

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 1, July 2022

Automatic License Plate Recognition System

Supriya S S and Arunkumar K L

Department of Computer Applications J. N. N. College of Engineering, Shimoga, Karnataka, India supriyasuppi4466@gmail.com and arunshivamoga@gmail.com

Abstract: Automatic Number Plate Recognition (LPR) plays an important role in numerous applications and various techniques have been proposed. In this paper we will learn about the automatic license plate detection of the security purpose and documentation of entry of vehicles inside any building. In this technique we are using easy-OCR for detection of the characters and numbers present in the number plate. By using this technique, we can store the number plate details and vehicle entry time in an accurate rate and in a faster way. In this project we are using the camera to take the picture of the number plate and then by using easy OCR we are taking the characters and number values from the image of the number plate and then the data is stored in the data base and can be exported when ever needed.

Keywords: OCR, Licence plate, image, car, capture, pre-process, python

REFERENCES

- [1]. Chengpu Yu, Mei Xie, Jin Qi, "A Novel System Design of License Plate Recognition", International Symposium on Computational Intelligence and Design , 2008.
- [2]. J. Sharma, A Mishra, K. Saxena and S. Kumar, "A Hybrid Technique for License Plate Recognition Based on Feature Selection of Wavelet Transform and Artificial Neural Network", International Conference on Reliability, Optimization Information Technology, 2014.
- [3]. Muhammad Tahir Qadri, Muhammad Asif, "Automatic Number Plate Recognition System for Vehicle Identification Using Optical Character Recognition", International Conference on Education Technology and Computer, 2009.
- [4]. Er. Kavneet Kaur, Vijay Kumar Banga, "Number Plate Recognition Using OCR Technique", International Journal of Research in Engineering and Technology, vol 2, Issue. 09, sep-2013.
- [5]. Arunkumar K L, Ajit Danti, Manjunatha H, "Classification of Vehicle Make Based on Geometric Features and Appearance-Based Attributes Under Complex Background", Springer 1035 (CCIS), pp 41-48
- [6]. K L Arunkumar, Ajit Danti, "A novel approach for vehicle recognition based on the tail lights geometrical features in the night vision", International Journal of Computer Engineering and Applications, Volume XI
- [7]. Manjunatha HT, Arunkumar K L, Ajit Danti, "A Novel Approach for Detection and Recognition of Traffic Signs for Automatic Driver Assistance System Under Cluttered Background", Springer 1035 (CCIS), pp 407-419
- [8]. KL Arunkumar, A Danti, HT Manjunatha, "Estimation of vehicle distance based on feature points using monocular vision", IEEE 8816996 (2019), 1-5
- [9]. KL Arunkumar, A Danti, HT Manjunatha, D Rohith, "Classification of Vehicle Type on Indian Road Scene Based on Deep Learning", Springer, Singapore 1380 (2021), 1-10
- [10]. HT Manjunatha, A Danti, KL ArunKumar, D Rohith, "Indian Road Lanes Detection Based on Regression and clustering using Video Processing Techniques", Springer, Singapore 1380 (CCIS), 193-206
- [11]. Arunkumar K L, Ajit Danti, "Recognition of Vehicle using geometrical features of a tail light in the night vision, National Conference on Computation Science and Soft Computing (NCCSSC-2018)
- [12]. Manjunatha HT and AjitDanti. "A Novel Approach for Detection and Recognition of Traffic Signs for Automatic Driver Assistance System Under Cluttered Background" - Recent Trends on Image Processing and Pattern Recognition, Springer Nature Singapore, Pte Ltd. 2019, RTIP2R 2018, CCIS 1035, pp. 1–8, 2019, ISBN 978-981-13-9181-1



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 1, July 2022

- [13]. Manjunatha HT and Ajit Danti. "Detection and Classification of Potholes in Indian Roads using Wavelet Based Energy Modules", IEEE- 978-1-5386-9319-3/19 © 2019
- [14]. Manjunatha HT and AjitDanti," Indian traffic sign board recognition using Normalized Correlation Method", International Journal of Computer Engineering and Applications (IJCEA), Volume XII, Issue III, March 18, ISSN 2321-3469
- [15]. Manjunatha HT and AjitDanti, "Segmentation of Traffic Sign Board in a cluttered background using Using Digital Image Processing", National Conference on Network Security, Image Processing and Information Technology, March 2017.