

Currency Detector Android Application for Visually Impaired People

Mr. Chandrashekhar Mankar¹, Anand Agrawal², Vinita Tiwari³, Nikita Shrinath⁴,
Himanshu Jamwal⁵, Priya Diwnale⁶

Assistant Professor, Department of Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4,5,6}

Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India

Abstract: *Not everyone in this world can see the colors or even the light from his/her eyes. These people are known as visually impaired people. Visually disabled people are partially sighted or completely blind. These types of people face many problems in their day-to-day life, including transactions through money. Every category of currency is different from the others, and the difference can be noticed through the naked eye. For visually challenged people, it is hard for them to differentiate between the notes. Higher organizations or institutions like Banks have expensive hardware machines that can easily determine the difference between original and fake notes. The technology used in those machines is not handy or cost-efficient. So, to overcome this issue, this project can help the visually disabled person recognize the currency notes using a mobile camera. The system will be developed as an Android application and will use high-performance image processing techniques.*

Keywords: Currency identification, visually disabled, TensorFlow, Android application, Image processing techniques.

REFERENCES

- [1]. Pratiksha Ganjave¹, Rushikesh Markad², Gaurav Rasal³, Yash Kalekar⁴ "Currency Detector for Visually Impaired (Study of The System Which Identifies Indian Currency for Blind People)" International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 IJERTV10IS110073 (This work is licensed under a Creative Commons Attribution 4.0 International License.) Vol. 10 Issue 11, November-2021.
- [2]. Srushti Samant¹, Sakshi Sonawane², Rohini Thorat³, Parsika Shah Bera⁴, Dr. N. P. Kulkarni⁵ "CURRENCY RECOGNITION SYSTEM FOR VISUALLY IMPAIRED PEOPLE" international journal of advanced scientific research and engineering trend Volume 5 Issue 3 March 2020.
- [3]. Shweta Yadav, Mr. Zulfikar Ali Ansari, Kaushiki Gautam Singh "CURRENCY DETECTION FOR VISUALLY IMPAIRED" 2020 JETIR May 2020, Volume 7, Issue 5.
- [4]. Gerrit J. J. van den Burg, Christopher K. I. Williams - "An Evaluation of Change Point Detection Algorithms - May 2020".
- [5]. Venkata Sai Teja. D1, *A Krishnamoorthy², P Boominathan³ "INDIAN CURRENCY RECOGNITION AND SPEECH SYNTHESIS FOR THE VISUALLY IMPAIRED PERSONS" International Journal of Pure and Applied Mathematics Volume 119 No. 15 2018
- [6]. Prof. Rajesh Babu, Ms. Monali Patil, Prof. Jayant Adhikari; Fake Currency Detection using Image Processing (2018).
- [7]. Anil Kumar B, KRJ Srikanth; Design and Development of real-time paper Currency Recognition System of Demonetization new Indian notes by using Raspberry Pi for Visually Challenged (2018)
- [8]. Snehal Saraf, VrushiSindhikar, Ankita Sonawane, Shamali Thakare "Currency Recognition System for Visually Impaired" Vol-3 Issue-2 2017.
- [9]. VedaSamhitha Abburu, Saumya Gupta, S. R. Rimitha, Manjunath Mulimani, Shashidhar G. Koolagudi; Currency Recognition System using Image Processing (2017).

- [10]. Yi C, Tian Y, Arditi A. Portable camera-based assistive text, and product labelreading from hand-held objects for blind persons. IEEE/ASME Transaction on Mechatronics.