### **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 6, May 2023

# Blind People Monitoring System for Visually Impaired

Dr. Sapna B Kulkarni<sup>1</sup>, Usha S<sup>2</sup>, Apeksha S<sup>3</sup>, B Tejashree<sup>4</sup>, B Varshita<sup>5</sup>

Associate Professor, Department of Computer Science<sup>1</sup>
Students, Department of Computer Science<sup>2,3,4,5</sup>
Rao Bahadur Y Mahabaleswarappa Engineering College, Bellary, Karnataka, India

Abstract: Visual impairment is one of the issues that several millions of people suffer from. They go through a lot of difficulties even to complete the basic chores. Even in their own home or office the struggle to navigate from one place to another without being dependent on anybody. As per the data from WHO(world health organisation) there are around 250+ million people with visual disablement out of which nearly 35+ million are totally blind which constitute a huge part of the population. Visually impaired people or in other words especially abled people are the ones who face a lot of difficulties even to accomplish their daily routine chores. Most of them even though they don't want, have to rely on other people for some kind of help. There are thousands of technologies being developed or have been developed for the assistance of these people. Computer vision being one of these technologies is providing the most promising solution Blind people find hard time navigating around the street. Due to their inability to see world ,they are often in danger of getting hit by obstacle and vehicle.

**Keywords:** Providing the Smart Blind Stick by Adopting the IOT Technology

#### REFERENCES

- [1] M. P. Agrawal and A. R. Gupta, "Smart Stick for the Blind and Visually Impaired People", Second International Conference on Inventive Communication and Computational Technologies (ICICCT),
- [2] pp. 542- 545, 2018.
- [3] R. F. Olanrewaju, M. L. A. M. Radzi and M. Rehab, "iWalk: Intelligent walking stick for visually impaired subjects", IEEE 4th International Conference on Smart Instrumentation, Measurement and Application (ICSIMA), pp. 1-4, 2017.
- [4] K. B. Swain, R. K. Patnaik, S. Pal, R. Rajeswari, A. Mishra and C. Dash, "Arduino based automated STICK GUIDE for a visually impaired person", IEEE International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM), pp. 407-410, 2017.
- [5] Nadia Nowshin, SakibShadman, Saha Joy, SarkerAninda, Islam Md Minhajul, "An Intelligent Walking Stick for the VisuallyImpaired People", International Journal of Online and Biomedical Engineering (iJOE), vol. 13, No. 11, 2017.
- [6] Radhika R, Payal G Pai, Rakshitha S, Rampur Srinath, "Implementation of Smart Stick for Obstacle Detection and Navigation", International Journal of Latest Research in Engineering and Technology (IJLRET), vol. 02, pp. 45-50, 2016.
- [7] Manikanta K, T. Siva SankaraPhani and A. Pravin, "Implementation and Design of Smart Blind Stick for Obstacle Detection and Navigation System", 2018.
- [8] O.B. Al-Barrm and J. Vinouth, "3D ultrasonic stick for blind", International Journal of Latest Trends in Engineering and Technology (IJLTET), vol. 3, 2014.
- [9] P. Sharma and S.L. Shimi, "Design and development of virtual eye for the blind", International Journal of Innovative Research in Electrical Electronics Instrumentation and Control Engineering, vol. 3 no. 3, pp. 26-33, 2015.

DOI: 10.48175/IJARSCT-10110



## **IJARSCT**



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 6, May 2023

- [10] T.A. Ueda, L.V. de Araujo, "Virtual walking stick: Mobile application to assist visually impaired people to walking safely", International Conference on Universal Access in Human-Computer Interaction, pp. 803-813, 2014.
- [11] V. Patel, "The Digitalization of the Walking Stick for the Blind", International Journal of Scientific & Engineering Research, vol. 6 no. 4, pp. 1142-1145, 2015.

DOI: 10.48175/IJARSCT-10110

