



## RESEARCH PUBLICATION HIGHLIGHT

832 Views  
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Regular Paper  
Effective hybrid video denoising and blending framework for Internet of Remote Things (IoRT) environments  
B. Aruna Devi & Mani Deepak Choudhary  
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Full Article | Figures & Data | References | Citations | Lat. Metrics | Licensing | Reprints & Permissions | Share | View PDF | View EPUB

In this article  
1. Introduction  
2. Related works  
3. Proposed scheme  
4. Performance evaluation  
5. Conclusion and Future work

Abstract  
The Internet of Remote Things (IoRT) has emerged as a transformative paradigm, merging IoT capabilities with remote technologies. IoRT environments, featuring interconnected sensors and robots, face challenges like sensor noise and low-light conditions, compromising video stream quality. This paper proposes a Hybrid Video Denoising and Blending Framework to address IoRT video data shortcomings. Leveraging spatial and temporal domain denoising techniques, the framework effectively removes noise while preserving visual details. The inclusion of advanced

Conference Publication Highlight We are pleased to announce that **M. Ananthi AP/IT**, presented her research paper titled “An Innovative Method for Improving Speech Intelligibility in Automatic Sound Classification Based on Relative-CNN-RNN” at the 2023 International Conference on Sustainable Communication Networks and Application (ICSCNA) held in Theni, India.

We are delighted to announce that **M. D. Choudhry AP/IT** have published their latest research article titled “*Effective Hybrid Video Denoising and Blending Framework for Internet of Remote Things (IoRT) Environments*” in **Automatika**, Volume 65, Issue 2, pages 510–522 (2024).

**DOI: 10.1080/00051144.2024.2312747**

This work presents a novel framework for enhancing video quality in IoRT environments, contributing to advancements in multimedia processing and remote connectivity.

Conferences > 2023 International Conference on Sustainable Communication Networks and Application (ICSCNA) > An Innovative Method for Improving Speech Intelligibility in Automatic Sound Classification Based on Relative-CNN-RNN

Publisher: IEEE | Cite This | PDF

Akavati Magadum, Monica Goud, Gopinath V, P. Prabu Sankar, B. Shvachshini, M. Ananthi | All Authors

5 Citations | 45 Full Text Views

Abstract: Sound engineers and producers establish the speech-to-background ratio (SBR) during mixing depending on the rules of thumb and their own ears. However, there is no assurance that the general public will be able to understand the voice content. This research introduces a method for automatically selecting the optimal SBR for a scenario based on an objective intelligibility metric. For several types of ambient noise, the SBR estimated by the model is necessary to achieve a minimal intelligibility level when compared to the SBR selected by listeners. The proposed method was found to benefit from an additional gain even for normally hearing listeners. The proposed method involves three stages: preprocessing, feature extraction, and model training. It employs a FIR filter for preprocessing and further the spectral centroid, roll-off, flux, and ZCR for feature extraction. R-CNN-RNN is used for training the model. The proposed method outperforms the CNN and CNN-RNN models.

More Like This  
Synchrophasor Measurement Method Based on Cascaded Infinite Impulse Response Dual Finite Impulse Response Filters  
Journal of Modern Power Systems and Clean Energy  
Published: 2024  
Modified Pi-shaped finite impulse response filter for static

## SMART INDIA HACKATHON 2023 – PARTICIPATION RECOGNITION



We congratulate **Melchoel John Bretto S II-IT** for actively participating in the **Smart India Hackathon 2023 – Software Edition**, held during the Grand Finale on December 19–20, 2023.

Organized by the **Ministry of Education, Government of India**, this national-level innovation challenge fosters creative problem-solving and technological excellence.



### DEPARTMENT OF INFORMATION TECHNOLOGY

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#### WORKSHOP PARTICIPATION – WOMEN IN AI WITH ONEAPI

We are pleased to share that students from **KGiSL Institute of Technology** actively participated in the workshop titled “*Women in AI with oneAPI*”, jointly organized by the **Department of CSE** and the **Centre of Excellence for Cloud Computing**, Sri Eshwar College of Engineering, Coimbatore, on 14th October 2023.

The following participants from the IT department represented KGiSL:

- Srivishnu Priya N
- Boomaswari S
- Nachamai S



#### STUDENT ACHIEVEMENT – IDEA PITCH COMPETITION

We are proud to recognize **Ranjani Shree R. S** for her active participation in the “*IDEAVIVE – Mega Idea Pitch Competition*” organized by the **AICHE Student Chapter of KPR Institute of Engineering and Technology (Autonomous, NAAC ‘A’)** on 12th October 2023.



#### NATIONAL SYMPOSIUM PARTICIPATION – GENESIS’23

We are proud to announce that **Mathan Kumar, Migavel Supriya, and Priya Bharathi B.** participated in “*PROJECT PALOOZA [Project Expo]*”, a flagship event of *GENESIS’23*, the National Level Technical Symposium organized by the **Association of Electronics and Communication Engineers (ASELCOME)**, Department of ECE, at Sri Ramakrishna Engineering College, Coimbatore, on 04 October 2023.



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