

A Novel Galvanic Vestibular Stimulation Based Navigator for the Blind

Saurav Kharb

ACKNOWLEDGEMENTS

“I would like to thank Mr Suchet Bargoti, postgraduate Mechatronic Engineer, currently pursuing PhD at the University of Sydney, for making this project possible and supporting through all times. This paper has also been reviewed by Prof. M. Balakrishnan and senior researcher Mr. Piyush Chanana at the Assistech lab, Indian Institute of Technology, Delhi. Thanks to Gaurav Kharb, MBBS second year student at Maulana Azad Medical College for helping with the biological aspects of this project. In the end a special thanks to Miss Taruna Kapoor and my school teachers for being a support throughout.”

REFERENCES

1. Wikipedia [Online] Available from: <http://www.iapb.org/vision-2020/globalfacts>
2. Sánchez, J., Elías, M. (2009). Guidelines for Designing Mobility and Orientation Software for Blind Children.
3. 9. Liao, K., et al., The Human Vertical Translational Vestibulo-ocular Reflex. *Annals of the New York Academy of Sciences*, 2009. 1164(1): p. 68-75.
4. 10. Day, B.L. and R.C. Fitzpatrick, The vestibular system. *Current Biology*, 2005. 15(15): p. R583R586.
5. Lund, S. and C. Broberg, Effects of different head positions on postural sway in man induced by a reproducible vestibular error signal. *Acta Physiologica Scandinavica*, 1983. 117(2): p. 307309.
6. Lund S, B.C., Effects of different head positions on postural sway in man induced by a reproducible vestibular error signal. *Acta Physiol Scand*, 1983. 117(2): p. 307-309.
7. Inglis, J.T., Shupert C.L., Hlavacka F., Horak F.B., Effect of galvanic vestibular stimulation on human postural responses during support surface translations. *J Neurophysiol*, 1995. 73: p. 896901.
8. Wikipedia [Online] Available from: https://en.wikipedia.org/wiki/PID_controller
9. Wikipedia [Online] Available from: https://en.wikipedia.org/wiki/Error_analysis_for_the_Global_Positioning_System