**A**

**Project Report On**

**“AUTOMATIC NUMBER PLATE RECOGNITION (ANPR) WITH PYTHON, YOLOV8, AND EASYOCR”**

****

**Submitted in partial fulfilment of the requirements of the**

**Bachelor of Computer Applications,**

**Karnataka State Akkamahadevi Women’s University, Vijayapura.**

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**Under the Guidance of:**

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**DEPARTMENT OF B.C.A.,**

**SMT. ALLUM SUMANGLAMMA MEMORIAL COLLEGE**

**FOR WOMEN, BALLARI.**

**2023-2024.**

**DECLARATION**

I, the undersigned hereby declare that the project report is **“AUTOMATIC NUMBER PLATE RECOGNITION (ANPR) WITH PYTHON, YOLOV8, AND EASYOCR ”** is a record project work carried out by me during the period of my studies in Smt.A.S.M College for Women,Ballari, Department of B.C.A.,under guidance of **Ms**. **DIKSHITHA D.M.Sc.,**lecturer of Smt. A.S.M. college for Women, Ballari, in partial fulfillment of the Bachelor of Computer Applications of Karnataka Akkamahadevi Women’s University, Vijayapura.

I have not submitted this project report to any other university for the award of any degree.

Place: Ballari

Date:  **SONU SINGH**

**CERTIFICATE**

This is to certify that **Kum. SONU SINGH.,** student of final year B.C.A. of **Smt. A.S.M. College for Women, Ballari**, has prepared this project report entitled **“AUTOMATIC NUMBER PLATE RECOGNITION(ANPR) WITH PYTHON, YOLOV8, AND EASYOCR”** under my guidance, in partial fulfilment of the requirements, for the award of Bachelor of Computer Applications of Karnataka State Akkamahadevi Women’s University, Vijayapura.

Place: Ballari

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**Name of the Examiner: Signature with Date:**

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**2.**

**CERTIFICATE**

This is to certify that **Kum.SONU SINGH,** student of final year department of B.C.A of Smt. A.S.M. College for Women, Ballari, has prepared this project report entitled **“AUTOMATIC NUMBER PLATE RECOGNITION (ANPR) WITH PYTHON, YOLOV8, AND EASYOCR”** under the guidance of **Ms. DIKSHITHA D. M.Sc.,** Department of B.C.A., Smt. A.S.M College for Women, Ballari, in partial fulfilment of the requirements for the award of Bachelor of Computer Applications of Karnataka State Akkamahadevi Women’s University, Vijayapura.

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**CERTIFICATE**

This is to certify that, **Kum. SONU SINGH.,** student of final year B.C.A of Smt. A.S.M. College for Women, Ballari has prepared this project report entitled **“AUTOMATIC NUMBER PLATE RECOGNITION (ANPR) WITH PYTHON, YOLOV8, AND EASYOCR”** under the guidance of **Ms. DIKSHITHA D. M.Sc.,** Department of B.C.A., Smt. A.S.M College for Women, Ballari, in partial fulfilment of the requirements for the award of Bachelor of Computer Applications of Karnataka State Akkamahadevi Women’s university, Vijayapura.

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**[SONU SINGH]**

**ABSTRACT**

In recent years the number of vehicles has increased drastically. With this increase, it is becoming difficult to keep track of each vehicle for purpose of law enforcement and traffic management. Number Plate Recognition is used increasingly nowadays for automatic toll collection, maintaining traffic activities and law enforcement. Many techniques have been proposed for plate detection, each having its own advantages and disadvantages. The basic step in Number Plate Recognition is localization of number plate. Automatic Number Plate Recognition system is a real time embedded system which automatically recognizes the number plate of vehicles. There are many applications ranging from complex security systems to common areas and from parking admission to urban traffic control. Automatic number plate recognition (ANPR) has complex characteristics due to diverse effects such as of light and speed. Most of the ANPR systems are built using proprietary tools like Matlab. This system presents an alternative method of implementing ANPR systems using Free Software including Python, YOLOv8, Easy OCR and the Open Computer Vision Library.

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