

## **ABSTRACT**

Automatic gates nowadays, especially in Indonesia, have several weaknesses, including having to bring a card for parking payments, gatekeepers who have time limits and must rest, vehicle theft, congestion in the parking lot itself due to the payment system taking too long. Speed is the main focus in managing automatic gate access because payments are practical, no need to wait and also safer because they only rely on microcontrollers and laptops, thus minimizing human involvement.

The solution to these various problems is to apply License Plate Recognition (LPR) technology, namely vehicle license plate recognition. By using this technology, a model of an automatic parking gate can be created and has an accuracy level of up to 95%. In the parking payment process, a system is created using an account for each plate used and will deduct the balance from the account if the gate is detected. The results of this project can connect the problems, methods, objectives and conclusions made.

**Keywords:** LPR, number plate recognition, automatic payment gate