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	(71)Name of Applicant :
	  1)St. Martin's Engineering College
	    Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	Name of Applicant : NA
	Address of Applicant : NA
	(72)Name of Inventor :
	  1)Dr. M. Thirupathi Professor, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  2)Mr. K.Balasubramanyam Assistant Professor, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally SECUNDERABAD ----------- -----------
	  3)Mr. Koppula Sankeerth Sai Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  4)Ms. Kamalapuram Mounika Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  5)Ms. Kovuri Sushmitha Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  6)Mr. G. Laxminarayana Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  7)Ms. V. Srivalli Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  8)Mr. K.N.S. Harish Kumar Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  9)Mr. D. Sandeep Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  10)Mr. N. Roop Pavan Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  11)Mr. Godhala Vikram Reddy Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  12)Mr. K.P.S.Kaushik Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  13)Mr. Ammula Srivastav Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  14)Ms. Manne Bhavana Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------
	  15)Ms. E. Varshitha Student, ECE
	Address of Applicant :St.Martin's Engineering College, Dhulapally Kompally Secunderabad ----------- -----------

(57) Abstract :

Currency is an unavoidable part of our day-to-day life. The current day monetary self-service gives birth to currency recognition, which plays a vital role in the automated banking procedure. It is straightforward for a typical human being to comprehend and recognize any banknote easily, but it is undoubtedly troublesome for anyone with a visually impaired or blind individual to accomplish a similar task. Banknotes commonly have unique designs according to the denomination and can be sorted with surplus human errors in the bank. These errors lead to difficulties in evaluating and recognition. Therefore, a novel method for currency recognition that identifies Indian currency in different views on the scale is proposed. Hence, if computers or systems recognize currency and can detect the fake currency, it will immensely boost the precision of recognition and decreases people's workload efficiently. This invention presents an Indian Currency detection analysis, which proposes an optimized model to recognize the currencies effectively. The Deep Learning approach of convolutional neural network model technique has improved the effective analysis of currency recognition with improved accuracy, high speed and efficiency along with complete automatic readily procedure with no human intervention and minimal complexity. The model which we worked on essentially classifies the currency note into distinct denominations like Rs10, Rs50, Rs100, Rs500, and Rs2000 and determines whether the money is genuine or counterfeit with better accuracy.

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