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Navigation Aid for Blind People

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MASTER THESIS

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Tallinn 2019

4 SUMMARY

4.1 Conclusion

Travelling outside environment is more challenging for the blind people. This paper present some combination of existing technological, which are modifying for getting better support in walking time especially for the blind person. Firstly, here describe the major problem facing by them while movement. Secondly, find some general solution to reduce those difficulties. Thirdly proposed some required hardware components which is useable for the predefine problem solution. Fourthly, practical experiment and working principle are explained with easy way for the better understanding. Finally, output result investigation, find out limitation of the system and some recommendation are added for further development of the crutches. This work introduces a system design and smart concept which is simple and easy to understand for the blind people. Combination of different sensor and other device will ensure them more confident with proper identification and feedback in walking time. The proposed system design will secure them and their houses while going outside. The sensors and others device functionality can be modify for getting better performance of the crutches. Some of those technologies can be used for other disabilities person also for specific purpose.

4.2 Limitation of the study

The propose combination of several component might have possibilities to increase weight of the crutches. The accuracy of color sensor module will be affected in harsh weather (snow fall, dusty). All of these components may consume more power; as a result, the battery life cycle may affect.

4.3 Future recommendation

Day by day more new technology will enhance the comfort of human life than previous; as a result, the disabilities person will get some extra advantage also. Only some basic technological equipment is available for blind person, but it possible to improve the navigation performance through new technological idea and implementation. Some existing technology is using some specific purpose and it could be contributing to build more convenient blind aid device. Improved image recognition technology is a good solution for blinds which recognize all kinds image (it can be a human, pet, tree, buss, building, traffic light etc.). A weather sensor in crutches can inform the user about the Barometric Pressure, Wind Speed, Wind Direction, Humidity, and Temperature to get the idea in outside environment through voice message whenever they need information. Finally, researcher should be search a way to make combination with upcoming more advance technology for the blind person crutches.