking cabs, offering peace of mind to women traveling after dark. Our commitment to safety extends beyond just the user; Velocity also facilitates a supportive carpooling feature, creating a community of users who share rides and contribute to a safer environment.

One of the remarkable features of Velocity is its positive impact on reducing greenhouse gas emissions. We believe that technology should



serve a dual purpose - addressing societal needs and environmental concerns. Velocity embodies this philosophy, providing a tangible solution for the safety of women while championing the cause of sustainable transportation.

A heartfelt thank you to our college and our CSE department for the unwavering support, ACM-W India for providing a platform that fosters innovation and collaboration, and a special mention to our mentor, Dr. Rajalakshmi S, for guiding us through the challenges with wisdom and expertise which helped us grab this position. We would also like to extend our thanks to our department HOD Dr TT Mirnalinee for this opportunity. This victory is a testament to the hard work, perseverance, and teamwork that define our spirit.

Looking forward to more such opportunities and challenges that push our boundaries.

**Swetha J, Sathvika V S - 3rd year CSE**  
**Sushmithaa P - 3rd year ECE**

## SIH 2023 grand finale

SIH 2023 grand finale was conducted during 19. 12. 2023 to 20.12.2023 (for Software) 19.12.2023 to 23.12.2023 (for Hardware). Three teams from the CSE department (Team Names: SeedShare, Pixel Phantoms, Five Guys) participated in finals. SeedShare team won the special mention award from AWS with a cash prize of INR 50,000



### Team : Pixel Phantoms - Software

Nodal Centre: Chandigarh Engineering College, Jhanjeri, Mohali

Team Members: Sundaresh Karthic Ganesan (2 CSE), Tharunithi T J (2 CSE), Sukesh Velusamy (2 CSE), Jithu Morrison S(2 CSE), Vishnu Praba A J (2 CSE), Yuvapriya N (2 CSE).

Mentors: Dr. S. Angel Deborah, Dr. Beulah A

### Team: Five Guys - Software

Nodal Centre: Kolhapur Institute of Technology'S College of Engineering (Autonomous), Kolhapur

Team Members: B Saathvik (2 CSE), Pranav Moorthi (2 CSE), Janeshvar Sivakumar (2 CSE), Aswath Karthik (2 IT) , Dunya Syed Hassan (2 IT), Ganesh B (2 Mech)

## Team SeedShare Triumphs at Smart India Hackathon 2023

Our college team SeedShare emerged as the winners of the Smart India Hackathon 2023, a prestigious event organized by the Ministry of Education and the Government of India with a prize money of Rs. 50,000/-. This was sponsored by AWS as a special prize for effectively deploying our solution on the cloud using the various technologies offered by AWS.





Amidst the backdrop of 181 software problem statements released by various ministries and an impressive 55,000 idea submissions, Team SeedShare's standout performance in the Student Innovation category, focused on blockchain and cybersecurity, propelled it to the top 5 submissions selected for the Grand Finale out of 430 contenders.

The Grand Finale, hosted at the Prasad V Potluri Siddhartha Institute of Technology in Vijayawada, on the 19<sup>th</sup> and 20<sup>th</sup> of December unfolded as a rigorous 36-hour hackathon. Teams from across the nation showcased their talents, engaging in multiple rounds of mentoring sessions and evaluations during the intense competition.

Team SeedShare had interdisciplinary members comprising Apurva Narayan ( Team Lead - CSE 3<sup>rd</sup> year), Themozhi J (ECE 3<sup>rd</sup> year), Olirva M ( CSE 3<sup>rd</sup> year), Rupam Banik (IT 3<sup>rd</sup> year), Keerthan Vinod ( CSE 3<sup>rd</sup> year) and Karthik Vijayakumar ( CSE 3<sup>rd</sup> year).

Team SeedShare was mentored by Dr. Chitra Babu, Professor, Department of CSE and Mr. Kiran of Presidio.

## PLACEMENT OFFERS

Student Name	Company - Job Offer Details
Ajay Kumar S.K	Royal Sundaram General Insurance
Dilli Kumar P S	TVS Credit Services
Harshavardhan V	iamneo
Lekha Chenguttuvan	TVS Credit Services
Mahalakshmi S	
Sivanesan S	Tiger Analytics
Balaji S	DevTown

## EXTRA - CURRICULAR ACTIVITIES

1. **R.Deepak Kumar** of 3rd year CSE has participated in a Cricket tournament organized by Loyola College of Engineering at State level held at Loyola College of Engineering, Chennai during 1.11.2023 to 1.11.2023.
2. **Nandini Sree R R** of 3rd year CSE 'B' participated in the National level event - Model United Nations named 'Witness Leadership Summit '23' held at the VIT Law School, Chennai during 3.11.2023 and 4.11.2023 and secured a 'verbal mention'. The SSN college team won the best delegation award.
3. **Samyuktaa Sivakumar and J M Sunil Sairaj** of 2nd year CSE have attended studio practice at Anna Nagar on 16th and 17.11. 2023 as part of the core team of the college dance club N2K organized at an intra college level.
4. **Dharunika, Shankari, Harini shree** of II year CSE have participated in "Kalaigiar Nootrandu vizha' an intra college state level competition held during 7-11-2023 organized by Saral Tamizh Mandram of SSN College of Engineering.
5. **V Yuktha and VK Srihari**, students of 2nd year from CSE department attended an inter college national level event organized by DFS Barclays on the topic "Digital Literacy and Career Insights", in association with United Way NGO, on 17/11/2023 (Friday) at DFS Barclay, Manapakkam as YRC Volunteers.
6. **Shankari S R** of II Year , CSE has participated in the Yuva Sangam Phase 3 ( Exposure to visit Rajasthan) under NSS organized by Yuva Sangam (With ministries of India) national level at IIIT, KOTA held from 05.12.2023 to 15.12.2023 as NSS Volunteer.

### Yuva Sangam Phase 3

#### Exposure Visit of Youth to Various States of India

Tamil Nadu to Rajasthan -December 06 to December 15, 2023

Sending Institute: IIM, Tiruchirappalli.

Receiving Institute: IIIT, Kota.

The much-anticipated commencement of the trip to Rajasthan began with the inauguration function, which took place on December 5, 2023, at 5 pm in IIM, Tiruchirappalli. Approximately 50 participants from various parts of Tamil Nadu enthusiastically attended this event. As the first segment of the program, "Tamilthai Vazhthu" was sung by all the participants, faculties, and parents. Following this, as a representation of Tamil culture, a "KuthuVilakku" was lit by a faculty member, a student, and parents. An introduction to Yuva Sangam was then presented, and participants

subsequently introduced themselves. It is crucial to note that due to flooding in Chennai, the train scheduled for Rajasthan delegates was canceled, leading them to actively participate in the inauguration function. Prizes were awarded to winners (Rajasthan Delegates) who excelled in various competitions such as Drawing, Elocution, and Essay writing. Following this, the Tamil Nadu delegates received their kits, including T-shirts, caps, identity cards, and tags. The inauguration function concluded with the singing of the National Anthem. Subsequently, the Tamil Nadu delegates had a

brief visit to IIM, Trichy's impressive library. Later in the evening, they enjoyed a delicious meal.

To kick off the trip, the Tamil Nadu delegates commenced their journey to Rajasthan from Tiruchirappalli Junction on December 6, 2023. In commemoration of this moment, a group picture was taken at the junction. Subsequently, their journey unfolded aboard the HamSafar Train.



On the second day of their journey to Rajasthan, the Tamil Nadu delegates continued their travel on the train. They made the most of their time by engaging in conversations, playing various games, etc. Day 2 concluded with the delegates sharing moments of camaraderie, making the train journey a memorable part of their overall experience.

After an extended journey, the Tamil Nadu delegates reached Jaipur Junction in Rajasthan. They were warmly welcomed by the Rajasthan Coordinators at the Jaipur Junction. Following this, they traveled to MNIT, Jaipur, where they received an exceptionally warm welcome. The delegates were honored with Rajasthan's traditional mala (garland) and presented with snacks and flowers, enhancing the warmth of their arrival.



After a quick refreshment, the Tamil Nadu delegates had an exciting start to their exploration of Rajasthan. Their first destination was the Pink City, Jaipur. Arriving at lunchtime, they headed to Lily

Pool Hotel for a delicious meal. Following this satisfying lunch, they had the opportunity to visit Jal Mahal. The delegates were treated to the historical and architectural wonders of Jal Mahal, making it a captivating start to their exploration of Rajasthan. After the historical visit, they were brought to the Devotional DevNarayan Ji temple. There, they had a pleasant darshan of Lord DevNarayan and admired the beauty of the temple. Then, they had a wonderful chance to visit the Hawa Mahal. It has 953 windows (Jharokhas). By looking at that, every student was very happy. The Hawa Mahal is a





palace in the city of Jaipur, India. Built from red and pink sandstone, it is on the edge of the City Palace, Jaipur, and extends to the Zenana, or women's chambers.

After visiting these places, students were allowed to purchase Rajasthani items from local shops. This was a highly anticipated part of the event. The day was completed by shopping for things in the Pink City. After shopping, the TN delegates were brought to MNIT, Jaipur, where they enjoyed a delicious night meal. Following that, they had a sweet sendoff to IIIT, Kota and took a group picture there. Thus, the day came to an end.

The TN delegates successfully reached IIIT, Kota at 4:30 am after a long journey from MNIT, Jaipur. There, they received a very warm welcome from the faculties and were provided with refreshments. Afterward, they were allowed to take some rest. After having some rest, the students enjoyed a tasty breakfast at IIIT, Kota. Later, around 10:45 am, they participated in a hearty welcome ceremony at IIIT, Kota. During the ceremony, they were honored with Rajasthani traditional turbans (Pagari), white garlands (Mala), and a memorable kit. A delightful welcome function took place in the auditorium, featuring quizzes and photo sessions. The TN coordinators presented mementos to IIIT, Kota, and vice versa, expressing mutual appreciation and respect.

In the sequence of visiting devotional places, their next stop was the Keshoraipatan Jain Temple. There, they explored the Jain sculptures and enjoyed delicious refreshments. After visiting the devotional places, the TN delegates had a super elegant visit to the Seven Wonders Park in Kota. Seven Wonders Park in Kota comprises miniatures of all the Seven Wonders of the World. These include Taj Mahal, Great Pyramid, Eiffel Tower, Leaning Tower, Christ the Redeemer of Brazil, Colosseum, and Statue of Liberty.

The fifth day's journey was quite long, so everyone was super excited. They reached the Meenal Waterfalls by 9:40 am. There, they had a wonderful experience with the nature of Kota. The sculptures and the natural surroundings were super elegant, making it a memorable spot to visit in one's life. The next day we visited the Rajasthan Atomic Power Station located at Rawatbhata. It currently has six pressurized heavy water reactor (PHWR) units operating with a total installed capacity of 1,180 MW.





On the first visit on Day 7, TN delegates went to the Army cantonment in Kota. There, they witnessed the sacrifices and the dedicated work of the Army officers. After visiting the Army Cantonment, the delegates had the chance to visit the Allen Coaching Institute in Kota. Eighth day was memorable for the participants as they spent their last day at IIIT, Kota. The morning started with various types of games such as Kabaddi, Kho-Kho, Volleyball, and Kiting. After playing, delegates had the chance to meet the director of IIIT, Kota. There, they had a very interactive session with the director. Participants also took

part in tree planting. They planted tree saplings, watered them, and enjoyed contributing to the conservation of nature within the IIIT, Kota premises. Following this, students got ready for the traditional program. During this program, they wore traditional dresses of Tamil Nadu, showcasing the elegant look of the state.

Everything has its end. At last, the trip came to an end with a heartfelt goodbye to the whole of Rajasthan. Participants departed from Sogaria Railway station, beginning their journey back to Tamil Nadu with lots and lots of memories from Rajasthan.



After a long journey from Rajasthan, TN delegates reached Tamil Nadu on December 15th. They shared heartfelt goodbyes with their friends and faculties. It was truly a memorable journey, likely to be an important part of every participant's life. A special thanks to Yuva Sangam for conducting this cultural event and facilitating cultural exchange across India. A heartfelt thanks to both IIM, Tiruchirappalli (Sending Institution) and IIIT, Kota (Receiving Institution) for taking care of the participants safely and ensuring their happiness.

**Shankari S R, II Year CSE**

## HOURLY OF CODE

Introduction :

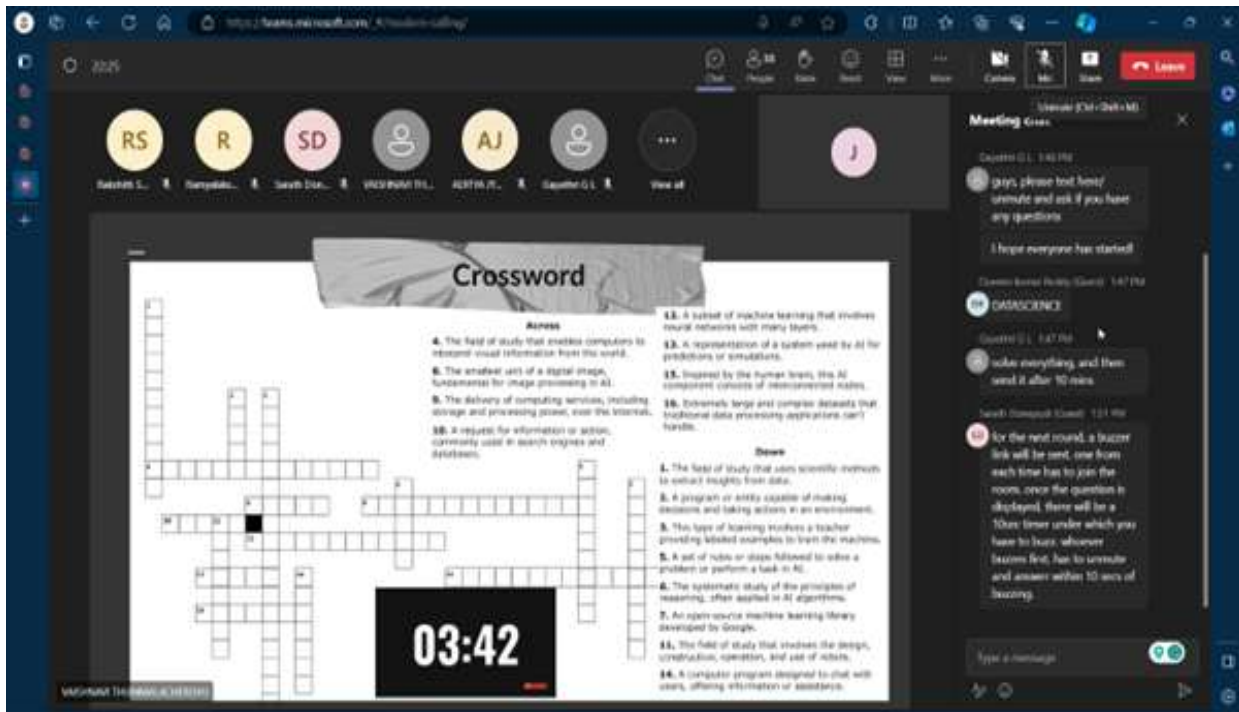
The "Hour of Code" online event, which commenced on December 6th, 2023 at 1:30 PM, was an exploration of creativity in the realm of Artificial Intelligence (AI). Hosted virtually, the event had 36 enthusiastic participants, who were actively engaged in the challenges. In his opening address, Jeevesh Krishna, head of ACM SSN, extended a warm welcome to the participants, and provided a comprehensive overview of the event's objectives and emphasizing the significance of creativity in the field of AI.



## 1. AI Trivia Challenge:

### Round 1 - Crossword Puzzle:

The first challenge of the day was the AI Trivia Challenge, and the first round was a crossword puzzle. Participants were presented with hints to fill in the crossword, testing their knowledge and creativity in AI. Participants fervently submitted their answers within the allotted 10 minutes via the chat box.

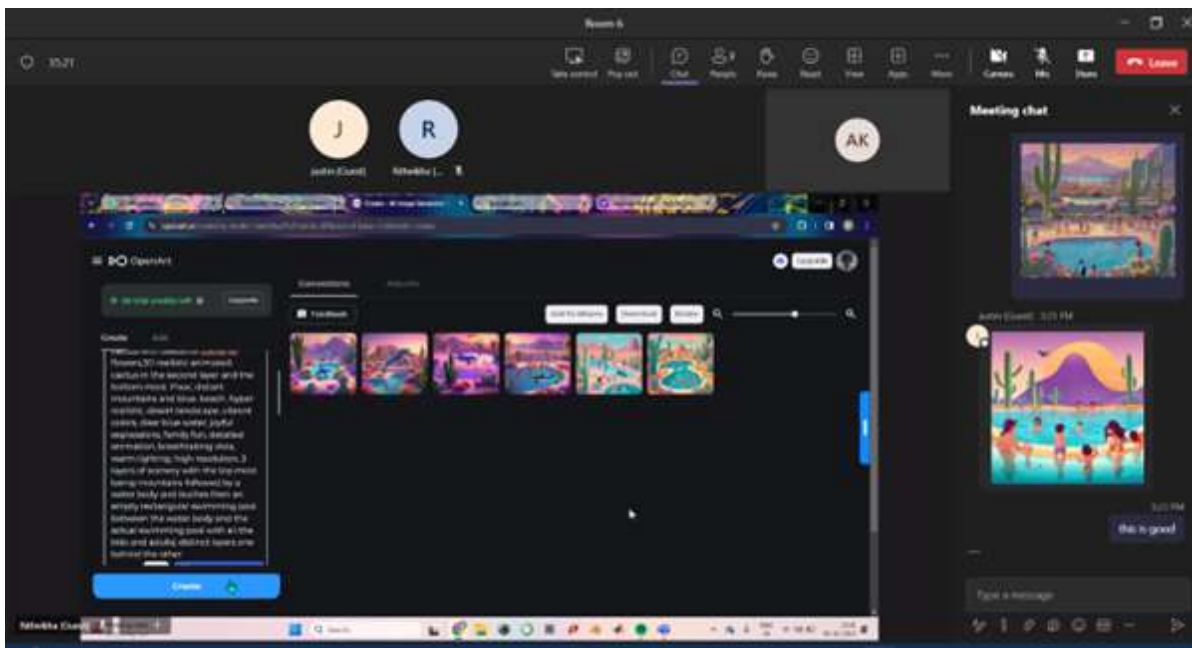


### Round 2 - AI Knowledge Quiz:

Following the crossword puzzle, the second round involved an AI Knowledge Quiz. This segment tested participants' awareness of the evolving landscape of AI, spanning the progress made in recent years. Vaishnavi T expertly led both rounds, guiding participants through a series of questions that sparked excitement and yielded a plethora of responses.

## 2. AI Image Generation:

Rakshith took charge of leading the AI Image Generation Challenge, providing each team with the second challenge instructions. To facilitate focused work, Vaishnavi efficiently organized breakout rooms for each team, ensuring a seamless and collaborative environment. Each team was presented with a specific image and tasked with generating the closest possible approximation using text prompts. Leveraging tools like NVIDIA Playground, participants were challenged to translate textual descriptions into visual representations within a time limit of 30 minutes. The culmination of the challenge revealed a remarkable display of creativity, with each team presenting images that closely matched the given prompts.



Participants' works :



3. Semantle:

The event unfolded with the third challenge, the Semantic Challenge. Gayathri provided insightful instructions, while the coordination efforts of Hishitha and Samyuktaa ensured a smooth and engaging experience for the participants. Participants transitioned into their respective breakout rooms, where they were tasked with guessing words and determining their semantic similarity to a secret word. The interactive nature of this challenge encouraged participants to work collaboratively. The challenge extended beyond word recognition, evolving into an engaging riddle-solving activity.

4. Website Replication Challenge:

"Hour of Code" reached its crescendo with the fourth and final challenge - the Website Replication Challenge. This challenge provided participants with an opportunity to apply their skills in handling

the Large Language Models blend with their coding skills and creativity by replicating a website. Yashasvee orchestrated the challenge by offering clear instructions and providing participants with essential website images and requirements. This event spanned 45 minutes, during which participants were tasked with replicating a given website. The challenge featured an interactive query session facilitated through the chat box. Participants were encouraged to seek clarification and guidance, fostering a collaborative learning environment. Yashasvee's responsiveness to participant queries ensured a supportive atmosphere throughout the challenge.

Participants' works :



Conclusion :

Sanjit S, in a heartfelt vote of thanks, acknowledged the participants for their active involvement and dedication throughout the event. Sanjit also announced that the winners of the various challenges would be duly recognized, adding an element of anticipation to the event's closure. The Hour of Code had thus come to a close as a well-received and enjoyable experience for all.



## Industry Visit to Regenboog India Foundation, Thiruvannamalai

Dr R Kanchana of Computer Science Department of SSN College took the initiative to organise a field trip for the CSE A 2nd year students to the Regenboog India Foundation near Thiruvannamalai on December 19, 2023. This field trip was organised as part of the UHV course to foster peace with society and nature. The objective is to study the innovative practices followed by them. The Mobile Medical Clinic provides free medical care to rural villagers. The Evening School provides educational support for school-aged children living in slum areas. The Mobile Library allows children to check out a book of their choice every two weeks. The Educational Support Project supports youth in high school and college who otherwise would have to drop out of school. The Menstrual Hygiene Awareness project aims at empowering young women for safe, healthy, and sustainable menstruation management. The Science Park developed by the Government is maintained by Regenboog.

This excursion has been attended by 43 students. This trip was primarily intended to better understand the village's numerous concerns and educational system.

We had visited Grama Panchayat, three separate villages, and a school, as well as the Regenboog India Foundation, to learn about their humanitarian projects such as mobile clinics, evening classrooms, mobile libraries, and the preservation of the Arunachala hills.



We got the opportunity to speak with the panchayat head, where we asked many questions and learned about the difficulties they are facing as well as their endeavours to enhance the village.



We went to Tiruvannamalai's Arunachala School (a primary level school) to promote social peace. They are more concerned with extracurricular activities than with academics. Extracurricular activities included pottery class, craft making, and silambam. The school was designed in such a way that the students could learn just by roaming around and observing their surroundings. For example: The floors were containing alphabets hidden in the tiles, Planets were hung on the ceiling helping them to visualize their solar system. They broke the conventional way of teaching from

textbooks and focused on more activities related teaching which made the kids believe studying is also

fun. All the staffs their not only provided their guidance in terms of education but also focused on the well being of student's lives by trying to resolve their family struggles too. They established an honesty shop where the kids could put money and take things while also learning some math. We had learned a lot from those kids. Finally, we held games and awarded prizes to the participants.

We went to the adjacent village to promote natural harmony. Exploring the village's farming landscape provided a thorough grasp of numerous agricultural processes, such as crop production, irrigation methods, and the painstaking care required for various crops.



Regenboog is a charitable organization that was created in 2006 in Tiruvannamalai, a tiny town in southern India. Regenboog was formed to make a difference in society through charitable projects in the fields of children's welfare, rural healthcare, education, and environmental care. The



organization's Managing Trustee is Mr. Kumarisan Vadamalai. We visited this Regenboog charity organization, where they described the numerous projects they are working on to improve the hamlet. This includes:

- **Mobile Medical Clinic:** It provides free medical care to rural villagers.
- **Menstrual Hygiene Awareness:** This project aims at empowering young women for safe, healthy, and sustainable menstruation management.
- **Mobile Library:** It allows children to check out a book of their choice every two weeks.
- **Evening School:** It provides educational support for school-aged children living in slum areas.

We learned a lot throughout this field trip. This trip was an experience that extended our perspectives and enriched our understanding.

II Year Students

CSE



## ALUMNI CORNER

- Ms.Shradda Mohan, Analyst, Goldman Sachs, CSE Alumni 2021, visited the campus on 01-11-2023 and interacted with our faculty.
- Ms. Vishnushree, Full Stack Developer, COMCAST, CSE Alumni 2023, visited the campus on 01-11-2023 and interacted with our faculty.
- Joshua A, Software Developer, Fidelity, CSE Alumni 2022, visited the campus on 09-11-2023 and interacted with our faculty.
- Ms.Varsha R, Software Developer, IBM CSE Alumni 2022, visited the campus on 14-11-2023 and interacted with our faculty.
- Meena Muthukumar, Senior Associate Software Engineer, Equinix, CSE Alumni 2023, visited the campus on 23-11-2023 and interacted with our faculty.
- Arunesh Kumar, Software Engineer, Stay Flexi, CSE Alumni 2022, visited the campus on 25-11-2023 and interacted with our faculty.
- Arun A, Senior Researcher, GM R&D, U.S.A, CSE Alumni 2011, visited the campus on 25-11- 2023 and interacted with our faculty.
- Vishakan S, Software Engineer, Workato, CSE Alumni 2022, visited the campus on 29-11-2023 and interacted with our faculty.
- Sudharshan R, Software Engineer, Navis Technologies, CSE Alumni 2022, visited the campus on 29-11-2023 and interacted with our faculty.
- Mr. Arun alumni (PG batch 2009-2011 Batch) visited the department of CSE on 25th Nov 2023 to have interactions with Dr. R. Kanchana and Dr. T. T. Mirnalinee. The possibility of a value added course was discussed.
- Mr. Karthik Raja, CSE Alumni 2023, visited the campus on 12-12-2023 and interacted with our faculty.
- Ms. Sivagami S N, Software Engineer, Amazon, U.S.A and CSE Alumni 2018, visited the campus on 26-12-2023 and interacted with our faculty.
- Mr. Kabila Sudhan, Backend Developer, Geatz, CSE Alumni 2022, visited the campus on 05-01-2024 and interacted with our faculty.
- Mr. Mohammed Rafiyudeen T, Devops Engineer, Data Access, CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.
- Mr. Jayasuriya B, Cybersecurity Analyst, Cycatz, CSE Alumni 2022, visited the campus on 07-01-2024 and interacted with our faculty.
- Mr. Yaswanth V, Advanced App Engineering Analyst, Accenture, CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.

- Mr. Pratyush Nepal, CEO, Lead on Leads, CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.
- Mr. Raghuraman Venkatesh, Research Assistant, UIC [University of Illinois Chicago], CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.
- Mr. Satheesh Kumar GR, Software Engineer, Chargebee, CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.
- Mr. Joshua A, CSE Alumni 2022, visited the campus on 06-01-2024 and interacted with our faculty.
- Mr. R. Sundareswaran, Senior Software Engineer, Yubi, M.E CSE Alumni 2018, visited the campus on 09-01-2024 for placement drive and interacted with our faculty.
- Mr. Arunesh Kumar, Software Engineer, Stayflexi Inc, CSE Alumni 2022, visited the campus as Resource person for FDP on Advanced AI tools and applications on 31-01-2024 and interacted with our faculty.
- Our Gold Medal winner of 2018-2022 Batch, Lakshmi Priya B writes.....



## Tribute 2024

On January 6 2024, a formal college alumni meetup was held at the SSN College of Engineering. The event was organized to bring together alumni from SSN to network, reminisce about their college days, and hear about the latest developments and initiatives at the college. The event was attended by alumni, representing various graduating classes from the past decades.

A total of more than 120 CSE alumni spread across all the batches attended the event. Need to highlight the participation of alumni from classes of 2004, 2008, 2009, and 2022, 2023 batches were good.

**Ms. Sai Veerya Mahadevan** of 2017 passed out, currently pursuing Ph.D in Osaka University, Japan, participated in the discussion with the faculty members



had a discussion with faculty members and gave suggestions to bridge the gap between the institution and the best practices of the industry.

**Mr.Aakash and Ms.Hema Priyalakshmi** of 2019 passed out, currently working in Capgemini visited the department and interacted with the faculty members.

The event in the evening was opened by the President of the Alumni Association, who welcomed everyone and gave a brief overview of the purpose of the meetup. Following it, the keynote speaker, the current college President, spoke about the latest initiatives and developments at the college, including new programs, facilities, and research initiatives. The keynote address was well-received, with many alumni expressing interest in the new initiatives and programs at the college. Then the attendees were encouraged to network and connect

and gave inputs about the practices followed in foreign universities and gave suggestions to improve the curriculum.

**Ms. Janaki, Ms.Jeevitha and Ms.Kirtana** of 2014 passed out, and currently working in Expedia, Zoho and Trimble respectively



with other alumni. This networking helped many to reconnect with old friends and make new connections.

Also few alumni were recognized for their outstanding achievements and contributions to their communities. They were engaged by Motta Madi Music to fill the evening with fun. The performance of Motta Madi Music was well received with the crowd interacting well with the band. The event ended with a thank you note by the President of the Alumni Association.



# **EDITORIAL TEAM**

## **FACULTY EDITORS**

**Dr. T. T. Mirnalinee**

Professor & Head/CSE

**Dr. A. Beulah**

AP/CSE

**Dr. S. Angel Deborah**

AP/CSE

## **STUDENT EDITORS**

**Samah Syed**

**Shankari S R**

B.E. CSE II Year