

Obstacle Detection and Path Tracking Application for Disables

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Abstract : Vision, the basis for performing navigational tasks, is absent or greatly reduced in visually impaired people due to which they face many hurdles. For increasing the navigational capabilities of visually impaired people a desktop application ODAPTA is presented in this paper. The application uses camera to capture video from surroundings, apply various image processing algorithms to get information about path and obstacles, tracks them and delivers that information to user through voice commands. Experimental results show that the application works effectively for straight paths in daylight.

Keywords : visually impaired, ODAPTA, Region of Interest (ROI), driver fatigue, face detection, expression recognition, CCD camera, artificial intelligence

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020