

ABSTRACT

PT. Cilegon Fabricators is one of the leading companies in steel fabrication. Besides that, the company also implements strict security to maintain product quality and the safety of employees and facilities. Therefore, a guest reception information system that has reliable features is needed. The Reception Information System was developed for PT. Cilegon Fabricators has several features. One of them is face recognition and data extraction from Indonesian ID cards (KTP). That feature was developed to make it easier for guests to input ID card data during registration and make it easier for security or front-desk to verify guests who come to PT. Cilegon Fabricators. The extraction data feature was developed using the Tesseract OCR engine library, and based on the testing result, the feature can read data from ID cards with an error ratio of 4.49%. The face recognition feature was developed using a one-shot learning technique with siamese neural architecture, and based on the testing result, feature accuracy is about 77%.

Keywords: Optical Character Recognition, One-Shot Learning, Siamese Neural Network, Face Recognition