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(71)Name of Applicant :  
**1)Dr.K.Vijai**  
 Address of Applicant :Professor, Department of Civil Engineering, St.Joseph's College of Engineering OMR, Chennai-119 Tamilnadu India -----  
**2)U. Hemavathi**  
**3)R.Deepa**  
**4)Rashmitha Shettigar**  
**5)M. Madhavi**  
**6)Dr M Vykunta Rao**  
**7)Ms. Garima singhal**  
**8)Dr. Jnaneshwar Pai Maroor**  
**9)Josna.O**  
**10)Dr Kruti Jenish Dangarwala**  
 Name of Applicant : NA  
 Address of Applicant : NA

(72)Name of Inventor :  
**1)Dr.K.Vijai**  
 Address of Applicant :Professor, Department of Civil Engineering, St.Joseph's College of Engineering OMR, Chennai-119 Tamilnadu India -----  
**2)U. Hemavathi**  
 Address of Applicant :Assistant Professor, Department of CSE, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi, Chennai, TamilNadu India -----  
**3)R.Deepa**  
 Address of Applicant :Research Scholar Department of Information Technology Anna University Dr.N.G.P Institute of Technology, Kallapatti Road,Coimbatore -,641048 Erode Tamilnadu India -----  
**4)Rashmitha Shettigar**  
 Address of Applicant :Assistant Professor, Department of IT/CS Mumbai University, Thakur Ramnarayan college of Arts and Commerce, Dahisar East, Mumbai, Maharashtra, India -----  
**5)M. Madhavi**  
 Address of Applicant :Assistant professor, Department of Artificial Intelligence, Anurag University Ghatkesar Medchal Telangana India -----  
**6)Dr M Vykunta Rao**  
 Address of Applicant :Associate Professor, Department of Mechanical Engineering, GMR Institute of Technology, Rajam, GMR Nagar-532127 Vizianagaram Andhra Pradesh India -----  
**7)Ms. Garima singhal**  
 Address of Applicant :Assistant professor, Department of School of Management, Noida Institute of Engineering and Technology, Greater Noida, Gautambuddh Nagar, Uttar Pradesh India -----  
**8)Dr. Jnaneshwar Pai Maroor**  
 Address of Applicant :Assistant Professor, Department of Humanities, NMAM Institute of Technology, NITTE (Deemed to be University), Nitte-574110, Karkala Taluk, Udupi, Karnataka , India -----  
**9)Josna.O**  
 Address of Applicant :Assistant Professor Department of Computer Science & Engineering, Rajarajeswari College of Engineering Ramohalli Cross, Mysore Road, Kumbalgodu, Bengaluru, Karnataka 560074. India -----  
**10)Dr Kruti Jenish Dangarwala**  
 Address of Applicant :Assistant Professor Department of Computer Science and Engineering Shri S'ad Vidya Mandal Institute of technology, College Road,Old National Highway no 8 Bharuch, Gujarat, India -----

(57) Abstract :  
 AI BASED HANDWRITTEN CHARACTER RECOGNITION SYSTEM USING DEEP LEARNING ALGORITHMS ABSTRACT: Handwritten character recognition entails the process of identifying characters from pictures and documents, and subsequently converting them into a machine-readable format for further processing. Digit recognition has various applications, such as sorting postal mail, processing bank checks, and entering data into forms. The key factor of the matter is the ability to create a proficient algorithm that can accurately differentiate between handwritten numerals given by users via scanners, tablets, and other digital devices. This research introduces an off-line handwritten digit recognition system that utilizes a range of machine learning methods. In order to recognize digits, many machine learning approaches such as Convolutional Neural Network, Multilayer Perceptron, Support Vector Machine, and K-Nearest Neighbor have been employed. The main goal of this study is to examine the capacity of CNN to identify characters from a collection of images, as well as to assess the accuracy of recognition through training and testing.

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