

## APPENDIX

### APPENDIX 1


#### LIST OF PUBLICATIONS

##### 1.PUBLICATION STATUS: APPLIED

**TITLE OF THE PAPER:** UNVEILING THE POWER OF DEEP  
LEARNING IN STEGANOGRAPHY CLASSIFICATIONS

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**NAME OF THE CONFERENCE:** 2025 INTERNATIONAL CONFERENCE ON  
ADVANCEMENT IN COMMUNICATION AND COMPUTING TECHNOLOGY



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**2025 INTERNATIONAL CONFERENCE ON ADVANCEMENT IN COMMUNICATION AND COMPUTING TECHNOLOGY : Submission (263) has been created.**

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Hello,

The following submission has been created.

Track Name: INOCN2025

Paper ID: 263

Paper Title: Unveiling the Power of Deep Learning in Steganography Classifications

**Abstract:**  
 In today's digital landscape, the implementation of steganography to hide sensitive information within images has become increasingly sophisticated, posing new challenges for secure data communication. This paper presents a deep learning technique specifically focused on the detection of stego-images-images with hidden messages-utilizing the VGG16 Convolutional Neural Network (CNN) architecture. The detection model is designed to identify subtle pixel-level modifications characteristic of steganographic methods, particularly the Pixel Value Differencing (PVD) and the Least Significant Bit (LSB) techniques, which are widely used for data embedding. The VGG16 model was trained on a carefully curated dataset of stego and non-stego images, our approach effectively learns to distinguish between the two with high accuracy. Through extensive evaluation, we demonstrate that our model achieves robust performance in terms of recall, precision, accuracy and F1 score, underscoring its reliability in classifying stego-images. This work contributes a powerful tool for enhancing secure digital communication, offering a systematic method to detect hidden information within images, thereby addressing a critical need for modern data security practices.

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Content: Unveiling the Power of Deep Learning in Steganography Classifications