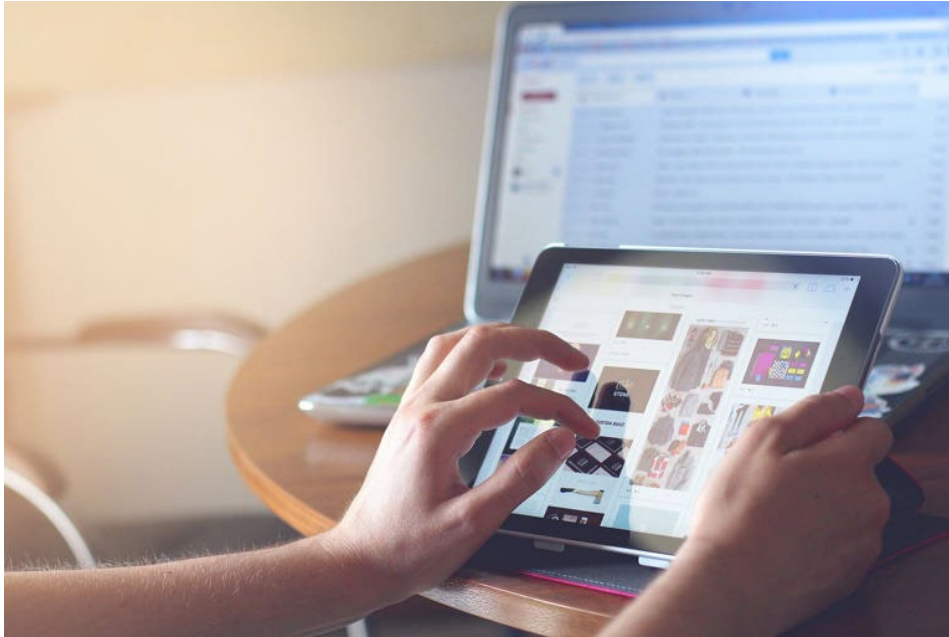18 February 2024

NTU develops three innovative AI programs that could transform online media

Story by Jewel Stolarchuk

SINGAPORE: Researchers from Nanyang Technological University (NTU) have unveiled three cutting-edge AI programs with the potential to reshape the future of media. These innovations harness the power of artificial intelligence to address various challenges in content analysis, video search efficiency, and image manipulation detection.

The first of these AI programs introduces a novel approach to understanding emotions in text, closely mimicking human reasoning. This capability opens up possibilities for more nuanced content recommendation systems and advanced sentiment analysis, potentially revolutionizing the way we interact with textual information online.

The second algorithm focuses on enhancing the efficiency of video search by automatically dividing lengthy videos into shorter, more manageable clips.

This breakthrough not only streamlines the process of finding specific moments within extensive video footage but also holds promise for applications in video-based learning, where quick access to relevant content is crucial.

The third AI innovation from NTU researchers addresses the growing concern of image manipulation such as deepfake technology.

This algorithm detects the digital fingerprints left behind by such manipulations and has the remarkable ability to restore doctored facial photos to their original, unaltered state. This advancement is poised to combat the rising threat of deepfake images, ensuring the authenticity of visual content in an era where image manipulation is becoming increasingly sophisticated.

All three AI programs hold great potential for a range of applications. From blocking malicious content online to facilitating video-based learning experiences, the impact of these innovations on the media landscape could be profound. Additionally, the ability to detect and restore manipulated images opens up new avenues for ensuring the integrity of visual information, guarding against the potential misuse of digitally altered content.

The NTU researchers behind these groundbreaking AI programs believe that the future applications of their innovations extend beyond their initial scope.

As society continues to grapple with challenges related to online content, video consumption, and image authenticity, these advancements offer a glimpse into a future where artificial intelligence plays a pivotal role in shaping a more secure and reliable media landscape.

https://www.msn.com/en-sg/news/singapore/ntu-develops-three-innovative-ai-programs-that-could-transform-online-media/ar-BB1ipxGe