Abstract

The development of urban traffic volume in Indonesia can reach 15% per year along with the number of vehicles that continues to grow, causing its own problems for parking needs. The current conventional parking system focuses on drivers to find their own parking space which can increase the exhaust emission and time. CCTV contained in the parking area can be used as a tool to find out the number of empty parking lots by applying computer vision to the CCTV system that is able to send data to the server to be reprocessed and notify the available parking locations. This project is divided into four stages, namely parking lot detection, vehicle detection, IoU calculation, and accuracy level. Tests carried out by taking several parking video samples used gave a total accuracy of 60%.

Keywords : CCTV, Computer Vision, Parking System