

Group Members:

2019-MC 253(leader)

2020R-2019 MC 297

2020R-2019 MC 296

Progress:

- Studied more about the internal working of the how the cane will operate
 - Discussed how we can make our cane for economical and efficient with our supervisor(Sir Saqib Zafar).
 - Compared different types of sensors that we can implement in our project to distinguish between different obstacles.
 - Studied some research papers the references are given below:
1. "Smart Cane for the Visually Impaired using Image Processing" by S. S. Deshmukh and S. S. Mundada. This paper proposes a smart cane system that uses image processing techniques to help the visually impaired navigate their surroundings.
 2. "Real-Time Object Detection for the Visually Impaired using Deep Learning" by N. K. Salimath and V. K. Agrawal. This paper proposes a real-time object detection system for the visually impaired that uses deep learning techniques.
 3. "A Low-Cost and Portable Vision-Based Navigation System for the Blind" by R. Chabra, M. I. Khan, and M. A. Khan. This paper proposes a low-cost and portable vision-based navigation system for the blind that uses a combination of image processing and machine learning techniques.
 4. "A Novel Machine Vision Based Smart Cane for Visually Impaired People" by S. K. Mitra, S. Bandyopadhyay, and P. Dutta. This paper proposes a novel machine vision based smart cane for visually impaired people that uses an ultrasonic sensor and a camera to detect obstacles and provide real-time feedback to the user.
 5. "A Smart Cane for Visually Impaired People using Deep Learning and Ultrasonic Sensors" by M. M. Hossain, M. N. Hossain, and M. H. Kabir. This paper proposes a smart cane system for visually impaired people that uses deep learning techniques and ultrasonic sensors to detect obstacles and provide real-time feedback to the user.

From the above mentioned research papers the one with most relatability with our concern was the 5th one by M.M.hossain