



AIST - 2024

# 6<sup>th</sup> International Conference on Artificial Intelligence and Speech Technology AIST-2024

(13<sup>th</sup> -14<sup>th</sup> November, 2024)

Technical Session: 01

Date: 13<sup>th</sup> November, 2024 (Offline Mode) Time: 11:45 AM – 01:15 PM

| S No | Paper ID | Paper Title   | Authors  |
|------|----------|---|--|
| 1    | 61       | Analysis of Online Hate Speech Detection for Multilingual and Multimodal Data using Artificial Intelligence               | Navya, Anjum, Neha Rani,<br>and Riya Singh                             |
| 2    | 63       | DeepFake Classification using Fine-Tuned Wave2Vec2.0  | Subham Sarkar, Ankita Ghosh, Anshul Gupta                              |
| 3    | 80       | Emotional Speech Corpus: A Review   | Krishna Rohilla, Aaditya Sharma,<br>Nilakshi Srivastav, Nivedita Palia |
| 4    | 141      | Speech Summarization Diverse Challenges and Advancements  | Riya Ahlawat, Samridhi Tiwari, Muskan Singh, Shweta Jindal             |
| 5    | 142      | Identifying Disaster-Related Tweets using Natural Language Processing and Core Machine Learning                           | Aditi Mehta, Arshiya Garg, Ritu Rani,<br>Garima Jaiswal, Arun Sharma   |
| 6    | 202      | Machine Learning and Neural Networks for Enhanced Autism Spectrum Detection ASD Detection with ABIDE preprocessed Dataset | Gaytri Mohapatra, Ritu Rani  |
| 7    | 247      | Translating Heritage: A Transformer-Oriented Method for Neural Machine Translation from Sanskrit to Hindi                 | Nandini Sethi, Amita Dev, Poonam Bansal                                |
| 8    | 277      | Advanced Speech Recognition: Techniques, Challenges, and Applications   | Laxmi Ahuja, Saurav Vinod Nair,<br>and Ayush Thakur                    |



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# 6<sup>th</sup> International Conference on Artificial Intelligence and Speech Technology AIIST-2024

(13<sup>th</sup> -14<sup>th</sup> November, 2024)

Technical Session: 02

Date: 13<sup>th</sup> November, 2024 (Offline Mode) Time: 11:45 AM – 01:15 PM

| S No | Paper ID | Paper Title   | Authors   |
|------|----------|---|---|
| 1    | 69       | Rule-based Named Entity Recognition for Hindi   | Devanshi Suri, Nimisha Malviya, Nisheet Joshi             |
| 2    | 81       | Investigating AI Explanations in Medical Diagnosis  | Nikita Garg, Manya Joshi, Nidhi Goel, Palak Handa         |
| 3    | 116      | A Metric-Driven Comparative Study of Text Summarization Model: Insights from State-of-the-art LLMs                        | Shivang Gaur, Aman Karunik, Swapnali Naik                 |
| 4    | 134      | Automatic Assessment of Program Code using CodeBERTScore: A Transformer-based Approach                                    | Hunny Gaur, Devendra K Tayal, Amita Jain                  |
| 5    | 139      | Survey on the Availability of Datasets for Machine Translation Systems in Indian Languages                                | Ayushi, Amita Dev, Poonam Bansal                          |
| 6    | 267      | SHiTraD: Sanskrit-Hindi Translation Dataset   | Nandini Sethi, Ayushi, Amita Dev, Poonam Bansal           |
| 7    | 292      | Emotional Arousal of Female Politicians: Distinguishing Enthusiasm and Anger Using Data Augmentation and Machine Learning | Hilla Goren Barnea, Vered Silber-Varod, Elishai Ezra Tzur |



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Technical Session: 03

Date: 13<sup>th</sup> November 2024 (Offline Mode) Time: 02:00 - 03:15 PM

| S No | Paper ID | Paper Title  | Authors   |
|------|----------|--|---|
| 1    | 56       | Harnessing Machine Learning for Feature Extraction in Plant Imaging and Analysis: A Review | Anshika Jain, Akansha Khandelwal, Vandana Singh, Astha Sharma, Ashwni Kumar                   |
| 2    | 70       | Deepfake Detection: A Comprehensive Analysis of Modern Techniques                          | Deepanshi Jalan, Shradha Jain, Anandita Tuli, Vanshika Chaudhary, Astha Sharma, Ashwani Kumar |
| 3    | 71       | Transfer Learning for Leaf Disease Image Classification via CNN Model                      | Kirti Dabas, Anuradha Chug, Amit Prakash Singh, Ravinder Kumar, Veerubommu Shanumugam         |
| 4    | 82       | Assessing ChatGPT in Medical Domain  | Aikanshi Rohilla, Palak Handa , Nidhi Goel  |
| 5    | 138      | Comparative Analysis of Deep Learning Techniques on Tomato Plant Disease Detection         | Riya Sharma, Ayushi Pasrija , Saloni Gupta , Poonam Bansal                                    |
| 6    | 187      | Recent Advances in Denoising Techniques for Hyperspectral Image Enhancement                | Priyanka Gupta, Garima Jaiswal, Ashish Kumar  |
| 7    | 305      | Predictive Models in Biomedical Applications: A Machine Learning Approach                  | Kanika Wadhwa, D. Ananya , Himanshu Mittal , Arun Sharma , Swaty Wadhwa                       |
| 8    | 386      | Echoes of Concern: Security Challenges in Voice Assistant Systems                          | Rakesh Kumar Singh, Charu Gupta   |



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Technical Session: 04

Date: 13<sup>th</sup> November 2024 (Offline Mode) Time: 02:00 - 03:15 PM

| S No | Paper ID | Paper Title  | Paper Title  |
|------|----------|--|--|
| 1    | 78       | Real-Time Detection of Household Objects Using Single-Shot Detection With MobileNet  | Pallavi Sharma, Isha Malhotra, Palak Handa, Nidhi Goel                                   |
| 2    | 90       | CTC-Based Automatic Speech Recognition for Hindi language  | Arushree Mishra, Suhani, Amita Dev, Poonam Bansal  |
| 3    | 225      | Bridging the Gap: Real-Time ASL Fingerspelling to Sentence Translation   | Manya Chandna, Abantika Dasgupta, Bhumika Gupta, Ravinder M, S.R.N. Reddy, Rishika Anand |
| 4    | 244      | Dictionary-Based Lexical Resource for Somali Homograph Disambiguation  | Abdullahi Mohamed Jibril, Abdisalam Mahamed Badel  |
| 5    | 283      | Comparative Evaluation of 3D U-Net and SegResNet Architectures for Brain Tumor Segmentation Using Adam and Ranger21 Optimizers | Nisha Purohit, C P Bhatt, Subodh Kumar   |
| 6    | 289      | Advancements in Alzheimer's Disease Detection: A Comprehensive Review of Deep Learning Approaches in MRI Imaging               | Khushi Jindal, Seeja K.R, D.K. Tayal   |
| 7    | 306      | Image Captioning Using Deep Learning Models: A Comprehensive Overview  | Nisha, Shailesh D Kamble, Himanshu Mittal  |



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Technical Session: 05

Date: 14<sup>th</sup> November, 2024 (Online Mode) Time: 11:15 AM – 12:45 PM

| S No | Paper ID | Paper Title  | Authors   |
|------|----------|--|---|
| 1    | 45       | Speech Emotion Classification with Acoustic Features using 1D CNN and LSTM Networks  | Yesha Vyas, Shofiya Bootwala, Neha Soni   |
| 2    | 62       | Unveiling Voices: Deep Learning Based Noise Dissipation with Real-Time Multi-Speech Separation And Speaker Recognition                       | Chaitra V, Meera Reji, Meghana Aithal, Varshini Gopal, Shylaja S S  |
| 3    | 74       | Identification of Speaker-Specific Features to Minimize the Mismatch Outcomes for Speaker Recognition using Anger and Happy Emotional Speech | Shalini Tomar, Shashidhar G. Koolagudi  |
| 4    | 89       | Bilingual Speech Translation Between Tamil and Telugu with Elimination of Dependency on Any Intermediate Languages                           | Kaarthik R, Rithuh Subhakkrit S, Ysaswini Dharmavarapu, Vignesh Kumar A, Dhanya M Dhanalakshmy, Karthikeyan N G |
| 5    | 92       | Turbocharging Pull Request Reviews: Exploring Generative AI for Code Review  | Sourav Datta, Anjali Sharma, Jaymin Rajgor  |
| 6    | 114      | NITK-TIEKLS: A Text-Independent Emotional Kannada Language Speech Dataset for Speaker Recognition  | Shalini Tomar, Shashidhar G. Koolagudi  |
| 7    | 117      | Audioverse: Personalized Story-telling Using Voice Cloning   | Kasey Ann Britto, Harini J, Shivanii M, Pranavi Karthik, Kalpana B N, Karthi M                                  |
| 8    | 155      | Customer Churn Prediction Using Artificial Neural Networks   | Manish Saini, Saurav Singha, Brijesh Kalakoti, Hashmat Fida   |



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Technical Session: 06

Date: 14<sup>th</sup> November, 2024 (Online Mode) Time: 11:15 AM – 12:45 PM

| S No | Paper ID | Paper Title   | Author   |
|------|----------|---|--|
| 1    | 84       | Human Evaluation of Some Machine Translation Toolkits for English-Hindi Language Pair   | Nisheeth Joshi, Riya Lonchenpa, Anju Krishna, Pragya Katyayan, Mhasilenuo Vizo |
| 2    | 135      | Optimizing Speaker Recognition through Feature Extraction Techniques: A Focus on Gujarati Dialects  | Meera M. Shah, Hiren R. Kavathiya  |
| 3    | 222      | A.R.I.S.E. Artificial Recognition and Intelligent Sign-language Eyewear - A Multifunctional Smart Glasses System for Enhanced Accessibility and User Assistance | Roshi Bhati, Rahul Thambi, Nikhil Nerurkar, Ketan Shah                         |
| 4    | 294      | Comparing Audio Speech Recognition and Video Speech Recognition using Neural Networks   | Atharva Swami, Neetigya Bisen, Darshak Savant                                  |
| 5    | 335      | NLP-Driven Sentiment Analysis for Fake News Identification: The Responsive Truth  | Arpita Singh, Arpit Dubey, Rabins Porwal                                       |
| 6    | 344      | Sign Language to Speech Conversion in Regional Language (Tamil)   | Anitha Julian, Pavan Pavan Kumar A B, Janarthanan S, Priyanka S                |
| 7    | 385      | A Framework Using Feature Maps Improving Speech Delivery In Preschoolers  | Arindam Bindlish, Jitendra Singh Goyal, Vaibhav Gujral, Tanu Dua, Gaurav Dubey |



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**Technical Session: 07**

**Date: 14<sup>th</sup> November, 2024 (Online Mode) Time: 02:30 PM - 04:00 PM**

| S No | Paper ID | Author   | Paper Title   |
|------|----------|--|---|
| 1    | 32       | Exploring State-of-the-Art approaches for Heart Disease Detection: A Detailed Analysis                               | B. Shamna, C. P. Maheswaran   |
| 2    | 33       | A Comprehensive Analysis of Recent Methodologies for Irregular Heart Beat Prediction                                 | K. Rema, C.P. Maheswaran  |
| 3    | 49       | Next-Gen Imaging: The Power of Hyperspectral Data and Autoencoders   | Pallavi Ranjan, Sushma Hans; Salih Ismail   |
| 4    | 50       | Redefining Vision Tasks: The Power of Transformers in Classification, Detection, and Segmentation                    | Sushma Hans, Pallavi Ranjan, Salih Ismail   |
| 5    | 94       | Leveraging Depth Data and Parameter Sharing in Vision Transformers for Improved Face Anti-Spoofing                   | Aashania Antil, Chhavi Dhiman   |
| 6    | 103      | Comparative Analysis of Multiple Embedding Models for Text Based Document Similarity                                 | Shreya Khosla, Shresth Jain, Anupama MA, Rama Subba Reddy Thavva                                    |
| 7    | 107      | Electricity Demand Prediction using Machine Learning   | Ali Sadiq Khawja  |
| 8    | 156      | AI-Driven Essay Evaluation: Enhancing Accuracy and Fairness in Automated Scoring Systems                             | Kuldeep Kumar Singh, Gaurav Gupta, Sapna Chaudhary, Sajal Singh Masand, Swati Saran, Shivani Sharma |
| 9    | 268      | CodeBERT-BiGRU for Software Defect Prediction  | Priya Singh, Ruchika Malhotra   |
| 10   | 280      | AccuRep: A Real-Time Android Application for Exercise Tracking Using MoveNet Pose Detection and Joint Angle Analysis | Atharva Swami, Ishi Prashar, Tanmay Sahasrabudhe, Preeti Agarwal                                    |



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