

## Deepfake Detection for Compressed Media

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**Abstract :** The usage of artificially created videos and audio by deep learning is a major problem of the current media landscape, as it pursues the goal of misinformation and distrust. In conclusion, the objective of this work targets generating a reliable deepfake detection model using deep learning that will help detect forged videos accurately. In this work, CelebDF v1, one of the largest deepfake benchmark datasets in the literature, is adopted to train and test the proposed models. The data includes authentic and synthetic videos of high quality, therefore allowing an assessment of the model's performance against realistic distortions.

**Keywords :** deepfake detection, CelebDF v1, convolutional neural network (CNN), xception model, data augmentation, media manipulation

**Conference Title :** ICCIT 2025 : International Conference on Computing and Information Technology

**Conference Location :** Bengaluru, India

**Conference Dates :** January 30-31, 2025