

NARASARAOPETA ENGINEERING COLLEGE

(Autonomous)

DEPARTMENT OF CSE - (ARTIFICIAL INTELLIGENCE)

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Guide	P. Neelima – (M.Tech)
Title	AUTOMATIC LICENSE NUMBER PLATE RECOGNITION SYSTEM
Domain/Technology	Deep Learning
Dataset Link	https://www.kaggle.com/datasets/andrewmvd/car
Base Paper Link	https://ieeexplore.ieee.org/document/10151655
Software Requirements	Browser : Any Latest browser like Chrome Operating System : Windows 10 Language : Python Platform : Anaconda
Hardware Requirements	Processor : Intel(R) Core [™] 2 i7-5500U CPU @2.50GHz RAM : 8GB(gigabyte) System Type : 64-bit operating system, x64-based processor
Abstract	Automatic Number Plate Recognition (ANPR) is an image processing technology which uses number (license) plate to identify the vehicle. The objective is to design an efficient automatic authorized vehicle identification system by using the vehicle number plate. The system is implemented on the entrance for security control of a highly restricted area like military zones or area around top government offices e.g., Parliament, Supreme Court etc. The developed system first detects the vehicle and then captures the vehicle image. Vehicle number plate region is extracted using the image segmentation in an image. Optical character recognition technique is used for the character recognition. The resulting data is then used to compare with the records on a database so as to come up with the specific information like the vehicle's owner, place of registration, address etc. Traffic control and vehicle owner identification has become major problem in every country. Sometimes it becomes difficult to identify vehicle owner who violates traffic rules and drives too fast. Therefore, it is not possible to catch and punish those kinds of people because the traffic personal might not be able to retrieve vehicle number from the moving vehicle because of the speed of the vehicle. Therefore, there is a need to develop Automatic Number Plate Recognition (ANPR) system as a one of the solutions to this problem. The License Plate detection and recognition is a challenging task that plays a significant role in intelligent transportation systems. Where it could be used as a core in various applications, such as security, traffic control, and electronic payment systems (e.g., freeway toll payment and parking fee payment).