



FINAL YEAR PROJECT REPORT

**VEHICLE NUMBER PLATE RECOGNITION
SYSTEM USING IMAGE PROCESSING**

**In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)**

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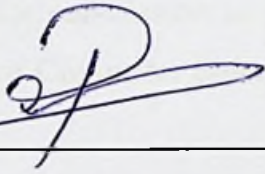
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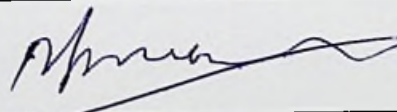
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We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

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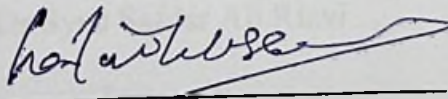
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VEHICLE NUMBER IDENTIFICATION USING DEEP LEARNING

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VEHICLE NUMBER PLATE RECOGNITION SYSTEM USING IMAGE PROCESSING

ABSTRACT

Automatic System for Recognizing License Plates Vehicles can be identified using an image processing technique that utilises the licence plate number. In highly restricted areas, such as military zones or the vicinity of high-ranking government offices or colleges, this equipment is installed at the entry. In order to extract the vehicle number plate region, the system first recognises the car's presence. When a vehicle's licence plate is read using ALPR technology, the resulting data is checked against a database to determine the owner's identity. Python and OpenCV are used to develop and test the system, which is then put to the test on real images. A demonstration of real-time detection and recognition of a vehicle's licence plate was performed, and the results were positive. A car licence plate recognition system is given with a smart and easyOCR algorithm. This technique is used to identify licence plates in real time. After recognition and verification of the number plate the signal is provide to the Arduino and then open the barrier using servo motor. Recommendations for future development and conclusions are also included in the report.

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