

Ask4Summary and Authorship Fingerprinting

While the generative AI is popular with the public, the dataset used for training the generative AI is too broad to be helpful for teaching and learning. For example, a teacher believes concept #A is more important than concept #B and has supplied all course materials and supplemental readings to students reflective of this concept weighting. If their students then use a generative AI tool trained with different dataset, which emphasizes concept #B, students might learn different materials and could even fail subsequent course exams. This talk will cover two of my Natural Language Processing (NLP) research. Ask4Summary (<https://ask4summary.vipresearch.ca/>) has a system periodically running backend services to process course's learning materials and answers user questions by identifying relevant content and generating summaries only based on the provided materials. Ask4Summary has reached 82.69% success rate for providing quick (0.766 seconds in average) responses of course relevant questions and is available for users in interactive web, Moodle plug-in form, and Python library. Authorship Fingerprinting research uses both of Statistical and Neural NLP to correctly distinguish the works created by ChatGPT 3.5, ChatGPT 4, and human authors with precision rate (i.e., not mis-pointing finger on human authors and incorrectly labelling their works as AI-written ones) 98.06% in our preliminary study.