

SMRITI

*Department of
Computer Science and Engineering*

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EDITORIAL DESK

Warm greetings to all SMRITI readers. We are pleased to consolidate the accomplishments and remarkable works that happened in the department during this period.

The department appreciates Dr. K. Vallidevi for initiating an MoU with YesPanchi Tech Services Private Limited. We also congratulate Dr. Chitra Babu who initiated and liaised with Manatec Electronics Pvt. Ltd., Pondicherry for getting an MoU signed between SSN and Manatec for 5 years.

We commend Dr. A. Beulah, Dr. S. Rajalakshmi, Ms.S.Angel Deborah and our department alumni Rithwin Siva, Nishant Mathew, R. Nidhi Bhandari, Varsha Bhargavi Dwarakanathan for filing a patent with the Indian patent office. The department congratulates Ms. M. Saritha for successfully defending her thesis.

We appreciate the efforts of Dr. B. Bharathi in organizing the Second Workshop on Language Technology for Equality, Diversity, Inclusion (LTEDI-2022) and one shared task conducted as part of Second Workshop on Speech and Language Technologies for Dravidian Languages (DravidianLangTech2022) held at Dublin. Also we extend our appreciation to Dr. D. Thenmozhi for organizing four shared tasks in LTEDI-2022 and DravidianLangTech2022.

Our Head of the Department chaired the Board of Studies meeting to approve the PG curriculum 2022. The university nominee, academic expert, industry representative, alumni representative and department faculty members were part of the meeting.

We commend the efforts of our Head of the Department and Dr. S. V. Jansi Rani who initiated the LatConnect programme to strengthen the support system for lateral, rural and vocational students. We applaud the endeavors of Dr. D. Venkata vara Prasad and Dr. Prabha B, Professor & Head, Department of Mathematics who mentored a team of four third year CSE students Vaseekaran S, Srikanth Iyer, Vignesh G R and Prathista Rana to develop a Mentor App.

Our students have immensely contributed towards the growth of the department. It is joyful to mention that three teams from our department have made entry to the grand finale of SIH '22. Many student teams eagerly participated and won remarkable positions in tasks conducted as part of Conference and Labs of the Evaluation Forum(CLEF) 2022 to be held at Bologna, Italy.

With a heavy heart, the department bid farewell to Dr. R. S. Milton who had been a great support for the growth of the department for the past twelve years.

We are extremely happy to see the new achievements of our faculty and students during this quarter. We are looking forward with great anticipation to a more fruitful quarter.

SMRITI Editorial Team

EXTERNAL INTERACTIONS AND RECOGNITIONS

Academic Audits

1. **Dr. Chitra Babu** was appointed as a member of the affiliation inspection team by Anna University to inspect 2 colleges during 2nd and 3rd June 2022.
2. **Dr. T.T. Mirnalinee** audited Academic and Administrative activities of CSE department at AMET University.

AICTE SPICES

Dr. Chitra Babu and Dr. V. Balasubramanian have received the approval for the funding of Rs. 1, 00, 000 for the SSN Coding Club under the AICTE SPICES scheme.

Tamil Virtual Academy

Dr. T. T. Mirnalinee, Dr. R. S. Milton, Dr. D. Thenmozhi, Dr. P. Mirunalini and Dr. B. Bharathi attended a meeting along with Dr. C. Aravindan with a team from Tamil Virtual Academy regarding Hackathon on the topic, "Tamil Computing", on 02.05.2022 and 12.05.2022.

IFIP, Springer

Dr. A. Chamundeswari nominated as secretary for Springer IFIP TC12, WG 12.13 AI FOR GLOBAL SECURITY (<http://www.ifiptc12.org/>)



Business Incubation Meeting

Dr. K. R. Sarath Chandran, Dr. N. Sujaudeen, Ms. S. Lakshmi Priya and Dr. H. Shahul Hamead attended the pitch deck meeting with industry expert **Mr. Easwaran and Dr. Bhalaji** on 14/06/2022.

Board of Studies – Meetings

1. **Dr. Chitra Babu** attended the first Syllabus sub-committee meeting of Anna University on 6th June 2022 for revising the curriculum and syllabi for R 2021 II, III and IV year B.E (CSE), B.Tech (IT), B.E(CSE) with AI&ML specialization, B.E(CSE) with Cybersecurity specialization and B.E(Computer and Communications) programs.
2. **Dr. Chitra Babu** attended the second syllabus sub-committee meeting on 25th June 2022 in online mode for reviewing the syllabi framed for R 2021 higher semester courses for the affiliated colleges.

3. **Dr. T.T. Mirnalinee** attended the BOS meeting at AMET University.
4. **Dr. T.T. Mirnalinee** served as a BOS member of K.S. Rangasamy College of Technology, Namakkal, Tamil Nadu

ACM, India

1. **Dr. Chitra Babu** as a member of the ACM India Education Committee, attended the Department Advisory Board (DAB) meeting conducted by the IT department of the Kumaraguru College of Technology (KCT), Coimbatore on 14th June 2022.
2. **Dr. Chitra Babu** as Chair of ACM iSIGCSE (Special interest Group on Computer science Education) liaised with TCS Research for the Fireside Chat organized jointly by ACM India and TCS Research, helped in getting one of the panelists (Dr. Swaran Lata) from MeiTty. She also briefed about ACM India at the beginning of the Fireside Chat that was organized on 28th June 2022.
3. **Dr. Chitra Babu** as an ACM-W India Council member attended the ACM-W India Council meeting on 23rd June 2022 to discuss and plan the events for the coming year.
4. **Dr. Chitra Babu** attended the meeting with the Vice President of ACM India on 11th June 2022 regarding the Teaching Partnership program(TPP) and provided feedback on the two Value-added courses that were handled by Prof. Ponnurangam Kumaraguru of IIIT Hyderabad and Dr. R. Venkateswaran, CIO, Persistent Systems, Pune during March - May 2022.
5. As ACM-W India Council member, **Dr. Chitra Babu** attended the council meeting on 21st May 2022 to discuss the upcoming activities and also to file the annual report for the council.
6. **Dr. Chitra Babu** as a member of the ACM India Internal engagement Committee, participated in the virtual ACM India Professional Chapter Summit that was organized on 22nd May 2022 and explained ACM resources could be effectively used by the professional chapters.

Invited Lectures - Outside SSN

1. **Dr. B. Bharathi** delivered a talk and demo on "Machine learning for speech processing" in IEEE SPS Seasonal School on Image, Audio, And Video Processing for Pattern Recognition which is scheduled on June 25, 2022 at Kumaraguru College of Technology.
2. **Dr. D. Thenmozhi** delivered a talk titled "Density and Contour Plots" in a Faculty Development Training Programme (FDTP) on "AD8302 - Fundamentals of Data Science" conducted by Department of Information Technology & Department of AI&DS of MSEC sponsored by Centre for Faculty Development, Anna University, Chennai during 1st July 2022.

3. **Dr. S. Saraswathi** delivered a talk on "Cyber Security" in a 5-day FDP on Cyber security and Ethical Hacking at SRM Valliammai Engineering College on 06-06-2022 through virtual mode.
4. **Dr. S. Manisha** delivered a talk on the topic "Information retrieval process" on 20th June 2022 in the Six Days Online Faculty Development Programme on "AD8302-Fundamentals of Data Science" sponsored by the Anna University, Chennai scheduled from 20.06.2022 to 25.06.2022 in St. Joseph's Institute of Technology, Chennai.
5. **Dr. A. Chamundeswari** delivered a talk on, "Practical scenarios in Agile Methodologies," organized by Computer Society of India (CSI) Kanchipuram chapter.
6. **Dr. T. T. Mirnalinee** delivered a talk on Outcome Based Education for the faculty members of Vels University, Chennai on 06.05.2022.
7. **Dr. D. Thenmozhi** delivered a talk on "Research Directions in Text Analytics" in the Five Day Virtual Faculty Development Program on Insights and Open Challenges in Computing Technologies on 13th July, 2022 organized by Sri Sairam Engineering College, Chennai.
8. **Dr. D Thenmozhi** delivered a talk titled "Text Classifications using Deep Neural Networks" on 21st July 2022 in "3 Days Workshop on Developing Application with Natural Language Processing" organized by SRM Institute of Science and Technology, Kattankulathur.

Signed MoUs

1. An MoU which was initiated by **Dr. K. Vallidevi** between Sri Sivasubramaniya Nadar College of Engineering and YesPanchi Tech Services Private Limited was signed by both ends.
2. **Dr. Chitra Babu** initiated and liaised with Manatec Electronics Pvt. Ltd., Pondicherry for getting an MoU signed between SSN and Manatec for 5 years. The MoU copies with authorized signatures on both ends were received on 11th July 2022.



Nalaiya Thiran – an experiential project-based learning program

1. **Dr. T.T. Mirnalinee** served as a member of Skill Development Courses under Naan Mudhalvan Scheme for value added courses in Engineering colleges affiliated to Anna University in collaboration with Tamil Nadu Skill Development Corporation and Directorate of Technical Education.

2. **Dr. Chitra Babu, Dr. D.Venkatavara Prasad, Dr. R. Kanchana, Dr. J. Bhuvana, Dr. V. Balasubramanian, Dr. A. Beulah** attended Faculty Orientation Session - Project Based Experiential Learning Program (Naalaiya Thiran) on 14-07-2022 organized by Anna University as University Eco partner, IBM as Technology partner, and ICT Academy as support partner and Nasscom as skills certification partner.
3. **Dr. J. Bhuvana, Dr. V. Balasubramanian, Dr. Sarathchandran, Dr. A. Beulah and Ms. S. Lakshmi Priya** attended 2 days training on “Enterprise Design Thinking” organized for the mentors of Experiential Project Based Learning course under the Naan Mudhalvan Scheme during 29- July 2022 , 30-July 2022.

Program Committee Members

1. **Dr. K. R. Sarath Chandran** acted as program committee member in the 2022 IEEE World Conference on Applied Intelligence and Computing (AIC 2022) held during June 17-19, 2022, organized by Rajkiya Engineering College, Sonbhadra and technically supported by Soft Computing Research Society.
2. **Dr. Chitra Babu** as one of the Program chairs of ACM India COMPUTE conference had a meeting with the other Program chair, Dr. Amey Karkare of IIT Kanpur and the Proceedings Chair, Dr. Sridhar of IIT Tirupathi after receiving the approval from ACM ICPS for publishing the Proceedings of COMPUTE that will be indexed in ACM digital library.
3. As one of the Program Committee chairs of the ACM COMPUTE 2022 conference, **Dr. Chitra Babu** convened a meeting with steering committee Chair and the Organizing Committee members to discuss the website and the dissemination of Call for Papers on 20th May 2022.
4. As an Organizing Committee members of the ACM IKDD CODS-COMAD conference, **Dr. Chitra Babu** attended the OC meeting on 18th May 2022.
5. **Dr. Chitra Babu** as the co-chair of the "Diversity & Inclusion" track of the ACM India IKDD CODS-COMAD conference, discussed the plan for the track with the chair, Prof. B. Ravindran of IIT Madras on 20th May 2022.
6. **Dr. Chitra Babu** as a Program Committee member was invited to the ACM annual "Computational Thinking in Schools(CTiS 2022)" conference held at IISER Pune on 8th and 9th July 2022. She also served as a session chair for one of the paper presentation sessions.
7. **Dr. K. Madheswari** served as a session chair for the conference , "3rd International Virtual Conference on Industry 4.0 (IVCI4.0 – 2022)", held online during July 19 – 20, 2022, organized by The School of Computer Science and Engineering & Center for Cyber Physical Systems, Vellore Institute of Technology, Chennai in association with Manchester Metropolitan University, UK and Jawaharlal Nehru Technological University Hyderabad.

Ph. D. Viva-Voce Examiner / DC Member

1. **Dr. T.T. Mirnalinee** served as DC Member of Ms. Banupriya of RMK engineering College.
2. **Dr. S. Saraswathi** attended the DC meeting of Mrs. Nirmala.V, on 25/06/2021 at 2.00 P.M through online.
3. **Dr. V. Balasubramanian** attended the first online DC meeting for Mr. Venkata Nagarjun, Research Scholar, VIT University on 12.5.22 at 3.00 P.M.
4. **Dr. S. V. Jansi Rani** attended the comprehensive viva meeting of Ms.S.Aarthi, part time scholar of Dr.N.Bharathi, SRM University.
5. **Dr. D.Venkatavara Prasad** attended a Virtual DC Meeting for Ms. Anna Anbumozhi, SRM University on 09-05-2022.
6. **Dr. B. Bharathi** attended a Confirmation DC meeting at SRM IST, Vadapalani, in online mode.
7. **Dr. T.T. Mirnalinee** attended the DC meeting for the scholar Vaishnavi.

INDUSTRY COLLABORATION

Ford Motor Private Limited

Dr. V. Balasubramanian, along with Dr.S.Radha, Dr. Rajavel, Dr. Kishore, Ms. Anitha and Mr. Nambi, had a discussion with FORD for Technical Training Opportunities of FORD Employees at SSNCE, 02-06-2022 (Thursday) 10.00AM

Boston IT Solutions

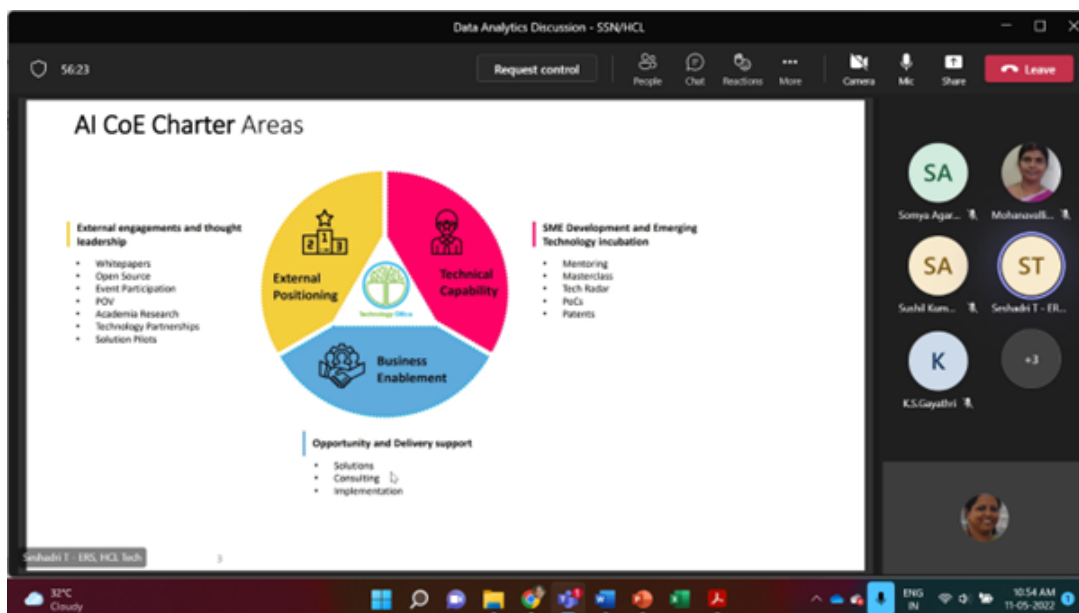
Ms. Laxmi Nageswari and Shri. Venkatesan Babu, Regional Sales Manager from Boston IT Solution (India) Pvt Ltd visited the department of CSE on 13th May 2022. Dr. T. T. Mirnalinee and Dr. R. Kanchana had a meeting with them regarding the different avenues for collaboration in terms of internships, industry participation in delivering curricular courses, value added courses, industry sponsored lab, etc. The details of the hardware infrastructure of the department and the tentative curriculum of the PG programmes were shared with them.

Further, Dr. T. T. Mirnalinee and Dr. R. Kanchana had a meeting with Boston India on 22nd Jun 2022 in VC platform. There was a discussion on value added courses and topics.

Dr. R. Kanchana/ASP CSE

HCL Technologies

A team from HCL visited the department of CSE on 12th April 2022 for possible collaboration. Dr. R. Kanchana was nominated as a SPOC along with Dr. Mohanavalli of IT department, for Data Analytics and asked to present her research in data analytics.



Dr. R. Kanchana presented the details of the completed work on Immunization Coverage Monitoring and Analysis (under the BIRAC funded project) and one of the student project works on Exactly once semantics for streaming pipelines to the HCL team on 11th May 2022 in online mode. More details were sought on her BIRAC funded project which was shared with the HCL team.

Dr. R. Kanchana/ASP CSE

Also, Dr. T. T. Mirnalinee Dr. P. Mirnalini along with Dr. C. Aravindan had a meeting with the HCL team to discuss the projects. Dr. H.Shahul Hamead demonstrated his projects on Green Switch and Low-cost SDN switch to a committee from HCL Technologies that has visited the department.

Caterpillar India Engineering Solutions Pvt. Ltd

1. Dr. Chitra Babu along with Dr. S. Rajalakshmi and Ms. S. Angel Deborah interacted with the Caterpillar technical team to discuss the progress of the consultancy project titled "Scalable Mobile Application for Performing Full Text Search (FTS) in SQLite Database" on May 9 and 19, 2022.
2. Dr. Chitra Babu along with Dr. S. Rajalakshmi, Ms. S. Angel Deborah and the students met with the Caterpillar technical team on 27th July 2022 to discuss the feedback on the codebase that was submitted to Caterpillar.

Photon Interactive Pvt Ltd.

Mr. Edwin Gunansingh G, Photon Interactive Pvt Ltd., (Dansake, Denmark) gave a motivational talk and shared his experience with the I year B.E. CSE and I year M.E. CSE students on 19th May 2022.

Zoho Corporation

Mr. Harishankar currently Member Leadership staff ZLabs – NLP, ZOHO initiated a possible collaboration for the Internship programme for P.G students of SSN.

Emids Technologies, USA

An MoU is planned with Dr. Karthik Ramesh Vice President - International Markets, Head Transformation and Innovation, Emids and SSN for providing Internships and to act as industry experts and mentors of the current students.

Sella India Software solutions(P) ltd

Dr. Sharavanan P.T is an Alumni (2009-11 batch) M.E (CSE),technical lead in Sella India Software solutions(P) ltd , acted as a review member for M.E CSE Project work Phase -II review held on 4-7-2022.

Qmax Ion Pvt Ltd

Dr. T.T. Mirnalinee, had a discussion with Mr. Prem Karthik Manager - Product development, Qmax Ion Pvt Ltd for students projects and faculty consultation projects.

Coinbooks, USA

Mr.Mohana Sundar Founding Engineer at Coinbooks delivered a talk on "Proof of Work - A Contrarian Approach to College and Career" for SSN Students on 02-07-2022 under SSN ACM Student chapter. Almost 80 students participated in the webinar.

PUBLICATIONS

Patent Details

1. The patent titled "Braille Interpretation Pad" (application number: 202241037782) filed by **Rithwin Siva, Nishant Mathew, R. Nidhi Bhandari, Varsha Bhargavi Dwarakanathan, A. Beulah, S. Rajalakshmi and S. Angel Deborah** was published on 22nd July 2022 with publication number 29/2022 in Indian Patent Office.
2. **H. Shahul Hamead** has submitted the response document to FER for his patent titled "An Effective Frequency Provisioning Method for Scalable Devices in NB-IoT Platform" (201741045343)

Journal Publications

1. **S. V. Jansi Rani**, published a paper titled, "Improving throughput of transmission control protocol using cross layer approach", Computers Systems Science and Engineering, Vol. 43, no.3, pp. 1231–1239, 2022, Clarivate, IF 1.486.
2. **R. Priyadarshini, T. Sree Sharmila**, "An Efficient Edge Preserving Interpolation Method for Underwater Acoustic Image Resolution Enhancement", Archives of Acoustics, Vol. 47, No. 2, pp. 267–274, 2022, Clarivate, 0.954.
3. **V. Balasubramanian, Sriram M, A Susmithaa Raam, B Vignesh**, " End-to-End Machine Learning Pipeline for Real-Time Network Traffic Classification and Monitoring in Android Automotive", International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2022.
4. **M. Monisha and V. S. Felix Enigo** published a paper titled, "Optical Character Recognition for Printed Tamizhi Documents using Deep Neural Networks", in DESIDOC Journal of Library and Information Technology, 2022, IF: 1.67, Clarivate.
5. **K. Lekshmi, Pravinkrishnan K., B. Prabavathy** published a paper titled, " An Overview of Chatbots using ML Algorithms in Agricultural Domain", in International Journal of Computer Applications, 184(11), 2022, IF:0.745
6. **S.V. Jansi Rani along with Radha, N., Shahina, A., Khan, A. N.** published a paper titled, "A new multi-stream approach using acoustic and visual features for robust speech recognition system", Materials Today: Proceedings, Vol.62(7), 4916-4924, 2022.

7. **S. Saraswathy, Ezhil Tharsan S. Dharshan S. Dinesh G.**, published a paper titled, “Real Time Indian Sign Language Detection Using LSTM and Keypoint Extraction”, in International Journal of Computer Applications, 184(21), 1-7. IF: 1.067
8. **S. Saraswathy**, published a paper titled “Enforcing a Source-end Cooperative Multilevel Defense Mechanism to Counter Flooding Attack”, in Computer Systems Science & Engineering, (Clarivate), IF: 4.397, 44 (1) pp. 67–79.
9. **B. Prabavathy, Chaitanya A, Hariharan R, Harishkumaar S**, published a paper titled, “Enhancement of GraphQL Data Fetching Technique”, International Journal of Computer Applications, IF: 1.067, 184(10):1-6.

Conference Presentations / Publications

1. **K. Madheswari K, Nandakishor Velu, Sanjay Rojar Utharia Muthu, Nitheesh Kumar Narasimmalu**, presented a paper titled “Comparative study of Machine Learning and Deep learning for Fungi classification” in ICSADL 2022, 16-17 June 2022.
2. **V.S. Felix Enigo, J. K. Lakshmi Divya, R. Iswarya** published a book chapter titled, “Smart, Safe, and Secure Shopping Experience Using Beacons”, Computer Networks, Big Data and IoT, Part of the Lecture Notes on Data Engineering and Communications Technologies book series, Springer, Singapore. Vol. 117.
3. **Kayalvizhi S, Dr.D.Thenmozhi, Bharathi RajaChakravarthi, Jerin Mahibha C**, "Findings of the Shared Task on Detecting Signs of Depression from Social Media", Volume-2022.ltedi-1, pp-331-338, May 2022,ACL-2022.
4. **Anbukkarasi Sampath, Dr.D.Thenmozhi, Bharathi Raja Chakravarthi, Ruba Priyadharshini, Subalalitha Cn, Kogilavani Shanmugavadivel, Sajeetha Thavareesan, Sathiyaraj Thangasamy, Parameswari Krishnamurthy, Adeep Hande, Sean Benhur, Kishore Ponnusamy, Santhiya Pandiyan**, "Findings of the Shared Task on Emotion Analysis in Tamil", Volume-2022. dravidianlangtech-1, pp-279–285, May 2022, ACL-2022.
5. **Sivamanikandan S, Santhosh V, Sanjaykumar N, Jerin Mahibha C, D.Thenmozhi**, "scubeMSEC@LT-EDI-ACL2022: Detection of Depression using Transformer Models", Volume-2022.ltedi-1, pp-212–217, May 2022, ACL-2022.
6. **B.Bharathi, Dhanya Srinivasan, Josephine Varsha, D.Thenmozhi, B.Senthil Kumar**, "SSNCSE_NLP@LT-EDI-ACL2022:Hope Speech Detection for Equality, Diversity and Inclusion using sentence transformers", Volume-2022.ltedi-1, pp-218–222, May 2022, ACL-2022.
7. **Dhanya Srinivasan, B. Bharathi, D. Thenmozhi, B. Senthil Kumar**, "SSNCSE_NLP @LT-EDI -ACL 2022: Speech Recognition for Vulnerable Individuals in Tamil using pre-trained XLSR models", Volume-2022.ltedi-1, pp-317-320, May 2022, ACL-2022.

8. **Bharathi Raja Chakravarthi, Ruba Priyadharshini, Dr.D.Thenmozhi, John McCrae, Paul Buitelaar, Prasanna Kumaresan, Rahul Ponnusamy**, "Overview of The Shared Task on Homophobia and Transphobia Detection in Social Media Comments", Volume-2022.ltedi-1, pp-369-377, May 2022, ACL-2022.
9. **Divyasri K, Gayathri G L, Krithika Swaminathan, D.Thenmozhi, B.Bharathi, B.Senthil Kumar**, "PANDAS@TamilNLP-ACL2022: Emotion Analysis in Tamil Text using Language Agnostic Embeddings", Volume-2022. dravidianlangtech-1, pp-105-111, May 2022, ACL-2022 .
10. **Krithika Swaminathan, Divyasri K, Gayathri G L, D.Thenmozhi, B.Bharathi**, "PANDAS@Abusive Comment Detection in Tamil Code-Mixed Data Using Custom Embeddings with LaBSE", Volume-022. dravidianlangtech-1, pp-112-119, May 2022, ACL-2022.
11. **Ruba Priyadharshini, Bharathi Raja Chakravarthi, Subalalitha CN, D.Thenmozhi, Malliga Subramanian, Kogilavani Shanmugavadivel, Siddhanth U Hegde, Prasanna Kumaresan**, "Overview of Abusive Comment Detection in Tamil-ACL 2022", Volume-2022.dravidianlangtech-1, pp-292-298, May 2022, ACL-2022.
12. **B. Bharathi, Bharathi Raja Chakravarthi, Subalalitha Cn, Sripriya N, Arunaggiri Pandian, and Swetha Valli**, " Findings of the Shared Task on Speech Recognition for Vulnerable Individuals in Tamil", In Proceedings of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, pages 339-345, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) url= <https://aclanthology.org/2022.ltedi-1.52>
13. **Suhasini S and B.Bharathi**, " SUH_ASR@LT-EDI-ACL2022: Transformer based Approach for Speech Recognition for Vulnerable Individuals in Tamil", In Proceedings of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, pages 177-182, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) url = <https://aclanthology.org/2022.ltedi-1.23>
14. **B. Bharathi, Dhanya Srinivasan, Josephine Varsha, D. Thenmozhi, and B. Senthil Kumar**, "SSNCSE_NLP@LT-EDI-ACL2022:Hope Speech Detection for Equality, Diversity and Inclusion using sentence transformers", In Proceedings of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, pages 218-222, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) url = <https://aclanthology.org/2022.ltedi-1.30>
15. **Krithika Swaminathan, B.Bharathi, Gayathri G L, and Hrishik Sampath**, "SSNCSE_NLP @LT-EDI-ACL2022: Homophobia/Transphobia Detection in Multiple Languages using SVM Classifiers and BERT-based Transformers", In Proceedings of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, pages 239-244, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) url = <https://aclanthology.org/2022.ltedi-1.34>

16. **Dhanya Srinivasan, Dr. B.Bharathi, D.Thenmozhi, and B.Senthil Kumar,** "SSNCSE_NLP@LT-EDI-ACL2022: Speech Recognition for Vulnerable Individuals in Tamil using pre-trained XLSR models", In Proceedings of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, pages 317–320, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) url = <https://aclanthology.org/2022.ltedi-1.48>
17. **Divyasri K, Gayathri G L, Krithika Swaminathan, Thenmozhi Durairaj, B.Bharathi, and B.Senthil Kumar,** " PANDAS@TamilNLP-ACL2022: Emotion Analysis in Tamil Text using Language Agnostic Embeddings", In Proceedings of the Second Workshop on Speech and Language Technologies for Dravidian Languages, pages 105–111, Dublin, Ireland. Association for Computational Linguistics. (Online)
18. **Ranjana, S., Priya, J., Reenu Rita, P.S., B.Bharathi,** " End-to-End Speaker Verification for Short Utterances", In: Reddy, V.S., Prasad, V.K., Wang, J., Reddy, K. (eds) Soft Computing and Signal Processing. ICSCSP 2021. Advances in Intelligent Systems and Computing, vol 1413. Springer, Singapore. https://doi.org/10.1007/978-981-16-7088-6_27
19. **S.Kavitha, Sudhamsu Gurijala, Sai Chitti Subrahmanyam, V., Swetha, B. ,** Published a paper titled as "Generating the Base Map of Regions Using an Efficient Object Segmentation Technique in Satellite Images" in Soft Computing and its Engineering Applications. icSoftComp 2021. Communications in Computer and Information Science, vol 1572. Springer, Cham. https://doi.org/10.1007/978-3-031-05767-0_27
20. **Karun Anantharaman, S. Rajalakshmi S. Angel Deborah, M. Saritha , R.S.Milton,** "SSN_MLRG1@LT-EDI-ACL2022: Multi-Class Classification using BERT models for Detecting Depression Signs from Social Media Text" , pp.296-300.
21. **Sarika Esackimuthu, Shruthi H, S. Rajalakshmi, S. Angel Deborah, R.S.Milton, T.T Mirnalinee,** "SSN_MLRG3 @LT-EDI-ACL2022-Depression Detection System from Social Media Text using Transformer Models", pp.196-199.
22. **Praveen Kumar V , Prathyush S , Aravind P, S. Angel Deborah, S. Rajalakshmi, R.S.Milton, T.T Mirnalinee,** "SSN_ARMM@ LT-EDI -ACL2022: Hope Speech Detection for Equality, Diversity, and Inclusion Using ALBERT model", pp.172-176.
23. **Varsini S, Kirthanna Rajan, S. Angel Deborah, S. Rajalakshmi, R.S.Milton, T.T Mirnalinee,** "Varsini_and_Kirthanna@DravidianLangTech-ACL2022-Emotional Analysis in Tamil", pp.165-169.
24. **Shruthi Hariprasad, Sarika Esackimuthu, M.Saritha,S. Rajalakshmi, S. Angel Deborah,** "SSN_MLRG1@DravidianLangTech-ACL2022: Troll Meme Classification in Tamil using Transformer Models", pp.132-137.
25. **J. Bhuvana** has presented a paper titled, 'A Study and Review of Classical, Machine Learning and Deep Learning Methods of Software Reliability Estimation for Safety-Critical Systems' in the TNSCST Sponsored 8th International Conference on Latest Trends in Science, Engineering and

Technology (ICLTSET'22) organized by Karpagam Institute of Technology, Coimbatore held on 20th & 21st of May 2022.

26. **Kanchana Rajaram, Arti Devi, Selvakumar S. (2022)** PalmNet: A CNN Transfer Learning Approach for Recognition of Young Children Using Contactless Palmprints. In: Chen J.IZ., Wang H., Du KL., Suma V. (eds) Machine Learning and Autonomous Systems. Smart Innovation, Systems and Technologies, vol 269. pp 609-622 Springer, Singapore. "
27. **Rajaram, K., Selvi, K.P.N. (2023)**. CCC-Quality2: Cross-Cloud Service Composition Based on Quality of Clouds and Web Services for Business Applications. In: Kaiser, M.S., Xie, J., Rathore, V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2021). Lecture Notes in Networks and Systems, vol 401. Springer, Singapore. https://doi.org/10.1007/978-981-19-0098-3_40
28. **Rajaram, K., Sharma, P.K., Selvakumar, S. (2022)**. NRP-APP: Robust Seamless Data Capturing and Visualization System for Routine Immunization Sessions. In: Hemanth, D.J., Pelusi, D., Vuppalapati, C. (eds) Intelligent Data Communication Technologies and Internet of Things. Lecture Notes on Data Engineering and Communications Technologies, vol 101. Springer, Singapore. https://doi.org/10.1007/978-981-16-7610-9_56
29. **Kalaivani Adaikkan, Thenmozhi Durairaj**, "SSN_NLP_MLRG at SemEval-2022 Task 4: Ensemble Learning strategies to detect Patronizing and Condescending Language", Vol, ACL Anthology: 2022.semeval-1, pp: 400-404, July 2022.
30. **Diksha Krishnan, Jerin Mahibha C, Thenmozhi Durairaj**, "GetSmartMSEC at SemEval-2022 Task 6: Sarcasm Detection using Contextual Word Embedding with Gaussian model for Irony Type Identification", Vol, ACL Anthology: 2022.semeval-1, pp-827-833, July 2022.
31. **Kalaivani Adaikkan, Thenmozhi Durairaj**, "Multilingual Hate Speech and Offensive Language Detection in English Hindi and Marathi languages", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 92-103, July 2022.
32. **Sai Shridhar Balamurali, Kayalvizhi S, Thenmozhi D**, "Simple Transformers in Rhetoric Role Labelling for Legal Judgements", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 562-567, July 2022.
33. **Kalaivani Adaikkan, Thenmozhi Durairaj, Aravindan Chandrabose**, "TOLD: Tamil Offensive Language Detection in Code-Mixed Social Media Comments using MBERT with Features based Selection", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 667-679, July 2022.
34. **C Jerin Mahibha, Sampath Kayalvizhi, Durairaj Thenmozhi, S Arunima**, "Offensive Language Identification using Machine Learning and Deep Learning Techniques", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 705-713, July 2022.

35. **Bharathi Raja Chakravarthi, Ruba Priyadharshini, Sajeetha Thavareesan, Dhivya Chinnappa, Durairaj Thenmozhi, Elizabeth Sherly, John P. McCrae, Adeep Hande, Rahul Ponnusamy, Shubhanker Banerjee, Charangan Vasantharajan**, "Findings of the Sentiment Analysis of Dravidian Languages in Code-Mixed Text", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 872-886, July 2022.
36. **Dhanasekaran Prasannakumaran, Jappeswaran Balasubramanian Sideshwar, Durairaj Thenmozhi**, "ECMAG - Ensemble of CNN and Multi-Head Attention with Bi-GRU for Sentiment Analysis in Code-Mixed Data", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 967-975, July 2022.
37. **Adaikkan Kalaivani, Durairaj Thenmozhi**. "Multilingual Sentiment Analysis in Tamil Malayalam and Kannada code-mixed social media posts using MBERT", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 1020-1028, July 2022.
38. **C Jerin Mahibha, Sampath Kayalvizhi, Durairaj Thenmozhi**, "Sentiment Analysis using Cross Lingual Word Embedding Model", CEUR(Scopus indexed) proceedings, Volume 3159, pp: 1094-1100, July 2022.
39. **Karthik Desingu, Anirudh Bhaskar, Mirunalini Palaniappan, Eeswara Anvesh Chodisetty, Haricharan Bharathi** published a paper titled "Classification of Fungi Species: A Deep Learning Based Image Feature Extraction and Gradient Boosting Ensemble Approach" in the Proceedings of the Working Notes of CLEF 2022, pp-2047-2062
40. **Mirunalini Palaniappan, Karthik Desingu, Haricharan Bharathi, Eeswara Anvesh Chodisetty, Anirudh Bhaskar**, published a paper titled "Deep Learning and Gradient Boosting Ensembles for Classification of Snake Species", in the proceedings of the Working Notes of CLEF 2022, pp - 2175-2188.
41. **Dr. D. Thenmozhi and B. Harish** published a book chapter titled, "Self-Driving Car in a Constrained Environment", Book Title: IFIP Advances in Information and Communication Technology, Springer, Vol: 651, Pages:325-339.2022.
42. **Karthikraja, A., Aarthi Suresh Kumar, B. Bharathi, Jayaraman Bhuvana, and T. T. Mirnalinee**. ""Abusive and Threatening Language Detection in Native Urdu Script Tweets Exploring Four Conventional Machine Learning Techniques and MLP."" In Hate Speech and Offensive Content Detection (HASOC), CEUR, Vol.3159, pp. 806-812, Working Notes of FIRE 2021 - Forum for Information Retrieval Evaluation
43. **Anand, Anirudh, Jeet Golecha, B. Bharathi, Bhuvana Jayaraman, and T. T. Mirnalinee**. ""Machine Learning based hate speech identification for English and Indo-Aryan languages."" In Hate Speech and Offensive Content Detection (HASOC), CEUR, Vol.3159, pp. 432-438, Working Notes of FIRE 2021 - Forum for Information Retrieval Evaluation."
44. **Jayaraman, Bhuvana, T. T. Mirnalinee, Karthik Raja Anandan, Aarthi Suresh Kumar, and Anirudh Anand**. ""Offensive text prediction using Machine Learning and Deep

Learning approaches." In Hate Speech and Offensive Content Detection (HASOC), CEUR, Vol.3159, pp. 688-695, Working Notes of FIRE 2021 - Forum for Information Retrieval Evaluation."

45. **Abhishek Kumar Gautam, B. Bharathi**, "RNN's VS TRANSFORMERS : Training language models on deficit datasets", FIRE 2021: Forum for Information Retrieval Evaluation, December 13-17, 2021, Virtual event, CEUR workshop proceedings, Vol. 3159, pp. 737-743, URL: <http://ceur-ws.org/Vol-3159/T3-17.pdf>
46. **Anirudh Anand, Jeet Golecha, Bharathi B, Bhuvana Jayaraman, Mirnalinee T. T**, "Machine Learning Based Hate Speech Identification for English and Indo-Aryan Languages", FIRE 2021: Forum for Information Retrieval Evaluation, December 13-17, 2021, Virtual event, CEUR workshop proceedings, Vol. 3159, pp. 432-438, URL: <http://ceur-ws.org/Vol-3159/T1-42.pdf>
47. **K A. Karthikraja , Aarthi Suresh Kumar, B. Bharathi, Jayaraman Bhuvana, T.T Mirnalinee**, "Abusive and Threatening Language Detection in Native Urdu Script Tweets Exploring Four Conventional Machine Learning Techniques and MLP", FIRE 2021: Forum for Information Retrieval Evaluation, December 13-17, 2021, Virtual event, CEUR workshop proceedings, Vol. 3159, pp. 806-812, URL: <http://ceur-ws.org/Vol-3159/T4-7.pdf>
48. **Karthik Puranik, Bharathi B, Senthil Kumar B**, "Transliterate or Translate? Sentiment Analysis of Code-Mixed Text in Dravidian Languages", Urdu Script Tweets Exploring Four Conventional Machine Learning Techniques and MLP", FIRE 2021: Forum for Information Retrieval Evaluation, December 13-17, 2021, Virtual event, CEUR workshop proceedings, Vol. 3159, pp. 939-949, URL: <http://ceur-ws.org/Vol-3159/T6-7.pdf>
49. **B Bharathi, G U Samyuktha**, "Machine Learning Based Approach for Sentiment Analysis on Multilingual Code Mixing Text", FIRE 2021: Forum for Information Retrieval Evaluation, December 13-17, 2021, Virtual event, CEUR workshop proceedings, Vol. 3159, pp. 1038-1043, URL: <http://ceur-ws.org/Vol-3159/T6-18.pdf>
50. **Rajalakshmi Sivanaiah, Angel Deborah S, Sakaya Milton Rajendram and Mirnalinee T T** published a paper titled "TechSSN at SemEval-2022 Task 5: Multimedia Automatic Misogyny Identification using Deep Learning Models" , Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022), as a part of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2022), Seattle, Washington, pages 571 - 574, July 14-15, 2022 © ACL 2022 Association for Computational Linguistics
51. **Rajalakshmi Sivanaiah, Angel Deborah S, Sakaya Milton Rajendram and MirnalineeT T, Ramdhanush Venkatakrishnan** published a paper titled "TechSSN at SemEval-2022 Task 6: Intended Sarcasm Detection using Transformer Models", Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022), as a part of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2022), Seattle, Washington, pages 851 - 855, July 14-15, 2022 © ACL 2022 Association for Computational Linguistics

52. **Karun Anantharaman, Divyasri K, Jayannthan PT, Angel Deborah S, Rajalakshmi Sivanaiah, Sakaya Milton Rajendram and Mirnalinee T T** published a paper titled "SSN_MLRG1 at SemEval-2022 Task 10: Structured Sentiment Analysis using 2-layer BiLSTM", Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022), as a part of 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2022), Seattle, Washington, pages 1324 - 1328, July 14-15, 2022 © ACL 2022 Association for Computational Linguistics

SCHOLAR INFORMATIONS

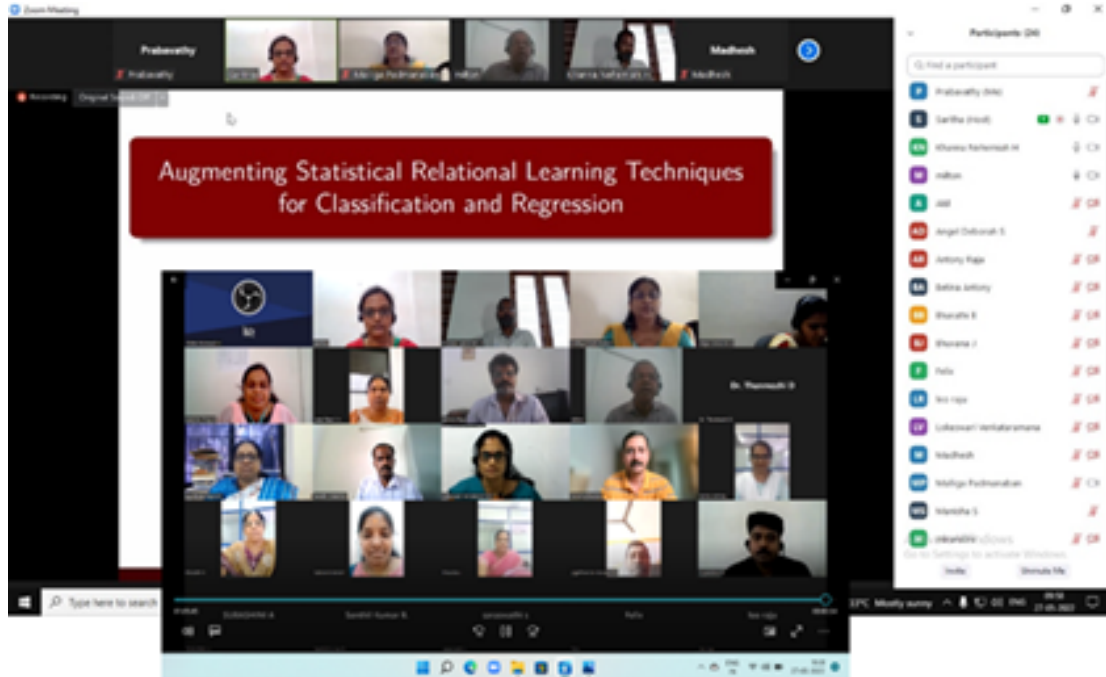
1. **Dr. R. S. Milton** convened PhD VIVA VOCE for the part time scholar Ms. M. Saritha 27.05.2022 in online mode at Department of CSE, SSN College of Engineering.
2. **Dr. D. Thenmozhi** conducted a first DC meeting for her part time research scholar Mr. Sampath G (Reg No: 22157997131) on 5th July 2022.
3. **Dr. J. Suresh** convened Synopsis meeting for her full-time research scholar, Ms. M. Sathya on 08.07.2022.
4. **Dr. B. Prabavathy** conducted First Doctoral Committee Meeting on 27.07.2022 for Part-time Research Scholar A S Balaji who has joined in July 2022 Session.
5. Ms. N. Safiyyah joined as a full time scholar under Anna University, Chennai under the supervision of **Dr. T.T. Mirnalinee**.
6. **Dr. A. Chamundeswari** organized the first DC meeting for Mrs.S.Manimegalai, full time research scholar on 5-7-22.
7. **Dr. D. Thenmozhi** conducted a confirmation DC meeting for her full time research scholar Ms.S. Kayalvizhi on 20th July 2022.
8. **Dr. D. Thenmozhi** conducted a first DC meeting for her part time research scholar Ms. G. Shimi on 29th July 2022.

A Stepping Stone Towards Research

I am very glad to share that I have successfully defended my PhD thesis titled "Augmenting Statistical Relational Learning Techniques for Classification and Regression" on May 27, 2022 through online platform in the presence of Dr. P. Malliga, Associate Professor and Head Incharge, Centre for Educational Media and Technology, NITTTR, Taramani as Indian Examiner and Dr. H. Khanna Nehemiah, Professor, Ramanujan Computing Centre, Centre for Admissions, Anna University as Subject Expert. I wish to express my deep sense of gratitude to my supervisor Dr. R. S. Milton, Professor, Department of Computer Science and Engineering, SSN College of Engineering for his constructive guidance and constant support while pursuing the PhD work. I thank my doctoral committee members Dr. Chitra Babu, Professor, Department of Computer Science and Engineering, SSN College of Engineering, and Dr. Ranjani Parthasarathi, Professor, Department of Information Science and Technology, Anna University for their valuable advice and suggestions towards shaping up the PhD work. I convey my profound thanks to our Head of the Department, Dr. T. T. Mirnalinee, and all the faculty and

non-teaching staff for their continuous support and encouragement during my research. I convey my sincere gratitude to Dr. V. E. Annamalai, our Principal and the Management of SSN Institutions for their excellent support and motivation in carrying out this research work. I express my heartfelt thanks to my family and friends for their understanding and moral support, especially during my trying times.

Never Stop Learning Because Life Never Stops Teaching – Kirill Korshikov



Pursuing research is a continuous learning experience and it has facilitated me to learn from mistakes. There may be ups and downs in life and the willingness to accept them silently will lead us to achieve more. I take this PhD degree as a stepping stone to carry forward my research and I hope that it would support me to do beneficial to the society.

M. Saritha

FUNDED PROJECT INFORMATIONS

1. **Dr. V.S. Felix Enigo** demonstrated the faculty funded project to SCRB, Chennai.
2. **Dr. G. Satheesh Kumar** as the Principal Investigator, **Dr. M. Dhanalakshmi**, **Dr. Jansi Rani S.V**, **Dr. P. Vijayalakshmi**, **Dr. M. Senthil Kumaran**, **Dr. Anbuselvi M**, **Dr. S. Vijayan**, **Dr. Ramakrishnan (VIT Vellore)** & **Dr. P. Rajini Kumar (TN Sports University)** as the Co-Investigator/s submitted a project titled "Smart agents for geriatric functional empowerment and dignified sustenance" to the SUPRA, DST on 10.05.2022 with a budget of Rs. 7950954/-

3. **Dr. D. Thenmozhi, Dr. J. Betina Antony and Dr. P. Mirunalini** applied an externally project titled "Knowledge-based Question Answering System for Tamil Biomedicine" to Tamil Virtual Academy with a budget of Rs.24.7Lakhs for the duration of 3 years.
4. **Dr. D. Thenmozhi along with Dr. C. Aravindan and Dr. N. Sripriya** applied an externally project titled "Cross-Lingual Information Retrieval System to Enhance the Self-learning Capability of Tamil-medium Students" to Tamil Virtual Academy with a budget of Rs.28.3 Lakhs for the duration of 3 years.
5. **Dr. B. Bharathi, Dr. P. Vijalakshmi of ECE, and Dr. T. Nagarajan of SNU** applied an externally project titled "Real-time multi-dialect automatic speech recognition system for Tamil" to Tamil Virtual Academy with a budget of Rs.13,77,500 Lakhs for the duration of 1 years.
6. **Dr. R. Priyadharsini and Dr. A. Beulah** submitted a project titled " Design of Computationally Intelligent System for inspection in Hazardous Environment" under the scheme call for innovative projects towards the possible funding under 3rd wave of AU-NLCIL Innovation Hub for Energy, Environment & Sustainability (ANIHEES) on May 6, 2022.
7. Title:மனநலக்கணிப்பான்(Mananala Kanippan): Deep Learning based Stress Type Assessment in Tamil text using Emotion Analysis for Mental Health Prediction, PI: **Ms. S.Angel Deborah; Dr. S.Rajalakshmi and Dr. M.Saritha**, Total Budget(INR): Rs.23,27,529, Funding Agency: Tamil Virtual Academy
8. **Dr.S.Rajalakshmi, Ms.S.Angel Deborah and Ms.M.Saritha**, have submitted the project proposal titled "App controlled HiTech Agri-Drone for crop health monitoring with smart drip irrigation" under the scheme call for innovative projects towards the possible funding under 3rd wave of AU-NLCIL Innovation Hub for Energy, Environment & Sustainability (ANIHEES) 2022 on May 6, 2022.
9. **Dr. T. T. Mirnalinee, Dr. B. Bharathi and Dr. J. Bhuvana**, submitted a project proposal titled, ' ஆய்வக பரிசோதனை உதவி கருவி- Development of AI-based smart, lab assist device for the visually impaired Tamil medium higher secondary school students' to Tamil Virtual Academy under Proposals Under Tamil Software Development Fund (TSDF) - 2022 for a budget of Rs.23,20,500
10. **Dr.Y.V. Lokeswari and Dr. D. Venkatavara Prasad** has submitted a project titled "Investigating Genetic Biomarker Mutation Levels to Improve the Therapeutic Decision for Precision Oncology - A Computational Approach" under DST SUPRA Scheme for a budget of Rs. 31,12,384/- and for a duration of 3 years.
11. **Dr. S.V.Jansi Rani** submitted a project titled, "Mitigation of Seafood Mislabeling / Food Fraud using Fish Species Identification through Artificial Intelligence" to SERB on 07.07.2022 with a budget of Rs. 19,99,832.
12. **Dr.S.V.Jansi Rani, SSNCE along with Dr.Varun P Gopi, NIT Trichy, Ms. Jemila Thangarani A, TNJFU, Dr. Priyadharsini R, SSNCE, Dr. Satheesh Kumar Gopal,**

SSNCE submitted a project proposal on “An FPGA based Intelligent Automatic Feeder for Aqua farming” to DBT on 14/07/2022 for the funding of Rs.72,46,901.

13. **Dr. Chitra Babu** submitted a project proposal on 8th July 2022 titled " Design and Development of an active pitch bi-rotor Horizontal axis Wind Turbine(HAWT)"to Ministry of New and Renewable Resources as co-investigator along with Dr. T. Micha Premkumar of Mechanical Engineering as Principal investigator.
14. **Dr. R.Kanchana** along with **Dr. S. Selvakumar** filed a joint Indian Patent as a result of Collaborative research sponsored by BIRAC, New Delhi on 14 Jul 2022.

PAPERS REVIEWED

1. **Dr. B. Bharathi**, reviewed 4 papers for Interspeech 2022
2. **Dr. B. Bharathi**, reviewed 5 papers for IEEE International Conference on Signal Processing and Communications (SPCOM 2022)
3. **Dr. B. Bharathi** reviewed 2 papers for Computer, speech and Language journal.
4. **Ms.S.Angel Deborah** reviewed a paper for Transactions on Asian and Low-Resource Language Information Processing on 20th May 2022.
5. As a PC member of the 4th ACM Computational Thinking in Schools(CTiS) conference, **Dr. Chitra Babu** reviewed 10 abstracts.
6. **Dr. K. R. Sarath Chandran** reviewed one paper on May 11, 2022, for IEEE World Conference on Applied Intelligence and Computing (AIC 2022) organized by Rajkiya Engineering College, Sonbhadra and Soft Computing Research Society.
7. **Dr. K. Vallidevi**, has done the second review for the paper titled "Bias and unfairness of collaborative filtering based recommender systems in MovieLens dataset" for IEEE Access.
8. **Dr. A. Beulah** reviewed a paper for the International Journal of Imaging Systems and Technology.
9. **Dr. J. Bhuvana** has reviewed a paper for IEEE Transactions on Artificial Intelligence.
10. **Dr. B. Prabavathy** reviewed journal paper for Computer Modeling in Engineering & Sciences journal 207.07.2022
11. **Dr. K. Madheswari** reviewed 7 papers for Multimedia Tools and Applications Journal.
12. **Dr. S. Rajalakshmi** reviewed a paper for the Journal of Ambient Intelligence and Smart Environments on July 5, 2022.

FDP/ SEMINAR / WORKSHOP / CONFERENCE ORGANIZED

1. **Dr. Chitra Babu** was part of the organizing committee of the ACM-W Grad Cohort that was organized by IIT Jodhpur in virtual mode on 21st and 22nd July 2022.
2. **Dr. B. Prabavathy** arranged a talk on "Basics of Structures" for II & III year students as a part of Supplementary course in C Programming.

ACL - 2022

Workshop on Language Technology for Equality, Diversity, Inclusion (LT-EDI-2022) - ACL 2022

Equality, Diversity and Inclusion (EDI) is an important agenda across every field throughout the world. Language as a major part of communication should be inclusive and treat everyone with equality. Today's large internet community uses language technology (LT) and has a direct impact on people across the globe. EDI is crucial to ensure everyone is valued and included, so it is necessary to build an LT that serves this purpose. Recent results have shown that big data and deep learning are entrenching existing biases and that some algorithms are even naturally biased due to problems such as 'regression to the mode'. Our focus is on creating LT that will be more inclusive of gender, race, sexual orientation, persons with disability. The workshop will focus on creating speech and language technology to address EDI not only in English but also in less-resourced languages.

The broader objective of LT-EDI-2022 will be

- ★ To investigate challenges related to speech and language resource creation for EDI.
- ★ To promote research in inclusive LT.
- ★ To adopt and adapt appropriate LT models to suit EDI.
- ★ To provide opportunities for researchers from the LT community around the world to collaborate with other researchers to identify and propose possible solutions for the challenges of EDI.

This workshop was held on 27th May 2022. In this workshop, 12 papers got selected and presented during the workshop. This workshop was organized in hybrid mode. The papers are published in ACL anthology during May 2022. In this workshop, **Su Lin Blodgett**, postdoctoral researcher in the Fairness, Accountability, Transparency, and Ethics (FATE) group at Microsoft Research Montréal gave the invited talk in the workshop. In this workshop, 4 shared task also conducted. Link: <https://sites.google.com/view/lt-edi-2022/home>

Dr. B. Bharathi, ASP/CSE

Shared tasks - ACL - 2022

Speech Recognition for Vulnerable Individuals in Tamil

The shared task on “Speech Recognition for Vulnerable Individuals in Tamil” was conducted as part of a second workshop on language technology for equality, diversity, inclusion (LT-EDI – 2022) during 27th May 2022. This shared task addresses a challenging area in Automatic Speech Recognition: vulnerable old-aged and transgender people in Tamil. People in their old-age visit primary locations such as banks, hospitals and administrative offices to address their needs in their quotidian lives. Many aged people are unaware of using the equipment facilitated to aid people.

Similarly, transgender people are deprived of primary education because of prejudice in society, so speech is the only medium that could assist them in satisfying their needs. The spontaneous speech data is gathered from old-aged and transgender people, who are bereft of using these facilities to their advantage. The speech corpus containing 5.5 hours of transcribed speech will be released for the training set, and 2 hours of speech data will be released for testing.

Dr. B. Bharathi, ASP/CSE

Multimodal Sentiment Analysis in Dravidian Languages

The shared task on “Multimodal Sentiment Analysis in Dravidian Languages” was conducted as part of the Second Workshop on Speech and Language Technologies for Dravidian Languages -(DravidianLangTech-2022) @ ACL2022 during 26th May 2022. Human communication is inherently multimodal and asynchronous. Analyzing human emotions and sentiment is an emerging field of artificial intelligence. We are witnessing an increasing amount of multimodal content in local languages on social media about products and other topics. Understanding users’ preferences, habits, and contents by sentiment analysis and opinion mining opened up opportunities for many companies. Sentiments aid in decision-making, communication, and situation analysis.

Recently, due to the popularity and availability of handheld devices with cameras, more videos express their sentiment and opinion about a product, people and places than text. For example, users create videos by recording their opinions of products using mobile cameras or webcams and post them on social media such as YouTube, TikTok and Facebook. Therefore, analysis of multimodal content becomes vital to understanding the opinions. The goal of this task is to identify the sentiments expressed by the movie reviewers in their videos. The problem is defined as the “Identification of sentiments from movie review videos in Malayalam and Tamil”. The length of the videos is between 1 minute to 3 minutes. The proposed task consists in the identification of Highly positive, Positive, Neutral, Negative, and Highly Negative videos by taking the video, speech and text modalities.

Dr. B. Bharathi, ASP/CSE

[Detecting Signs of Depression from Social Media Text](#)

This shared task was organized as part of "2nd workshop on language technology for equality, diversity and inclusion". We joined with a faculty member from University of Ireland, Galway to organize this task. The data set for this task was created by the SSN team using the funds sanctioned by DST. aims to detect the signs of depression of a person from their social media postings wherein people share their feelings and emotions. Given social media postings in English, the system should classify the signs of depression into three labels namely "not depressed", "moderately depressed", and "severely depressed". A total of 31 teams submitted their runs for this task.

Dr. D. Thenmozhi, ASP/CSE

[Homophobia/Transphobia Detection in social media comments](#)

This shared task was organized as part of "2nd workshop on language technology for equality, diversity and inclusion". We joined with a team of faculty members from University of Ireland, Galway to organize this task. Participants will be provided with sentences in comment, extracted from social media. Given a comment, a system must predict whether or not it contains any form of homophobia/transphobia. This shared task focused on three sub-tasks for Tamil, English, and Tamil-English (code-mixed) languages. It received 10 systems for Tamil, 13 systems for English, and 11 systems for Tamil-English.

Dr. D. Thenmozhi, ASP/CSE

[Abusive Comment Detection in Tamil](#)

This shared task was organized as part of "2nd workshop on speech and language technologies for dravidian languages". We joined with faculty members from University of Ireland, Galway, SRM institute and Kongu Engineering college to organize this task. This shared task aims at detecting the abusive comments involving, Homophobia, Misandry, Counter-speech, Misogyny, Xenophobia and Transphobic from social media in Tamil and Tamil-English code-mixed languages. 10 teams participated in detecting abusive comments in Tamil language and 11 teams participated in the Tamil-English language.

Dr. D. Thenmozhi, ASP/CSE

[Emotion Analysis in Tamil](#)

This shared task was organized as part of "2nd workshop on speech and language technologies for dravidian languages". We joined with faculty members from University of Ireland, Galway, SRM institute, Kongu Engineering college, University of Hyderabad, NIT-K and Eastern University, Srilanka to organize this task. This task is organized as two Tasks. Task A is carried with 11 emotions annotated data for social media comments in Tamil and Task B is organized with 31 fine-grained emotion annotated data for social media comments in Tamil. Totally, we have received around 24 submissions from 13 teams.

Dr. D. Thenmozhi, ASP/CSE

SSN IIC - Infusing AI in the Retail Supply Chain Industry

SSN IIC organized an interactive session on “Infusing AI in the Retail Supply Chain Industry”. The session was handled by Vijay Ekambaram, Senior Research Engineer, Master Inventor, AI Industry Solutions, IBM Research, India. In this session Vijay covered some of the newer advancements in infusing Machine Learning(ML) techniques to solve key business problems in the Retail and Supply Chain industry. Specifically, he focussed on a broad spectrum of various ML solutions grounded on the multimodal (time-series, text, and, vision) nature of the data collected from the retail domain and how it can influence various key business decisions. There were 40 Participants for the event.

URL: <https://www.youtube.com/watch?v=-JOY-FTSZ7c>

Dr. V. Balasubramanian/ASP CSE

Introduction to Data Analytics

A guest lecture on "Introduction to Data Analytics" was arranged for M.E I Year Students. The lecture was delivered by Dr Sharavanan P.T, Technical lead, Sella India Software solutions(P) ltd on 4-7-2022 in offline mode.

Abstract of the talk:

Data analytics mainly deals with the science of examining and investigating raw data to derive useful patterns and inference. Data analytics has been deployed in many of the industries to make decisions at proper levels. It focuses upon the assumption and evaluation of the method with the intention of deriving a conclusion at various levels. Various types of data analytical techniques such as predictive analytics, prescriptive analytics, descriptive analytics, text analytics, and social media analytics are used by industrial organizations, educational institutions and by government associations. This context mainly focuses towards the illustration of contextual examples for various types of analytical techniques and its applications.

Dr. D. Venkata Vara Prasad / Prof, CSE



Computer Vision Techniques And Applications

An invited talk for II Sem M.E CSE students has been arranged. Dr. R. Kishore Kumar, NIFT delivered the talk titled “Computer Vision Techniques and Applications” on 22-7-2022 10:30 am to 11:30 am. Dr Kishore Kumar is currently working as Assistant Professor and AI Engineer, VisioNxt, National Institute of Fashion Technology (NIFT), Chennai.

Abstract of the talk:

Humans interpret, view and understand the world through the human visual system. They have their life span to perceive and convey real-time scenes, but sometimes humans get stuck in the problem of diagnosis or classification. Computer vision is an interdisciplinary field that equips machines to view and understand the visual world. Computer vision algorithms include different methodologies that understand the objects in digital images with the help of statistical or deep learning techniques. Computer vision has gained massive traction in recent years, from essential classification to self-driving cars. This presentation aims to provide fundamental concepts regarding image classification, object detection and image segmentation.

Dr. D. Venkata Vara Prasad / Prof, CSE

The screenshot shows a Google Meet interface during a presentation. The main slide displays the title "COMPUTER VISION TECHNIQUES AND APPLICATIONS" in large, bold, black letters. Below the title, it states "Presented by Dr R Kishore Kumar, Assistant Professor & AI Engineer, VisioNxt, National Institute of Fashion Technology, NIFT Chennai Campus. Email : kishorekumar.ravi@nift.ac.in". The slide is framed by a yellow geometric shape. The meeting controls at the bottom show the time as 10:36 AM and the ID as xgd-gidn-soz. A notification at the bottom left says "YAZHINI K has left the meeting". The right sidebar shows a grid of participant avatars, including Kishore Kumar Ravi, Prasad D V V, Priyadharsini R, Swetha Sasidharan, Santhosh Shivan, Suhasini S, ARCHANA JP, Saritha M., YAZHINI K, and You.

International Yoga Day Celebrations

Surya Shakthi practice for the students of Shiv Nadar University

Dr. R. Kanchana coordinated with Isha Foundation, Coimbatore for the Hatha Yoga Teacher who presented Surya Shakthi practice for the students of Shiv Nadar University, Chennai on 20th May 2022 4-6 pm in commemoration of International Day of Yoga. It was organized by Dr. Balaji, Sports Center.



Upa Yoga Practice for the students of SSN

Dr. R. Kanchana coordinated with Isha Foundation, Coimbatore for the Hatha Yoga Teacher who presented Upa Yoga practice for the students of SSNCE, Chennai on 21st June 2022 4.30-6.30 pm in commemoration of 8th International Day of Yoga. It was organized by Dr. Balaji, Sports Center. The Principal addressed the students and stressed the need for yoga in day to day life. The Vice-Principal also joined the session.



SEMINAR / WORKSHOPS / FDPs ATTENDED

1. **Ms.S.Lakshmi Priya** attended a National Workshop on "How to improve authors citations-Phase II" organized by Department of Chemical Engineering, Sri Sivasubramaniya Nadar College of Engineering on 17-06-22
2. **Dr. K.R. Sarath Chandran** attended a virtual national workshop on "How to Improve Authors Citations-Phase II" on 17/06/2022 organized by the Department of Chemical Engineering, Sri Sivasubramaniya Nadar College of Engineering.
3. **Dr. V. Balasubramanian, Dr. K. Vallidevi** completed AICTE approved CSEDU program in "Effective Teaching of Introduction to Programming" Semester long program conducted during Jan 2022 to May 2022, and completed the module with excellent performance.
4. **Dr.J. Bhuvana, Dr. R. Priyadharsini** attended one-week Professional Development Programme on Research Methodology and IPR through online mode from 23.05.2022 to 27.05.2022 conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chennai
5. **Dr. Chitra Babu, Dr. T.T Mirnalinee** received a certificate from AICTE for successfully completing the online orientation training program for Mentors during 7th to 11th February 2022 under the National Initiative of Technical teachers Training(NITTT).
6. **Dr. V. Balasubramanian** attended a workshop titled "Protecting your IP- Case Studies on Litigation" on 9.7.22 organized by SSN IIC.
7. **Dr. V. Balasubramanian**, Completed the Innovation Ambassador Foundation level conducted in Online mode by Ministry of Education and AICTE on 13.7.22.
8. **Dr. J. Bhuvana, and Dr. R. Priyadharsini** attended one-week Professional Development Programme on Research Methodology and IPR through online mode from 23.05.2022 to 27.05.2022 conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chennai.

WEBINARS ATTENDED / ORGANIZED

1. **Dr. V. Balasubramanian** attended a webinar on "Out of the box thinking for problem solving" 28th June 2022 at 2.00 PM by Dr. Kamakoti, Director, IIT Madras.
2. **Dr. V. Balasubramanian** attended a Webinar on "Does Remote Work Present a Major Cyber security Threat?" on 29.6.22 from 7.30 PM to 8.30 PM by Mr. Arun Soni, internationally acclaimed author and cyber security expert organized by EC-Council.

3. **Dr. K. R. Sarath Chandran** has attended a webinar on "Cost-Optimized FPGAs and Adaptive SoCs for Low Power Designs" organized by AMD-XILINX on 21/06/2022.
4. As ACM iSIGCSE Chapter Chair, **Dr. Chitra Babu** organized and hosted the joint webinar under the auspices of ACM India and iSIGCSE Chapter by Prof. M. Balakrishnan, ACM Fellow from IIT Delhi on the topic "Embedded System Projects for Social Impact" on 25th May 2022 6 - 7 PM.

OTHER ACTIVITIES

1. **Dr. T. T. Mirnalinee and Dr. R. Kanchana** attended a meeting with Prof. Ganesh Samudra on 28th Jun 2022, to clarify the doubts in semester attainment calculation and PO attainment analysis for PG program.
2. **Dr. P. Mirunalini**, acted as External Examiner for Dissertation – II for M.Tech degree at MIT Chennai on 29.06.2022.
3. **Dr. N. Sujaudeen and Dr. K.R. Sarath Chandran** was appointed as the Chief Invigilator to conduct TNPSC Group-2 Examination on 21st May 2022.
4. **Dr. D. Thenmozhi** served as a session chair for the second workshop on Language Technology for Equality, Diversity and Inclusion as part of ACL 2022 conference held at Dublin during 27th May 2022.
5. **Dr.V.S.Felix Enigo** served as session chair for 3rd International Conference of Emerging Technologies (INCET) 2022 which is conducted during 27-29th May, 2022, technically Co-sponsored by IEEE Bangalore section in Jain College of Engineering ,Belagavi ,Karnataka ,India.
6. **Mr. B. Senthil Kumar**, attended the ACL 2022 International conference virtually from 23.05.2022 to 27.05.2022.
7. **Dr. Chitra Babu** had a meeting with the Ex-Director of IIIT Delhi, Prof. Pankaj Jalote regarding the "State of Computing Higher education in India" along with Prof. Venkatesh Kamat of IIT Goa.
8. **Dr. T T Mirnalinee, Dr. J. Suresh, Dr. R. Kanchana** attended the meeting convened by the Principal on the conduct of the EFP course on Fundamentals and Practice of Software Development and presented the course plan, projects and assignments given to the students.
9. **Dr. T. T. Mirnalinee, Dr. R. Kanchana, Dr. B. Prabhavathy** revised the brochure for B. E(CSE) and M. E(CSE).
10. **Dr. T. T. Mirnalinee, Dr. R. Kanchana, Dr. K. Sarath Chandran, and Mrs. Lakshmipriya** prepared a brochure highlighting the admission for ME (CSE).

11. **Dr. H.Shahul Hamead** has convened the monthly meeting for SDN research group on 06/05/2022. The faculty members of SDN group (**Dr. T. T. Mirnalinee, Dr. J. Bhuvana, Dr. V.S. Felix Enigo, Dr. K. Sarath Chandran, Dr. A. Beulah**) explored various research areas of SDN.
12. **Dr. V. Balasubramanian** attended IIC4.0 Third Council Meeting on 9.7.22 at 10.30 AM to 11.30 AM
13. **Dr. Chitra Babu** was appointed as an external examiner for the end semester project Viva Voce examination of M.C.A degree students on 6th July 2022.
14. **Dr. T.T. Mirnalinee** served as a member in the interview panel of SNU Chennai admissions.
15. **Dr. R. Kanchana** presented the progress made in the EFP course on Fundamentals and practice of software development to prof. Ganesh Samudra on 21st July 2022
16. **Dr. R. Kanchana** attended the meeting with Prof. Ganesh Samudra to present the criteria 2 of PG SAR and receive his suggestions on 8th Jul 2022.

LatConnect

The Department of CSE has taken initiative to strengthen the support system for lateral, rural and vocational students.

In connection with this, LatConnect was launched on 04.05.2022 (Wednesday) between 10 am to 11am in CSE Seminar hall.

The goal of this program is to

1. Connect students with their seniors and juniors
2. Career guidance
3. Academic guidance
4. Dedicate an alumni for each individual student
5. Guidance for self exploration
6. Explore their strength
7. Specialized Mentoring support of faculty
8. Industrial internships
9. Track their academic record of exams

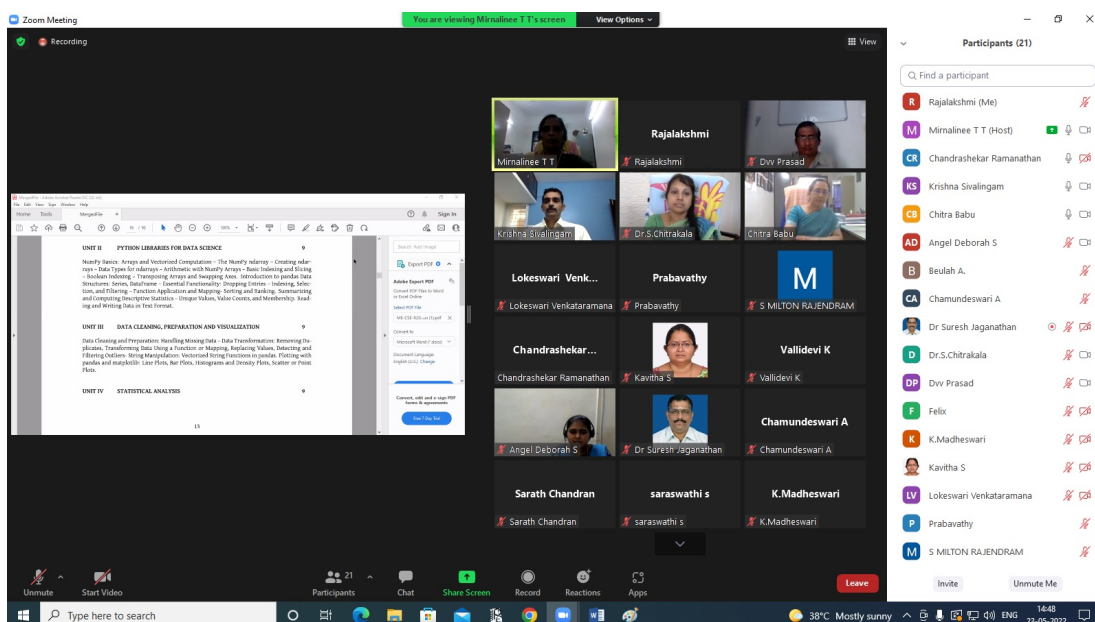
This was initiated by Dr. T. T. Mirnalinee & Dr. S.V.Jansi Rani

PG R2022 - BOS MEETING

The Board of Studies (BoS) of the Department of Computer Science met on 23 May 2022 from 1.30 PM to 3.10 PM to discuss the M.E curriculum and syllabi in online mode.

The following members were present:

Member	Role
Dr. T. T. Mirnallinee Prof. and HoD, CSE, SSNCE	Chairperson
Dr. S. Chitrakala Professor, Department of CSE, CEG, Anna University	University Nominee
Dr. Krishna Moorthy Sivalingam Institute Chair Professor, Department of CSE, IIT Madras	Academic Expert
Dr. Chandrashekar Ramanathan Professor and Dean (Academics), IIIT Bangalore	Academic Expert
Mr. Kaarthik Sivakumar Principal Engineer, Cisco Systems	Industry Representative
Mr. V. Sasikumar Senior Software Engineer, Walmart Global Tech India, Bangalore	Alumni Representative
CSE Department faculty members	



THE MENTOR APP

The Mentoring process in SSN College of Engineering so far has been carried out by issuing Hardcopy Mentor Books from the Mentor to his/her allocated student Mentees. An idea was brought forward to Implement this in a more efficient, less time-consuming way by developing an Online Mentor Record website for the very same purpose. This idea was brought in by Dr Prabha B, Professor & Head, Department of Mathematics along with Dr D.Venkata vara Prasad, Professor, Department of Computer Science and Engineering. A team of four third year CSE students namely Mr Vaseekaran S , Mr Srikanth Iyer , Mr Vignesh G R and Prathista Rana worked to meet this objective.

The Mentor App website paves way for four different Logins - Student, Mentor, Faculty (or other professors) and the parent. Certain Restrictions on accessing the details Have been distributed among the 4 users, thus maintaining Confidentiality. Students have the provision to enter their personal details, Marks obtained in the semester and additional career information. Mentors Have the Provision To Add The Mentees filtered upon the Name, batch, and Class and Can clear / Edit the Number of mentees. Parents have a provision to View their own student's whole profile and will not have access to other modules, and cannot edit the same. Other Faculties have the provision to view All the student's Profile record and cannot edit the same.

TECHNOLOGIES USED:

Front-end Tools: ReactJs with Bootstrap

Middleware: SpringBoot (Spring Web, Spring Security)

BackEnd Tools: MongoDB

Code Maintenance: GitHub Repositories

API Documentation: Postman Agent

User Interface design: Figma

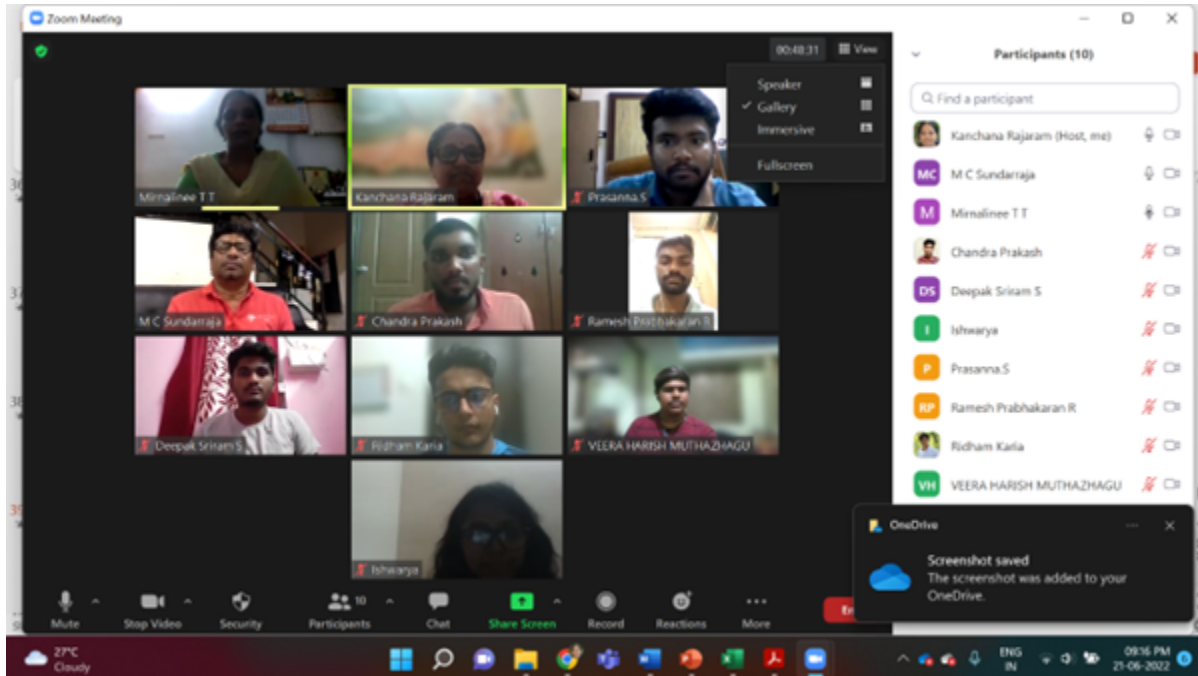
Miscellaneous Open-Source tools: FontAwesome icons

The app was demonstrated and this initiation acted as a triggering point for implementation of this concept in SSN ERP module by ERP team.

ME 2022 ADMISSION – OPEN DAY

Twelve candidates have applied for admission into ME(CSE) programme. The candidates were called for a counseling session on 21st June 2022. Dr. T.T. Mirnalinee, HoD, CSE welcomed the candidates and briefed about the department. Dr. R. Kanchana presented the details of the programme and screened a video showing the feedback on the programme by the alumni. The candidates were happy about the programme and clarified their doubts.

Dr. R. Kanchana/ASP CSE



NOTABLE VISITORS

A team of faculty from St. Xavier's Catholic College of Engineering, Nagercoil visited our college on May 04, 2022 to understand the best practices followed in our college after Autonomy. The team visited the research labs in the Department of CSE and held a meeting with Dr.T. T. Mirnalinee, Professor and Head of the Department. The Visit to the department was coordinated by **Dr.T. T. Mirnalinee, Dr.J. Bhuvana and Dr.R. Priyadharsini.**

FAREWELL TO OUR BELOVED PROFESSOR

We had a get together to bid farewell to our dear Professor Dr. R. S. Milton. Our department Faculty and non-teaching staff shared their thoughts on working with Milton Sir. Sir always used to start our day with warm wishes and a smile. He guided us in our path and helped us to overcome the hard times of our life and career. If we approach him with our problems, he will show a righteous way and give suggestions to solve it. Sir shared his experiences and narrated a story about friendship. His thoughts, sense of humour and Tamil proficiency have impressed and encouraged us to follow them. With heavy heart, we bid bye to sir and wish him a great life ahead. We said goodbye to someone who was more than just a co-worker.

We miss your smiling face, infectious laugh, and friendly conversation. Though we miss your warm welcome every day, we know that you will be happy moving forward to an exciting and a challenging role. It was a pleasure getting to know, working with you, and learning from you. We hope our paths will cross again someday. Happy time with your family, Sir.



Dr. S. Rajalakshmi & Dr. M.Saritha

SMART INDIA HACKATHON 2022

Entry to Grand Finale

The following teams from the department got selected to grande finale:

Team Name	Team Members	Mentors	Problem Statement	Organization
Intecoders	Madhuri Mahalingam Subha R Sanmati P Krupa Elizabeth Thannickal Meena Muthukumar Manickam.L	Dr. A. Beulah Ms. S. Angel Deborah	Portal to know about various National and International scholarships	All India Council for Technical Education (AICTE).
31494 - Kyogre_SIH20 22	Karthik Desingu Nivedhitha D Dhana Lakshmi M Anirudh A Karthik Raja A Aravind Kannan Rathinasabapathi	Dr. Sakthivel Murugan S Mr. Abhishek Premanand	Pattern recognition algorithm to identify marine animals.	India Meteorological Department (IMD), Ministry of Earth Sciences (MoES).
32289 - ByeWorld_SIH 2022	Vignesh Balaji S Sumon Kumar Supraja S. N Thejas Shruthi D. Shri Keshavinee	Dr.V. Balasubramanian Dr. Sanjeet Kumar Nayak	Graphical password authentication	National Digital Education Architecture (NDEAR), Department of School Education & Literacy (DoSEL).

SIH 2022- BYEWORLD

The Government of India organised Smart India Hackathon 2022 to seek participation from students to help address the challenges faced by various industries and ministries. In this regard, our college conducted an Internal Hackathon on 23rd March, for shortlisting the top teams and we the team ByeWorld secured the first position. We developed a graphical password authentication system with various novelties for the problem statement ID DR705. And we also submitted a project idea for intelligent automation of projector screens as a solution to the problem statement ID AK1088.

The results were announced on 28th June, our team ByeWorld was shortlisted for the Grand Finale of Smart India Hackathon 2022 under the problem statement ID AK1088.

We'd like to thank our mentor Dr V. Balasubramanian and SSNCE management for supporting us throughout the journey. We are looking forward to achieving success in the Grand Finale.

– Team ByeWorld

Vignesh Balaji S, Sumon Kumar, Supraja S,

Thejas Narasimhan, Shruthi D, Shri Keshavinee R,

CSE-B II year.



STUDENT ACHIEVEMENT

Research Update

1. **Karthik D (III year CSE), Anirudh (II year CSE), Eeswaraanvesh Chodisetty (II year CSE) and Haricharan Bharathi (II year CSE)** along with **Dr. P. Mirunalini** participated and developed a system in the International Shared Task on “FungiCLEF2022” conducted as part of Conference and Labs of the Evaluation Forum (CLEF) 2022 to be held at Bologna, Italy.
2. **Karthik D (III year CSE), Anirudh (II year CSE), Eeswaraanvesh Chodisetty (II year CSE) and Haricharan Bharathi (II year CSE)** along with **Dr. P. Mirunalini** participated and developed a system in the International Shared Task on “SnakeCLEF2022” conducted as part of Conference and Labs of the Evaluation Forum (CLEF) 2022 to be held at Bologna, Italy.
3. **Nandakishor Velu(II year), Sanjay Rojar Utharia Muthu(II year) and Shruthi Dhanvanth (II year)** along with **Dr. K. Madheswari** participated and developed a system in the International Shared Task on “FungiCLEF2022” conducted as part of Conference and Labs of the Evaluation Forum (CLEF) 2022 to be held at Bologna, Italy.
4. **Nithin S(III Year), Sandeep Sekar (III yr) and Aasif (III Yr)** with **Dr. A. Beulah** participated and developed a system in the International Shared Task on “PlantCLEF2022” conducted as part of Conference and Labs of the Evaluation Forum (CLEF) 2022 to be held at Bologna, Italy.
5. In the team name of KL_BP_SSN, **Sushaanth S, Sharvesh S, Nitheesh Kumar N, Sabarivasan V, Thejas N, Vikash Anand N, Lekshmi K, Prabavathy B** have participated in ImageCLEF 2022 Tuberculosis - Caverns Report: an image-based classification of lung cavern regions in lung CT images associated with lung tuberculosis and secured the THIRD position in the leaderboard.
6. Fusion Team 1: **Shreya Sriram, Madhuri Mahalingam, Sarah Aymen N, Shajith Hameed, Rahul R, Sai Shashaank R, Lekshmi K, Prabavathy B** have participated in ImageCLEF 2022 Fusion - Result Diversification: a fusion mechanism to create a new and improved super predictor for retrieving images from a series of weaker learner methods called inducers and secured one of the top THREE positions in the leaderboard.
7. Fusion Team 2: **Lekshmi Kalinathan, Prabavathy Balsundaram, Yogesh Munees E, Siddharth S, Shrijith Mr, Shrikeshavinee Ramachandran, Shruti Sriram, Ramdhanush Venkatakrishnan** have participated in ImageCLEF 2022 Fusion - Result Diversification and secured one of the top THREE positions in the leaderboard.
8. In the team name of KL_BP_SSN, **Pravinkrishnan K, Naren Sivakumar, Ainsely Jebaraj, C Padma Pooja, Supraja Sridhar, Prabavathy B, Lekshmi K** have participated in LifeCLEF 2022 Plant: an image-based plant identification task and secured the FIFTH position in the leaderboard.

INTERNALLY FUNDED STUDENT PROJECTS - SANCTIONED

S.No	Name and Year of the Student(s)	Project Guide(s)	Title of the Project	Budget
1	V. Indirakanth S. Kishaanth Koushik Viswanath Sabarivasan Velayutham II Year	Dr. R. Kanchana	Auto timer for traffic signals	Rs.12000
2	Aditi Ramprasad T.E. Anirudh Digant Mehul Gandhi III Year	Dr. S. Kavitha Dr. G. Raghuraman	Online class learner's behaviour analysis through compound facial expressions & EEG data using deep neural network techniques	Rs.24000
3	K.L. Mrithula Varsha Yeshwanth Vignesh Balaji II Year	Dr. K. Madheswari Dr. K. Lekshmi	Project REDPen	Rs.22000
4	K. Divyasri II Year Karun Anantharaman III Year B. Hariprasad III Year	Dr. R. Kanchana Dr. S. Saraswathi	Smart lock	Rs.24000
5	Sarika Esackimuthu R. Shri Keshavinee H. Shruthi II Year	Dr. S.V. Jansi Rani	Automatic weed detection and removal system	Rs.24000
6	S. K. Jayaraja K. Pravinkrishanan Samyuktha Ganeshkumar III Year CSE D. Jebaroshan III Year ECE	Dr. B. Prabavathy	Smart IoT based robot for farm management	Rs.18000
7	A. Anirudh Karthik Raja Anandan III Year	Dr. S. Sakthivel Murugan ECE	Arming and automation of remotely operable vehicles (RoV)	Rs.29000
8	E. Nivetha II Year ECE Jeevesh Krishna Arigala	Dr. R. Kanchana	Smart armband with fall detection in elderly	Rs.17000

	A. R. Fathima Naushin S. Vikash Anand II Year CSE			
9	D. Karthik III Year D. Nivedhitha IV Year	Dr. S. Sakthivel Murugan ECE	Development of autonomous navigation suite for an underwater vehicle (UWV)	Rs.30000
10	V. Nandakishor M.V. Selvendran U. Sanjay Rojar M. Ponvijay II Year	Ms. S. Angel Deborah Ms. S. Rajalakshmi	Voice to text converter for hearing impaired using raspberry pi	Rs.24000
11	R. Daphnie Rithika S. Ramya Priya S. Varsha Thushita Mariaselvan III Year	Dr. D. Thenmozhi	S.A.S. Ring (Safe and Sound)	Rs.11000
12	V. P. Abishek Dejah II Year CSE Shalom Fillbert II Year IT	Dr. K. Lekshmi Dr. K. Madheswari	Smart wheelchair	Rs.23000
13	P. K. Chirag Bheemaiah N. Aarthi Meena Muthukumar III Year CSE	Ms. S. Rajalakshmi Ms. Angel Deborah	Disease detection in plants using deep learning techniques	Rs.17000
14	A. Ranjanai A. Sanjana M. Pooja III Year CSE S. Archana III Year BME	Ms. Angel Deborah Dr. R. S. Milton Ms. S. Rajalakshmi Ms. M. Saritha	Speech emotion detection using Raspberry Pi	Rs.18000
15	C. Arun Prakaash ECE Arini Rsm R. Akhash Karthick EEE J. Dheeraj Mechanical I Year	Dr. J. Bhuvana Dr. T.T.Mirnalinee	Synchronized security system	Rs.20000
16	S. Sindhu N. Arthika EEE V. Swetha IT I Year	Dr. J. Bhuvana Dr. T.T. Mirnalinee	Smart Blink: Smart home automation using eye movement for disabled and geriatrics	Rs.20000
17	Syed Azim V.G. Susmitha S. Sai Skand ECE B. Ragul, CSE	Dr. V. S. Felix Enigo	Eagle Eye: The complete anti-cheat device	Rs. 30000

	I Year			
18	S. A. Kanisha Kiran ECE S. Meenakshi Lalitha Chemical I Year	Ms. S. Lakshmi Priya Dr. N. Sujaudeen Dr. K. R. Sarath Chandran	IoT-Enabled locker system with App intervention for smart campus	Rs.15000
19	A. Bhavana A. Sadhana Apurva Narayan I Year	Dr. J. Suresh	DigiWe - Automated interactive guidance in mobile phone usage	Rs.18600
20	Harini Mohan CSE B. Vasundhara J. Kaaviya Sri IT I Year	Dr. B. Bharathi Dr. P. Mirunalini	Binconnect: Smart waste management system using IoT	Rs.7000
21	Rakshith Subramanian CSE Akashraj Giriraj Deepesh Sudhan IT I Year	Dr. J. Suresh	Artificial intelligence supported human body temperature detector	Rs.22000
22	Pooja Premnath CSE Aman Singh ECE I Year	Dr. R. Sundareswaran Dr. M. Shanmugapriya Mathematics Dr. S. V. Jansi Rani CSE	Identification of acquisition nodes in electrical grid networks using centrality measures in graphs	Rs.15000
23	Sairam R. Sureshbabu Mechanical Sanjhay Venkatachari Tejas Venkataramanan CSE I Year	Dr. K. R. Sarath Chandran Dr. N. Sujaudeen Ms. S. Lakshmi Priya	QR code based smart trolley system for shopping malls	Rs.9000

Extra - Curricular

1. M.Madhuri, Shruti Susila Prasanna of III year CSE and Shruthi D of II year CSE have participated in the Fundraiser of SSN Theatre Club - Light's out please organized SSN College of Engineering at State level on 10th May 2022. There were about 500 to 600 people in the audience.
2. Hari Sundarraman of IV year CSE performed Mridangam on the occasion, "Sri Aurobindo's 150th birth anniversary and 50th anniversary of Bharat Nivas' ' on 28th May 2022 at Sri Aurobindo Auditorium, Puducherry.
3. Vignesh Balaji of II year CSE has been selected as a Google Developer Student Club Lead for SSN campus on 12th July 2022

ALUMNI INTERACTION

1. Mr.Vignesh Sha P.N (2015) and Mr.Balaji Rao (2017) acted as one of the Chief Guests for the Cultural Event Instincts 2022. Mr.Vignesh Sha is one of the budding directors in the film industry and is waiting for his pilot movie to be released next month.
2. Mr.T.R Murali (2015) currently as Senior Software Engineer, Wipro Pvt. Ltd. and Mr.K.Sridhar (2021), an entrepreneur holding a finance company for two wheelers, visited the department and interacted with few faculty members about the industry expectations and shared their experiences.
3. Ms.Akshaya Natarajan, Mr.Abhay Krishna and Ms.Meenakshi Poorani of U.G 2018 batch visited the department and interacted with the faculty members and shared their experience.
4. Ms.R.J. Vennila of P.G 2016 batch visited the department and interacted with the faculty members.

ART CORNER



Gayathri E
4th year

EDITORIAL TEAM

FACULTY EDITORS

Dr. T. T. Mirnalinee

Professor & Head/CSE

Dr. A. Beulah

AP/CSE

Ms. S. Angel Deborah

AP/CSE

STUDENT EDITORS

Varsini S

III Year

Aadhithya Muthukumar

Pooja Premnath

II Year