

Predictive Techniques for Recognizing and Classifying Real and AI-Generated Voices

Manali Shukla^{1,2*}, Anjali Saraswat^{2,3*}, Soumik Mallick^{1,2*}, Maharaja Sagar Mishra^{2,3*}

^{1*}Computer Science and Engineering Technology

^{2,3,4}Computer Science and Engineering Technology

ITM University, Turari, Gwalior, Madhya Pradesh, India.

*Corresponding author(s). E-mail(s): saraswatanjali455@gmail.com;

Contributing authors: shukla.manali2014@gmail.com ; mallicksoumik1711@gmail.com;

maharajasagarmishra@gmail.com;

^{*}These authors contributed equally to this work

Abstract: *Rapid growth in the technology specially in the field of artificial intelligence has transformed this world with the advent of generative artificial intelligence. Numerous applications which are easily accessible over the internet based on generative artificial intelligence models presenting challenges in front of researchers and security experts. In the present era of time, a variety of AI-generated tools are utilized to generate fake audio, image, video etc leading to a new challenge known as deep fake detection. However, the motives behind the use of generative artificial intelligence are not destructive but unfortunately misused. Tremendous growths in the cyber-attacks employing fake audio have been reported in the present era of time that raising the concern of security experts and researchers. Therefore, this is evolving as challenge in field of research to address recognition of fake voice and which motivates this research work. This research paper proposes an effective methodology to detect real and ai voice using artifact score and which shows promising results and comprehensive review of the research work done to address such type's deep fake detection.*

Keywords: Artificial Intelligence, Artifact, Cyber-Attack, Deepfake, Generative AI

