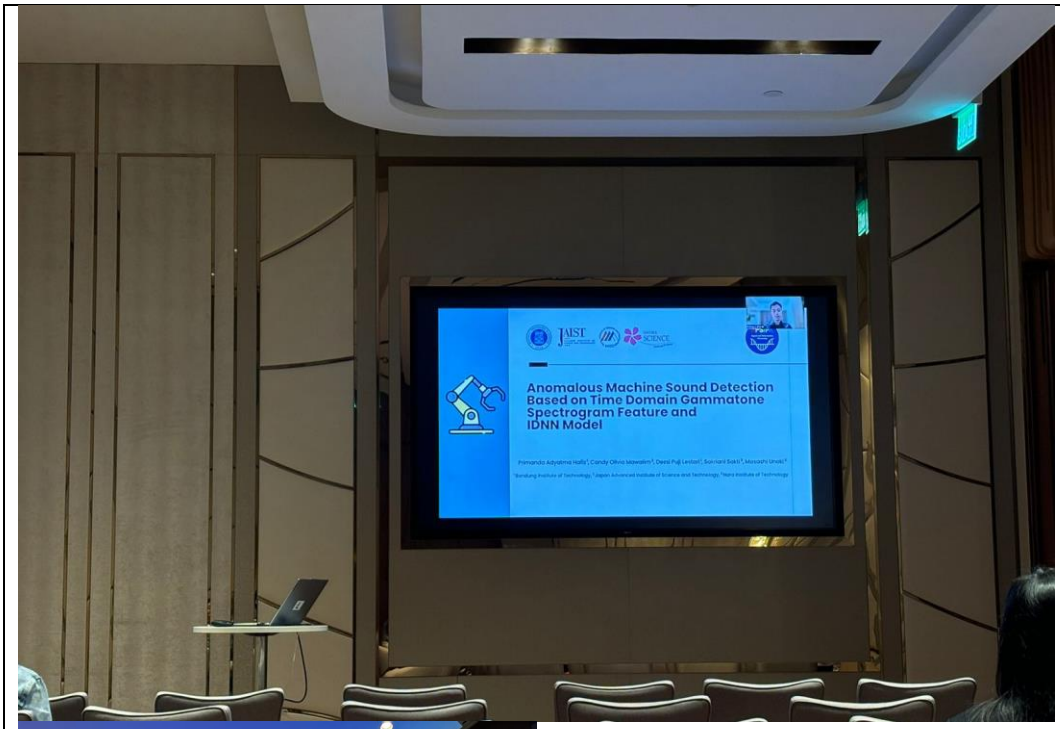
Appendix 2.2

Report of International Conference Presentation

Name: (Presenter)	Dessi Puji Lestari
Affiliation:	Institut Teknologi Bandung
Project Title:	Spoof Detection for Automatic Speaker Verification
Name of International Conference: (Link to website)	2024 Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC) http://www.apsipa2024.org/
Title of Research Paper:	Anomalous Machine Sound Detection Based on Time Domain Gammatone Spectrogram Feature and IDNN Model
Name of all Co-authors (if any)	Primanda Adyatma Hafiz, Candy Olivia Mawalim, Dessi Puji Lestari, Sakriani Sakti, and Masashi Unoki
Comments or feedback received at the conference: -	
Contribution to the project: This paper, titled "Anomalous Machine Sound Detection Based on Time Domain Gammatone Spectrogram Feature and IDNN Model," presents an advanced approach to identifying irregularities in machine audio patterns. By leveraging the Time Domain Gammatone Spectrogram Feature in combination with an Interpolation Deep Neural Network (IDNN) model, the proposed method effectively differentiates between normal and anomalous machine sounds. The approach enhances anomaly detection by capturing fine-grained spectral and temporal features, enabling a robust classification framework. Additionally, the methodology shows potential applications beyond machine sound anomaly detection, particularly in synthetic audio spoof detection, where distinguishing between authentic and artificially generated sounds is crucial. This makes the proposed model versatile for broader audio forensic and security applications.	
Photos	


Anomalous Machine Sound Detection
Based on Time Domain Gammatone
Spectrogram Feature and
IDNN Model

APSIPA ASC 2024
Asia-Pacific Signal and Information Processing Association
Annual Summit and Conference
December 3-6, 2024
Galaxy International Convention Center, Macao SAR

[Required Documents]

A) Presentation Materials (e.g. PPT slides)
B) Final Program of the conference

Reporter: Dessi Puji Lestari
Date: 27 February 2025