The Perception of Deepfake Technology Among University Students in Malaysia

Parveen Kaur^{1*}, Arif Jawaid², Steve Mathieus Anak Robert³, Stephenie Anak Selutan⁴, Tan Hoang Jenq⁵, Tan Pei En⁶, Veronica Nelson Nyalau⁷

¹Associate Professor, University Malaysia Sarawak, Malaysia; E-mail: sspkaur@unimas.my
²Professor, Lahore Garrison University, Pakistan

3,4,5,6,7University Malaysia Sarawak, Malaysia

Abstracts: It was alarming to know that a new technology (Deepfake) is paving the way to social media by demoralising popular people (celebrities) and others. It has badly affected reputation of many people without their knowledge and consent. It was decided to know about Deepfake technology at length and its extent in harming and hurting the people. A group of university students were randomly selected and administered through a questionnaire. The questionnaire comprised questions pertaining to awareness of deepfake and its consequences. The objectives of the study were to examine the emergence of Deepfake technology, the impact of Deepfake technology utility, and understanding the strategies to mitigate irresponsible usage of Deepfake technology among social media users. The descriptive data was analyzed using numbers and percentages. The major findings included its existence, impact on social media and strategies to mitigate irresponsible usage of Deepfake technology. A wider and larger diverse community using social media extensively will provide better results.

Keywords: Deepfake, Al, Social Media, University, Malaysia

1. INTRODUCTION

The aim of this paper was to examine and develop a deep understanding of the emergence and usage of Deepfake technology among the social media community. According to Chawla (2019), recent technology developments have made it simple to produce so-called "Deepfakes," which are hyper-realistic videos created with face swaps that barely reveal the manipulation. The term "deepfake" first appeared in 2017 when a group of Reddit users produced fake celebrity pornographic movies using Artificial Intelligence (AI) (Maddocks, 2020). Artificial intelligence programs that merge, combine, swap out, and superimpose pictures and video clips to make fake videos that look real are known as "Deepfakes" (Maras & Alexandrou, 2018). The term techniques for deep learning are used in Deepfake videos with a huge sample of video pictures as input to achieve face swapping. For instance, Deepfakes frequently feature the faces of politicians, famous people, comedians, and other celebrities in pornographic videos (Hasan & Salah, 2019). It is because there are so many sources of images and videos of them on the Internet that can be used to create the substantial picture stockpiles needed to train an AI Deepfake system. The more samples used, the more realistic the result will be. Moreover, deepfake is used either to exact retribution, to generate and upload a pornographic image of a celebrity, or to extort money from a target (Harris, 2018).

2. PROBLEM STATEMENT

People can find a voice and a sense of purpose through Deepfakes. New ideas and capacities for empowerment have come from all facets of society, including business, accessibility, public safety, and the arts, expression, etc. However, Deepfake technology has advanced to a troubling degree, leading to a considerable rise in fraud and other fraudulent practices that prey on the gullible. Therefore, this study aims to describe the advantages and disadvantages of Deepfake technology with survey interviews and case studies. The researchers interviewed 50 students from University Malaysia Sarawak (UNIMAS) coming from different courses and backgrounds. This enabled the researchers to acquire a better understanding of both the advantages and disadvantages of deepfake technology. Furthermore, examining the respondents' real responses to this subject will give us important data for our study. The objectives of the study were to examine the emergence of Deepfake