IJARSCT



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

Volume 2, Issue 2, July 2022

Driver Drowsiness Detection System for Accident Prevention

H Nawaz Shariff¹, Likith M², Harshithaling S³, Shreya S R⁴, Dr Madhu B K⁵

Students, Department of Computer Science and Engineering ^{1,2,3,4}
Professor and Head, Department of Computer Science and Engineering⁵
Vidya Vikas Institute of Engineering and Technology, Mysuru, Karnataka, India

Abstract: In our day to day life transportation systems plays an important role in human activities. Anyone can be the victim of road accidents at any time for various reasons but most of the accidents are caused due to drowsiness of the driver. The main reasons for drowsiness are due to lack of rest and sleep which causes tiredness on long journeys. Due to these factors, driver vigilance will reduce which causes serious situations and increases the chances of accidents. Because of this reason yearly, most of the accident is happening all over the world. In this technology advanced era, new technologies can play an important role in providing a solution to this problem.

Keywords: Driver drowsiness, Eye detection, Yawn detection

REFERENCES

- [1]. W. L. Ou, M. H. Shih, C. W. Chang, X. H. Yu, C. P. Fan, "Intelligent Video-Based Drowsy Driver Detection System under Various Illuminations and Embedded Software Implementation", 2015 international Conf. on Consumer Electronics Taiwan, 2015.
- [2]. W. B. Horng, C. Y. Chen, Y. Chang, C. H. Fan, "Driver Fatigue Detection based on Eye Tracking and Dynamic Template Matching", IEEE International Conference on Networking, Sensing and Control, Taipei, Taiwan, March 21-23, 2004.
- [3]. S. Singh, N. P. papanikolopoulos, "Monitoring Driver Fatigue using Facial Analysis Techniques", IEEE Conference on Intelligent Transportation System, pp 314-318.
- [4]. B. Alshaqaqi, A. S. Baquhaizel, M. E. A. Ouis, M. Bouumehed, A. Ouamri, M. Keche, "Driver Drowsiness Detection System", IEEE International Workshop on Systems, Signal Processing and their Applications, 2013.
- [5]. M. Karchani, A. Mazloumi, G. N. Saraji, A. Nahvi, K. S. Haghighi, B. M. Abadi, A. R. Foroshani, A. Niknezhad, "The Steps of Proposed Drowsiness Detection System Design based on Image Processing in Simulator Driving", International Research Journal of Applied and Basic Sciences, vol. 9(6), pp 878-887, 2015.
- [6]. R. Ahmad, and J. N. Borole, "Drowsy Driver Identification Using Eye Blink Detection," IJISET International Journal of Computer Science and Information Technologies, vol. 6, no. 1, pp. 270-274, Jan. 2015.
- [7]. A. Abas, J. Mellor, and X. Chen, "Non-intrusive drowsiness detection by employing Support Vector Machine," 2014 20th International Conference on Automation and Computing (ICAC), Bedfordshire, UK, 2014, pp. 188193.
- [8]. A. Sengupta, A. Dasgupta, A. Chaudhuri, A. George, A. Routray, R. Guha; "A Multimodal System for Assessing Alertness Levels Due to Cognitive Loading", IEEE Trans. on Neural Systems and Rehabilitation Engg., vol. 25 (7), pp 1037-1046, 2017.

DOI: 10.48175/IJARSCT-5838