Sistem Pendeteksi Kecurangan Ujian *Online* Dengan *Monitoring* Aktivitas Pengguna Secara *Real-Time*

Ahmad Saifur Rohman

Program Studi Teknik Informatika Jurusan Teknologi Informasi

ABSTRACT

The Era of Education 4.0 in Indonesia has seen a shift towards online learning, where the internet serves as the primary medium for the teaching and learning process. However, the implementation of online exams faces challenges such as the risk of cheating. Cheating is often observed during online exams, with behaviors such as looking to the right or left, glancing down, hand signals, and so on. Previous researchers have created systems to address this issue, such as face detection using deep learning methods, some have developed concepts for proctorless exam supervision, and others have designed automatic online exam proctoring systems. In this research, we have developed a platform called ProctorAI, which uses face mapping methods and captures images from the activity logs of each online exam participant, forwarding them to a website for identification. The ProctorAI platform was developed through several stages, including requirements analysis, system design, implementation, and finally, testing. These stages resulted in an accuracy rate of 100% if the monitoring process is conducted under sufficient lighting conditions. However, if the lighting is inadequate, the accuracy rate drops to 44.44%, with a failure rate of 55.56%. With the proposed system, exam proctors can monitor online exams in real-time and assess the potential level of cheating by exam participants. This system is expected to enhance security and trust in online exam results.

Keywords: Cheating, Education 4.0, Real-time, Proctoring Technology, Online Exams