ABSTRAK

Proses pencatatan tamu di Inspektorat Provinsi Sumatera Selatan masih dilakukan secara manual sehingga kurang efisien dalam pengelolaan data dan penyusunan laporan kunjungan. Penelitian ini bertujuan merancang dan membangun Sistem Anjungan Tamu Mandiri berbasis *website* dengan menerapkan metode *Face Detection* menggunakan algoritma *Haar Cascade Classifier* untuk mendukung verifikasi identitas pengunjung. Metode penelitian yang digunakan meliputi observasi, wawancara, dan studi dokumentasi, sedangkan pengembangan sistem menggunakan metode *Rapid Application Development* (RAD). Implementasi deteksi wajah dilakukan menggunakan pustaka *OpenCV* dan algoritma *Haar Cascade Classifier* secara real-time. Hasil penelitian menunjukkan bahwa sistem mampu mendukung registrasi tamu secara mandiri, penyimpanan data kunjungan, serta pembuatan laporan secara terstruktur. Hasil *User Acceptance Testing* (UAT) menunjukkan tingkat penerimaan pengguna sebesar 95,67%, sehingga sistem dinyatakan layak diterapkan di lingkungan Inspektorat Provinsi Sumatera Selatan.

Kata kunci: *Computer Vision, face detection, Haar Cascade Classifier, OpenCV,* Sistem Anjungan Tamu Mandiri

ABSTRACT

The guest registration process at the Inspectorate of South Sumatra Province is still performed manually, resulting in inefficient data management and report generation. This study aims to design and develop a web-based Self-Service Guest Kiosk System by implementing a face detection method using the Haar Cascade Classifier algorithm to support visitor identity verification. Data were collected through observation, interviews, and documentation studies, while the system was developed using the Rapid Application Development (RAD) approach. Face detection was implemented using the OpenCV library and the Haar Cascade Classifier algorithm for real-time processing. The results show that the system supports self-service guest registration, structured data storage, and visit report generation. User Acceptance Testing (UAT) produced a user acceptance rate of 95.67%, indicating that the system is feasible for implementation at the Inspectorate of South Sumatra Province.

Keywords: Computer Vision, Face Detection, Haar Cascade Classifier, OpenCV, self-service guest kiosk system