ISSN Online: 2583-1739



## Svādhyāya - International Journal of Transdisciplinary Research and Development (SIJTRD)



VOL 1 (2), DEC 2021, PP 42-49

## CONTOUR BASED NUMBER PLATE RECOGNITION SYSTEM USING EM SEGMENTATION METHOD

V. R.Viju<sup>1</sup>, Dr. R.Radha<sup>2</sup>

Research Scholar<sup>1</sup>, Associate Professor<sup>2</sup>,

Department of Computer Science, Dr.MGR Janaki College of Arts and Science for Women<sup>1</sup>

Department of Computer Science, SDNB Vaishnav College for Women<sup>2</sup>

vijumjc@mgrjanaki.ac.in<sup>1</sup>

## **ABSTRACT**

Vehicle number plate recognition systems are considered to be the core part in parking management, toll management, vehicle speed control management. Many algorithms and techniques have been developed by many researchers for detecting the number plate of any vehicle which is the unique tag. The purpose of this research paper is to effectively locate and segment the number plate. Contour based technique is used to locate the number plate with higher accuracy and extension maximization clustering method is applied to effectively segment the number plate from the given input image. Experimental results show the effectiveness of EM segmentation method to crop the plate region very accurately.

KEYWORDS: Number Plate, Image processing, Edge, Contour, Localization, Segmentation