

## **ABSTRACT**

Artificial Intelligence technology, which is often called AI, has many functions and purposes according to the system created, one of which is image processing, detecting objects and text from an image or video. This research is conducted to create a vehicle number plate recognition system to simplify the process of opening the portal. The system is created using YOLO and OpenCV technology as the algorithm for detecting and recognizing an object to be processed. With this technology, it is hoped the system can detect objects with high accuracy. The system design will be assisted by Tesseract OCR with available pre-trained models. In making this system, it is hoped that it can produce a system that is able to recognize vehicle number plates with high accuracy and help make the process of recognizing vehicle number plates more efficient.