

## Faculty Publications

### International Conferences (July 2021 – June 2022)

1. Srinithyee S K , Srivarsha E, R. Priyadharsini, Dr. A. Beulah," Optimized Image Edge Detection Approach using Fractional Order Calculus" 6th IEEE International Conference on Communication and Electronics Systems (ICCES 2021), 8 Jul, 2021 – Sat, 10 Jul, 2021, PPG Institute of Technology.
2. N. Sheerin Sitara and S. Kavitha, "SSN MLRG at VQA-MED 2021: An Approach for VQA to Solve Abnormality Related Queries using Improved Datasets" at CLEF2021. <http://www.dei.unipd.it/~ferro/CLEF-WN-Drafts/CLEF2021/>
3. Avantika Balaji, S. Ganesh, T. Abishek Balaji and Dr. K. R. Sarath Chandran, " Shot Boundary Detection and Video Captioning Using Neural Networks" in Fourth International Conference on Big data and Cloud Computing (ICBDCC21 - Springer) conducted during 20 - 21 August 2021 organized by Karunya Institute of Technology & Sciences, Coimbatore.
4. Rajalakshmi Sivanaiah, Angel Deborah S, S Milton Rajendram, Mirnalinee T T, Abrit Pal Singh, Aviansh Gupta, Ayush Nanda , "TECHSSN at SemEval-2021 Task 7: Humor and Offense detection and classification using CoBERT embeddings", Proceedings of the 15th International Workshop on Semantic Evaluation (SemEval-2021), pages 1185–1189 Bangkok, Thailand (online), August 5–6, 2021. ©2021 Association for Computational Linguistics
5. Akilan K, Anusha Chandrasekaran, Arunesh Kumar, Jashwanth S B, Joshua A,Rajalakshmi S, Angel Deborah S, "Customised Internet of Things based BusTracking and Management System", In Proceedings of Fourth International Conference on Big-Data and Cloud Computing (ICBDCC'21), conducted by Karunya Institute of Technology & Sciences, Coimbatore, on August 20 & 21, 2021, Springer - Lecture Notes in Electrical Engineering series.
6. Karthika Menon, V. Khushi Bohra, Lakshana Murugan, Kavya Jaganathan, Chamundeswari Arumugam, (2021) COVID-19 Diagnosis from Chest X-Ray Images Using Convolutional Neural Networks and Effects of Data Poisoning. In: Gervasi O. et al. (eds) Computational Science and Its Applications – ICCSA 2021. ICCSA 2021. Lecture Notes in Computer Science, vol 12957. Springer, Cham. [https://doi.org/10.1007/978-3-030-87013-3\\_38](https://doi.org/10.1007/978-3-030-87013-3_38)
7. Sowmya Ramesh, Subhiksha Selvarayan, Kanishq Sunil, Chamundeswari Arumugam, (2021) An Adaptive Multi-layered Approach for DoS Detection and Mitigation. In: Gervasi O. et al. (eds) Computational Science and Its Applications – ICCSA 2021. ICCSA 2021. Lecture Notes in Computer Science, vol 12957. Springer, Cham. [https://doi.org/10.1007/978-3-030-87013-3\\_40](https://doi.org/10.1007/978-3-030-87013-3_40)
8. Dakshinamoorthy Karthikeyan, Babu Aravind Sivamani, Pavan Kalyan Tummala, Chamundeswari Arumugam, (2021) Time Series for Forecasting Stock Market Prices Based on Sentiment Analysis of Social Media. In: Gervasi O. et al. (eds) Computational Science and Its Applications – ICCSA 2021. ICCSA 2021. Lecture Notes in Computer Science, vol 12955. Springer, Cham. [https://doi.org/10.1007/978-3-030-87007-2\\_25](https://doi.org/10.1007/978-3-030-87007-2_25)
9. Karthik Viswanath S, Naveen L, Ananda Raj, Rajalakshmi S, Angel Deborah S, Abstractive text summarizer: A Comparative study on dot product attention and cosine similarity, Fourth IEEE International Conference on Electrical, Computer and Communication Technologies(ICECCT 2021), Velalar College of Engineering and Technology, Erode, Tamil Nadu, INDIA during 15-17, September 2021. Proceedings of ICECCT 2021 will be published in IEEE Xplore

10. Ayush Nanda, Abrit Pal Singh, Aviansh Gupta, Rajalakshmi Sivanaiah, Angel Deborah Suseelan, S Milton Rajendram, Mirnalinee T T, "TECHSSN at HAHA @ IberLEF 2021: Humor Detection and Funniness Score Prediction using Deep Learning Techniques", Proceedings of the Iberian Languages Evaluation Forum (IberLEF 2021), co-located with the Conference of the Spanish Society for Natural Language Processing (SEPLN 2021), XXXVII International Conference of the Spanish Society for Natural Language Processing. Málaga, Spain, September, 2021. pp 814-820
11. D. Thenmozhi, "Findings of the Sentiment Analysis of Dravidian Languages in Code-Mixed Text", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
12. D. Thenmozhi, "ECMAG - Ensemble of CNN and Multi-Head Attention with Bi-GRU for Sentiment Analysis in Code-Mixed Data", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
13. D. Thenmozhi, "Sentiment Analysis using Cross Lingual Word Embedding Model", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
14. D. Thenmozhi, "Multilingual Sentiment Analysis in Tamil, Malayalam, and Kannada code-mixed social media posts using MBERT", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
15. D. Thenmozhi, "TOLD: Tamil Offensive Language Detection in Code-Mixed Social Media Comments using MBERT with Features based Selection", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
16. D. Thenmozhi, "Offensive Language Identification using Machine Learning and Deep Learning Techniques", International conference on Forum for Information Retrieval Evaluation (FIRE'21) during 13-17 December 2021.
17. B.Senthil Kumar, "Transliterate or translate? Sentiment analysis of code-mixed text in Dravidian languages" in the track "Sentiment Analysis for Dravidian Languages in Code-Mixed Text", co-located with Forum for Information Retrieval Evaluation (FIRE'21), 13-17 December 2021.
18. Kavitha Srinivasan, Priyadarshini JR, Varun Suresh and Nithya Rathna A, published a paper titled as "Pixel based Adversarial Attacks on Convolutional Neural Network Models" , Vol 611. Springer, Cham. [https://doi.org/10.1007/978-3-030-92600-7\\_14](https://doi.org/10.1007/978-3-030-92600-7_14), First Online: 12 December 202.
19. R. Kanchana, "DLoader: Migration of data from SQL to NoSQL databases" in the International Conference on Cognitive & Intelligent Computing (ICIC 2021), CMR college of Engineering and Technology, Hyderabad on 12th Dec 2021.
20. B. Harish and D. Thenmozhi, "Self Driving Car in a constrained environment" in ICCSP 2022 conference, SSN College of Engineering on 25th January 2022.
21. Aravind Kannan Rathinsabapathi, Sandeep Sekhar Bathala, Karthik A, Dr. P. Mirunalini, Dr. R. Priyadharsini, Presented and received the Best paper award for the paper titled "Zafe Zone - Self Defense Device for Children and Elderly" in the 5th International Conference on Intelligent Computing at Panimalar Engineering College, Chennai, March 25-26, 2022
22. D. Thenmozhi, Kayalvizhi S, Thenmozhi Durairaj, Bharathi Raja Chakravarthi, Jerin Mahibha C, "Findings of the Shared Task on Detecting Signs of Depression from Social Media", Volume-2022.Iledi-1, pp-331-338, May 2022.
23. D. Thenmozhi, Anbukkarasi Sampath, Thenmozhi Durairaj, Bharathi Raja Chakravarthi, Ruba Priyadharsini, 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.
24. Sivamanikandan S, Santhosh V, Sanjaykumar N, Jerin Mahibha C, Thenmozhi Durairaj, "scubeMSEC@LT-EDI-ACL2022: Detection of Depression using Transformer Models", Volume-2022.ltedi-1, pp-212–217, May 2022.
  25. Bharathi B, Dhanya Srinivasan, Josephine Varsha, Thenmozhi Durairaj, Senthil Kumar B, "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.
  26. Dhanya Srinivasan, Bharathi B, Thenmozhi Durairaj, and Senthil Kumar B. 2022. 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) <https://aclanthology.org/2022.ltedi-1.48>
  27. Bharathi Raja Chakravarthi, Ruba Priyadharshini, Thenmozhi Durairaj, 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.
  28. Divyasri K, Gayathri G L, Krithika Swaminathan, Thenmozhi Durairaj, Bharathi B, and Senthil Kumar B. 2022. 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 inclusion: May 2022) <https://aclanthology.org/2022.dravidianlangtech-1.17>
  29. Krithika Swaminathan, Bharathi B, Gayathri G L, and Hrishik Sampath. 2022. 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) <https://aclanthology.org/2022.ltedi-1.34>
  30. Ruba Priyadharshini, Bharathi Raja Chakravarthi, Subalalitha CN, Thenmozhi Durairaj, 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.
  31. Bharathi B, Bharathi Raja Chakravarthi, Subalalitha Cn, Sripriya N, Arunaggiri Pandian, and Swetha Valli. 2022. 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) <https://aclanthology.org/2022.ltedi-1.52>
  32. Suhasini S and Bharathi B. 2022. SUH\_AS@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) <https://aclanthology.org/2022.ltedi-1.23>
  33. Bharathi B, Dhanya Srinivasan, Josephine Varsha, Thenmozhi Durairaj, and Senthil Kumar B. 2022. 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) <https://aclanthology.org/2022.ltedi-1.30>
34. Krithika Swaminathan, Divyasri K, Gayathri G L, Thenmozhi Durairaj, and Bharathi B. 2022. PANDAS@Abusive Comment Detection in Tamil Code-Mixed Data Using Custom Embeddings with LaBSE. In Proceedings of the Second Workshop on Speech and Language Technologies for Dravidian Languages, pages 112–119, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) <https://aclanthology.org/2022.dravidianlangtech-1.18>
  35. Bharathi B and Josephine Varsha. 2022. SSNCSE\_NLP@TamilNLP-ACL2022: Transformer based approach for Emotion analysis in Tamil language. In Proceedings of the Second Workshop on Speech and Language Technologies for Dravidian Languages, pages 125–131, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) <https://aclanthology.org/2022.dravidianlangtech-1.20>
  36. Bharathi B and Josephine Varsha. 2022. SSNCSE NLP@TamilNLP-ACL2022: Transformer based approach for detection of abusive comment for Tamil language. In Proceedings of the Second Workshop on Speech and Language Technologies for Dravidian Languages, pages 158–164, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) <https://aclanthology.org/2022.dravidianlangtech-1.25>
  37. Premjith B, Bharathi Raja Chakravarthi, Malliga Subramanian, Bharathi B, Soman Kp, Dhanalakshmi V, Sreelakshmi K, Arunaggiri Pandian, and Prasanna Kumaresan. 2022. Findings of the Shared Task on Multimodal Sentiment Analysis and Troll Meme Classification in Dravidian Languages. In Proceedings of the Second Workshop on Speech and Language Technologies for Dravidian Languages, pages 254–260, Dublin, Ireland. Association for Computational Linguistics. (Online inclusion: May 2022) <https://aclanthology.org/2022.dravidianlangtech-1.39>
  38. Ranjana, S., Priya, J., Reenu Rita, P.S., Bharathi, B. (2022). 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](https://doi.org/10.1007/978-981-16-7088-6_27)
  39. Kavitha S., 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](https://doi.org/10.1007/978-3-031-05767-0_27)
  40. Karun Anantharaman, S. Rajalakshmi, S. Angel Deborah, M. Saritha, R. Sakaya Milton, "SSN\_MLRG1@LT-EDI-ACL2022: Multi-Class Classification using BERT models for Detecting Depression Signs from Social Media Text" , 27th May, 2022 pp.296-300.
  41. Sarika Esackimuthu, Shruthi H, Rajalakshmi Sivanaiah, Angel Deborah S, Sakaya Milton R, Mirnalinee T T, "SSN\_MLRG3 @LT-EDI-ACL2022-Depression Detection System from Social Media Text using Transformer Models", 27th May, 2022, pp.196-199.
  42. PraveenKumar V , Prathyush S , Aravind P, Angel Deborah S, Rajalakshmi S, Milton R S, Mirnalinee T T, "SSN\_ARMM@ LT-EDI -ACL2022: Hope Speech Detection for

- Equality,  
Diversity, and Inclusion Using ALBERT model", 27th May, 2022, pp.172-176.
43. Varsini S, Kirthanna Rajan, Angel Deborah S, Rajalakshmi S, R.S.Milton, T.T.Mirnalinee, "Varsini\_and\_Kirthanna@DravidianLangTech-ACL2022-Emotional Analysis in Tamil", 27th May, 2022, pp.165-169.
  44. Shruthi Hariprasad, Sarika Esackimuthu, Saritha Madhavan Rajalakshmi Sivanaiah, Angel Deborah Suseelan, "SSN\_MLRG1@DravidianLangTech-ACL2022: Troll Meme Classification in Tamil using Transformer Models", 27th May, 2022, pp.132-137.
  45. J. Bhuvana, 'A Study and Review of Classical, Machine Learning and Deep Learning Methods of Software Reliability Estimation for Safety-Critical Systems' in the TNSCST Sponsored 8<sup>th</sup> International Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'22) organized by Karpagam Institute of Technology, Coimbatore, 20th & 21st of May 2022.
  46. 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. [https://doi.org/10.1007/978-981-16-7996-4\\_44](https://doi.org/10.1007/978-981-16-7996-4_44)
  47. 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](https://doi.org/10.1007/978-981-16-7610-9_56)

**Faculty In-Charge**

**HoD, CSE**