

University of Essex

MSc Artificial Intelligence

Module: UAI_PCOM7E January 2025 A

Unit 6: Collaborative Discussion – Business Use Cases for AI

Initial Discussion

As a cloud developer, one facet of my work involves building out back end systems for detecting and remediating cases of copyright infringement of the company's social media assets; for example, video clips shared on social media platforms by fans of the company's movies and TV series. Some instances of media sharing are approved and encouraged by the company, such as promotional trailers. Others are not approved and subject to copyright take down actions.

Novel cases of infringement have started to crop where fans of protected content use generative AI platforms to modify the source video tracks, most often to generate fan works based on the original content, such as by extending scenes or changing the characters in scenes. This material can be more difficult to detect than straightforward instances of piracy, since the original content was heavily modified and stripped of its identifying metadata. Depending on the type and extent of the transformation of the original material, however, it still can be subject to copyright protection.

As such, a novel use for AI systems would be to automate detection and reporting of this type of unsanctioned modification of protected intellectual property, rather than relying on human employees to find and act on it. The challenge, however, is that generative AI platforms are rapidly changing, with new ones released to the public regularly, which makes defining a usable programmatic taxonomy for markers of infringement in such video files difficult (Lin et al., 2024).

Reference

Lin, L., Gupta, N., Zhang, Y., Ren, H., Liu, C.-H., Ding, F., Wang, X., Li, X., Verdoliva, L. and Hu, S. (2024). *Detecting Multimedia Generated by Large AI Models: A Survey*. [online] arXiv.org. doi:<https://doi.org/10.48550/arXiv.2402.00045>.