(12) PATENT APPLICATION PUBLICATION

(21) Application No.202341034717 A

(19) INDIA

(22) Date of filing of Application :18/05/2023

(43) Publication Date : 18/08/2023

(54) Title of the invention : CURRENCY DENOMINATION IDENTIFICATION – USING MACHINE LEARNING & ANDROID APPLICATION DEVELOPMENT

(51) International classification	:G06K 096200, G06N 030400, G06N 030800, G06N 200000, G16C 207000
(86) International Application No Filing Date	:PCT// :01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
Currency denomination identification is an important issue for the visually impaired community as they face difficulties in identifying the denominations of currency notes. Blind assistant technology has been developed to assist visually impaired individuals in this regard, making it easier for them to handle and transact with physical currency. Blind assistant systems use various techniques such as image processing, computer vision, and machine learning algorithms to identify the denomination of currency notes. This paper provides an overview of the blind assistant technology for currency denomination identification, including its design and implementation. It also discusses the advantages and limitations of this technology and its potential impact on the lives of visually impaired individuals. Additionally, the paper examines some of the challenges in implementing this technology and provides suggestions for future research in this area. This technique works based on three factors: color, size and texture which are used in the recognition. The technique proposed in this paper can be used to detect the currencies of many countries. For the sake of implementation only Indian paper currencies are considered. With this system it is easier to check currency anywhere and at any time, and the technique is implemented using the CNN (Convolution Neural Network). We tested this method on every denomination of India and the system was able to detect with 95% accuracy. A classification model is generated using all factors mentioned to increase the accuracy of the technique. Paper currency features play an important role in this recognition.

No. of Pages : 13 No. of Claims : 3