

Fourth International Conference on **Speech** and **Language** Technologies for **Low-Resource** Languages - **SPELLL 2025**

18th to 20th, December 2025 - Paper Presentation Schedule

Indian Institute of Information Technology Kottayam, Kerala, India

DAY-1

Track-1: Language Resources (LRs) - PANEL I

| Venue | BB218 | Link: TBA | | |
|-------------------------------------|----------|---|---|-------------------------|
| Day 1: 18th December 2025, Thursday | | Time: 02:00 PM - 04:00 PM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 30 | English Pronunciation through Malayalam in English-Malayalam Dictionaries: A Lexico-Phonetic Intervention | Jiji Chandran, Noora Abdul Hakim Khan | 02:00 p.m. - 02:15 p.m. |
| 2 | 133 | Grapheme-Based Part-of-Speech Tagging for Tamil Using Machine Learning Approaches | RM Soundar Arunachalam, C Janarthanan, A M ABIRAMI, Anitha D | 02:15 p.m. - 02:30 p.m. |
| 3 | 172 | KRISHI: An Annotated Dataset for Agricultural Text Classification in Malayalam | Anjana Sankar, Aisha Nama, Jeena Kleenankandy | 02:30 p.m. - 02:45 p.m. |
| 4 | 55 | Generative AI for Low-Resource NLP: Evaluating Khmer Data Generation for Homophone Spelling Correction | Seanghort Born, Madeth MAY, Claudine Piau-Toffolon, Sébastien Iksal | 02:45 p.m. - 03:00 p.m. |
| 5 | 114 | Nalam AI : Novel Assistive Language Medical AI Device For Instantaneous Monitoring and Intelligent Healthcare | RAJASUNDARI THANGADURAI, DR. ASHWINTH JANARTHANAN | 03:00 p.m. - 03:15 p.m. |
| 6 | 77 | Integrating Tolkāppiyam Ezhuthathikaram into AI: Fine-Tuning Large Language Models for Tamil Grammar | Subalalitha Chinnaudayar Navaneethakrishnan, Sathiyaraj Thangasamy, R.Nithya, Muneesmoorthy M, Rajendran N, Kavitha P, Karunya V, Mythily M, Boopalan S | 03:15 p.m. - 03:30 p.m. |

Track-2: Language Technologies (LT) - PANEL II

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| Venue | BB204 | Link: TBA |
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| Day 1: 18th December 2025, Thursday | | | Time: 02:00 PM - 04:00 PM | |
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| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 80 | NeuroLex: A Neuro-Symbolic AI-Driven Legal Contract Analyzer | Jiya Ajith, Anoop S, Sumam Mary Idicula | 02:00 p.m. - 02:15 p.m. |
| 2 | 20 | A Multilingual Adaptive Prompt Framework for Dialogue Systems in Low-Resource Indian Languages | SAUVIK BAL, LOPA MANDAL | 02:15 p.m. - 02:30 p.m. |
| 3 | 21 | TAMEAT- Tool to analyze Tamil language skills of undergraduate students in Tamil Nadu | Sathiyaraj Thangasamy, Subalalitha Chinnaudayar Navaneethakrishnan, Dhanalakshmi V, P. Kavitha, Mythily M, Rajendran Nallathambi, Karunya V, Nithya R, Sangeetha Sivanesan | 02:30 p.m. - 02:45 p.m. |
| 4 | 24 | Adopting Large Language Models for Automated Legal Document Annotation and Labeling | Hemant Kumar M, Sowmya Kamath S., Supreetha R | 02:45 p.m. - 03:00 p.m. |
| 5 | 36 | Byte-Level Tokenization over MuRIL and Multitask Learning for Classification Tasks in Code-Mixed Dravidian Languages | Archana K P, Premjith B | 03:00 p.m. - 03:15 p.m. |
| 6 | 67 | Exploring NMT Approaches and Vocabulary Optimization for Low-Resource Languages: A Case Study of English-Nepali-Tamang | Bipesh Subedi, Bal Krishna Bal, Prakash Poudyal, Rupak Raj Ghimire, Praveen Acharya, Balaram Prasain | 03:15 p.m. - 03:30 p.m. |
| 7 | 69 | Low-Resource Legal NLP: Summarizing Nepali Legal Documents with Multilingual Transformers | Arpan Sapkota, Rupak Raj Ghimire | 03:30 p.m. - 03:45 p.m. |

| Track-2: Language Technologies (LT) - PANEL III | | | | |
|---|----------|---|---|-------------------------|
| Venue | Mukhil | Link: TBA | | |
| Day 1: 18th December 2025, Thursday | | Time: 02:00 PM - 04:30 PM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 143 | Knowledge Graph-based Retrieval for Tamil Siddha Medicines | Seetharam Killivalavan, Thenmozhi Durairaj | 02:00 p.m. - 02:15 p.m. |
| 2 | 82 | Offensive language identification on Dravidian languages using Transformer-based embedding with Deep Learning Techniques | Varun Balaji S, Bojja Revanth Reddy, Vyshnavi Reddy Battula, Suraj Nagunuri, Balasubramanian Palani | 02:15 p.m. - 02:30 p.m. |
| 3 | 86 | Multi-Task Learning for Marathi | Amogh Thakurdesai, Suramya Jadhav, Ridhima Sinare, Abhay Shanbhag, Raviraj Bhuminand Joshi, Sheetal S. Sonawane | 02:30 p.m. - 02:45 p.m. |
| 4 | 96 | A Hybrid Framework for Tamil Text Summarization using Multilingual Transformers | Srimathi R, K.R. Premalatha, A M ABIRAMI, SHARMILA P | 02:45 p.m. - 03:00 p.m. |
| 5 | 128 | Comparative Analysis of Multilingual Transformer Models for Offensive Language Identification in Telugu: A Cross Paradigm Multilingual learning | Jadi Ashwini, Munawwar K V, Nandhini Kumaresh | 03:00 p.m. - 03:15 p.m. |

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| 6 | 141 | Indian Legal Text Question Answering and Summarization Using Reinforcement Learning | Shreesha M, Pranav Moothedath, Abhishek Srinivas, Anand Kumar Madasamy | 03:15 p.m. - 03:30 p.m. |
| 7 | 149 | Context-Aware Filtering and Semantic Feature Optimization for Tamil and Malayalam Sentiment Analysis | SUMY T O , Dr. A.Vinoth | 03:30 p.m. - 03:45 p.m. |
| 8 | 163 | ITATA: An Instruction-Tuned Framework for Aspect Term Analysis | SOUBRAYLU SIVAKUMAR, Jyothi Prakash, J Nagaraj, Selvanayaki Kolandapalayam Shanmugam, T Rajesh Kumar, Subalalitha Chinnaudayar Navaneethakrishnan | 03:45 p.m. - 04:00 p.m. |

| Track-3: Speech Technologies (ST) - PANEL IV | | | | |
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| Venue | BD400 | Link: TBA | | |
| Day 1: 18th December 2025, Thursday | | Time: 02:00 PM - 04:00 PM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 130 | Improving Tamil Language Proficiency Through Real-Time Pronunciation and Spelling Error Identification | Keerthi Priya M S, Namshika S N, Bharathi B | 02:00 p.m. - 02:15 p.m. |
| 2 | 26 | Speech-based Detection of Tamil Dialects: From Standard to Regional Variants | Anitha D, Srimathi S, Ms. Sherin Sahai V, Ms. Pavithra KB, Ms. Sanjanah A, Ms. Sheraffin Ithai V | 02:15 p.m. - 02:30 p.m. |
| 3 | 27 | From Voice to Vision: A Comprehensive Approach to Speech Emotion Recognition | Sannidhya Das, Dipanjan Saha, Subharthi Ray, Sainik Kumar Mahata, Dipankar Das | 02:30 p.m. - 02:45 p.m. |
| 4 | 89 | A Scalable Noise-Robust Speech Recognition Framework for Multilingual and Low-Resource Speech | Jairam R, Barathi Ganesh HB, JYOTHISH LAL G | 02:45 p.m. - 03:00 p.m. |
| 5 | 94 | DraviMood: Speech-Based Depression Classification in Dravidian Languages Using Feature Fusion and Deep Learning | Kritika A, Meenakshy S, Arya Palackal Shijish, Riya Rajeev, JYOTHISH LAL G | 03:00 p.m. - 03:15 p.m. |

| DAY-2 | | | | |
|--|----------|---------------------------|--------------|-------------------------|
| Track-4: Computer Vision and Natural Language Processing (NLP) - PANEL V | | | | |
| Venue | BB204 | Link: TBA | | |
| Day 2: 19th December 2025, Friday | | Time: 10:00 AM - 12:00 PM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |

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|---|-----|---|--|--------------------------------|
| 1 | 37 | Hindi Text-to-Image Synthesis using an Attention-Enhanced DMGAN Model | Remya Gopalakrishnan, Sudeep P V | 10:00 a.m. - 10:15 a.m. |
| 2 | 93 | A Complex Network Framework for Accurate Severity Assessment of Parkinson's Disease using Multimodal Data | Deepa Raj K, JYOTHISH LAL G, Juan Rafael Orozco-Arroyave, E A Gopalakrishnan | 10:15 a.m. - 10:30 a.m. |
| 3 | 10 | Transformer-Based Malayalam Handwritten OCR with Linguistically Aware Tokenization | Ashmi S N, Dr. Manjusha K | 10:30 a.m. - 10:45 a.m. |
| 4 | 43 | Multimodal Detection of Multiple Apex Frames in Micro-Expressions and Macro-Expressions using Bi-WOOF with Optical Strain | Harikrishnan M, Daleesha M Viswanathan | 10:45 a.m. - 11:00 a.m. |
| 5 | 88 | Encoder-Decoder based Image Captioning in Nepali Language | Shreyansh Lodha, Rupak Raj Ghimire | 11:00 a.m. - 11:15 a.m. |
| 6 | 111 | HVQA and CMH-VQA: Benchmarked Datasets for Evaluating VQA Systems in Hausa - A Low Resource Language | Alhaji Idi Babate, Hosahalli Lakshmaiah Shashirekha | 11:15 a.m. - 11:30 a.m. |

Track-4: Computer Vision and Natural Language Processing (NLP) - PANEL VI

| Venue | BC304 | Link: TBA | | |
|-----------------------------------|----------|---|--|-------------------------|
| Day 2: 19th December 2025, Friday | | Time: 10:00 AM - 11:30 AM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 118 | CogniLink: A Hybrid Assistive System for Alzheimer’s Care Integrating InsightFace, an XGBoost Classifier, and a Rule-Based NLP Engine | Mohamedsipli M, Vengadeswaran S, LekshmiPriya S B, Selvi C, R Tharaniya sairaj | 10:00 a.m. - 10:15 a.m. |
| 2 | 120 | Multimodal Fake News Classification using Transformer-Based Cross-Modal Attention | Dola Chakraborty, Kawsar Ahmed, Mohammed Moshul Hoque | 10:15 a.m. - 10:30 a.m. |
| 3 | 145 | Multimodal Late Fusion for Hate Speech Detection in Dravidian Languages | Jahnavi Murali, Rajalakshmi Sivanaiah | 10:30 a.m. - 10:45 a.m. |
| 4 | 158 | Multimodal Speech Recognition through Cross-Modal Masked Pretraining and 3D Spatiotemporal Transformer | N.Rathipriya, N. Maheswari, Shreeneka D | 10:45 a.m. - 11:00 a.m. |
| 5 | 162 | Zero-shot approach to Tamil Optical Character Recognition | Padma Venkatanarayanan, Chakravarthy Bhagvati | 11:00 a.m. - 11:15 a.m. |

Track-5: Applications of NLP - PANEL VII

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| Venue | BD404 | Link: TBA | |
| Day 2: 19th December 2025, Friday | | Time: 10:00 AM - 11:30 AM | |
| Session Chairs: Chair 1 & Chair 2 | | | |

| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
|-------|----------|---|---|-------------------------|
| 1 | 47 | Listening Beyond Words: A Review on Natural Language Processing for Speech Disorders | Antony Arul Raj D, Lakshana V, Perumal P, Ravishinu G | 10:00 a.m. - 10:15 a.m. |
| 2 | 63 | Interpretable Acoustic Features for Automated Severity Classification of Dysarthric Speech | Lavanya T, Harikrishnan Mahesh, Vijayalakshmi P | 10:15 a.m. - 10:30 a.m. |
| 3 | 87 | A Comprehensive Evaluation of Embedding Strategies for COVID-19 Fake News Detection | Praveen Kumar S, Diya Prakash, R RANJITH KUMAR, SIRANJEEVI RAJAMANICKAM, Balasubramanian Palani | 10:30 a.m. - 10:45 a.m. |
| 4 | 53 | Silent Cries Online: A Benchmark Dataset for Detecting Suicide Ideation in Hindi-English Code-Mixed Social Media Text with Deep Learning Applications | Pradeep, Deepawali Sharma, Aakash Singh, Vivek Kumar Singh | 10:45 a.m. - 11:00 a.m. |

| Track-5: Applications of NLP - PANEL VIII | | | | |
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| Venue | BD400 | Link: TBA | | |
| Day 2: 19th December 2025, Friday | | Time: 10:00 AM - 11:30 AM | | |
| Session Chairs: Chair 1 & Chair 2 | | | | |
| S. No | Paper ID | Paper Title | Author Names | Presentation Time (IST) |
| 1 | 144 | Explainable AI for Emotion Divergence: Integrating NLP and Literary Theories in the Analysis of Malayalam Rap Artist Vedan’s Lyrics | Ebin Deni Raj, Gayathri GR, Sara Renjit, Josit Mariya | 10:00 a.m. - 10:15 a.m. |
| 2 | 160 | Leveraging GAN and Deep Reinforcement Learning for Low-Resource Dravidian Languages Translation | Ramakrishna Kolikipogu, Gadda Bhavya Shree, S Pavan Kumar, Potluri Sai Sandeep, Sagar Gujjunoori | 10:15 a.m. - 10:30 a.m. |
| 3 | 166 | A Unique Research Framework: Robust, Explainable and Adaptive Malware Intelligence with SST-DTW and Attention-Enhanced ResNeXt++ | Hardik Prakash Somkuwar, A. Balu | 10:30 a.m. - 10:45 a.m. |
| 4 | 171 | Diacritization of Low-Resource using Deep Learning approach: The case of Algerian Dialect | CHERAGUI Mohamed Amine | 10:45 a.m. - 11:00 a.m. |