

Peer Review

Review of: "Inclusion 2024 — Global Multimedia Deepfake Detection: Towards Multi-dimensional Facial Forgery Detection"

JAYABAL Shanthini¹

1. SRM Institute Of Science & Technology (Deemed University), India

The study highlights the growing threat of deepfake technologies and proposes a large-scale dataset (MultiFF) to advance forgery detection research. The paper systematically covers the dataset, challenge structure, evaluation metrics, and top-performing solutions.

The study is well-structured and presents an important contribution to the field of multimedia forensics. However, some areas require further elaboration and critical analysis to enhance its impact.

While the paper discusses performance results, a **direct comparison** with existing deepfake detection models (such as FaceForensics++ benchmarks) would strengthen its impact.

The following questions can be answered

- How does MultiFF-trained detection performance compare with traditional datasets (DFDC, Celeb-DF, etc.)?
- What improvements in generalization have been observed when compared to previous state-of-the-art models?
- Future work could explore forgery localization methods to highlight manipulated facial regions rather than just binary classification (real vs. fake).
- Deepfake detection should ideally provide explanations for forensic evidence, especially for legal and cybersecurity applications.
- The paper does not explicitly discuss adversarial attacks on deepfake detection models. Attackers can easily introduce perturbations to evade detection systems.

Declarations

Potential competing interests: No potential competing interests to declare.