Detecting and Uses of Deepfakes

The foundations topic that was most interesting, was the topic of the Uncanny Valley. The uncanny valley, a term coined by Masahiro Mori, is used to describe how robots become more appealing as they become more humanlike up to a point, then they can really creep people out (Caballar 2019). This is interesting, since most people can tell whether or not something is human or only kind of close. This can be taken advantage of by using deepfakes. If one was to make a deepfake well enough, many people would simply believe it.

While researching articles about the uncanny valley(“INFO”) effect, I found many articles about deepfake technology. One such article, “What Are Deepfakes – and How Can You Spot Them?” by Ian Sample, talked about deepfakes, how they are made, how difficult they are to spot, and how AI may be the answer to detecting them (Sample 2020). This topic is very interesting, since deepfakes have the potential to affect decision making of those who see it and do not see through the effect. The ability to detect deepfakes will continue to increase in difficulty as the technology improves, unless AI is developed to detect deepfakes.

The increasing availability of deepfakes on the internet and their relative ease to make has me interested in this topic. There are many guides available online that show you how to make a deepfake. The hardware required to make one is within reach of most people, whether
it's a high-end gaming computer, or using cloud computing; there are even apps available that put your face on pre-sampled Celebrities (Sample 2020).

The use of AI and machine learning is a rapidly expanding field, and finding uses for that technology will lead to many different career options. Now that deepfakes exist, there is an emerging market for detecting deepfakes. Detecting deepfakes will continue to increase in difficulty as the technology and ease of making them continue to improve. One way of combating deepfakes, is to use AI to detect the minor errors and signatures of tampering (Korshunov & Marcel 2019).

This technology may create a feeling of unease, much like the uncanny valley effect can. The ability to mimic a person so near perfectly, can be used to sow mistrust. According to Prof Lilian Edwards, a leading expert in internet law at Newcastle University, “The problem may not be so much the faked reality as the fact that real reality becomes plausibly deniable” (Sample 2020).

Deepfakes interest me for a number of reasons, one of which is its relatively low cost of entry. Every day, these extraordinary tasks become easier and easier to achieve through simple online guides and faster and more powerful home computers. It will also be very interesting to see how deepfakes will affect politics and foreign policy, both domestically and abroad. Deepfakes aren’t necessarily always used for the wrong reasons, other uses include letting long dead artists introduce their work at a museum or to restore a person’s voice after losing it to disease (Sample 2020).

In conclusion, deepfakes and deepfake detection will be an ongoing battle. The best thing we can do for now, is to acknowledge the existence of deepfakes and educate the public.
Through constant vigilance and by looking for the source material, we can better protect ourselves from the outside influence of deepfakes. Whether it's used for good or evil, its existence will forever sculpt our world through politics and art.
Work Cited


