

Automated Parking Lot Management System

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Abstract: *Automated parking management system, utilizing machine learning for license plate recognition, has simplified the ticket generation and parking space allocation process in large parking areas. It offers a user-friendly experience by swiftly recognizing license plates upon vehicle entry. Furthermore, the system efficiently guides vehicles to the most suitable parking spaces, optimizing usage and alleviating congestion. This innovative approach streamlines these procedures, enhancing user convenience. It also plays a part in creating a more sustainable urban environment by reducing fuel consumption and emissions. To sum it up, our integration of machine learning for license plate recognition provides an efficient and eco-conscious solution to urban parking challenges, making parking hassle-free and environmentally friendly*

Keywords: car parking, Arduino Uno, parking lot management System, Ticket generation, license plate, alpr, OCR, Yolov5, License plate recognition system, Parking lot, Parking space automation