

Intelligent Traffic Monitoring System

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Abstract: *The increased popularity of private automobile has result in more congested urban traffic. As a result, traffic has become one of the most serious issues in major cities throughout the globe. Congestion and accidents are two major traffic challenges, both of which have resulted in significant time loss, property damage, and pollution. This project entails the development and deployment of a computer vision and image processing-based intelligent and automated traffic control system. This technology recognizes the number of cars on each route and assigns an optimal amount of waiting time based on the the amount more cars on every route. This system is entirely automated and may be used to replace the traditional, dynamically regulated transportation system with a fixed-time transportation system. The planned method has the potential to significantly reduce traffic congestion in congested cities via preserving it considerable number of person time that would otherwise be wasted waiting on congested highways. This research focuses, low-cost image analysis, and load balancing.*

Keywords: Image tracking, Python, Traffic monitoring, CNN, HTML

REFERENCES

- [1]. "Object recognition using discriminatively trained part-based models," IEEE Trans. Pattern Analy. Mach. Intell., vol. 32, no. 9, p. 1627, 2010. P. F. Felzenszwalb, R. B. Girshick, D. Mcallester, and D. Ramanan
- [2]. K. K. Sung and T. Poggio, "Example-based learning for view-based human face identification," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 20, no. 1, pp. 39-51, 2002
- [3]. .C. Wojek, P. Dollar, B. Schiele, and P. Perona, "Pedestrian detection: An evaluation of the state of the art," IEEE Trans. Pattern Anal. Mach. Intell., vol. 34, no. 4, p. 743, 2012.
- [4]. H. Kobatake and Y. Yoshinaga, "Detection of spicules on mammogram based on skeleton analysis." IEEE Trans. Med. Imag., vol. 15, no. 3, pp. 235-245, 1996.
- [5]. Y. Jia, E. Shelhamer, J. Donahue, S. Karayev, J. Long, R. Girshick, S.
- [6]. Guadarrama, and T. Darrell, "Caffe: Convolutional architecture for fast feature embedding," in ACM MM, 2014.
- [7]. A. Krizhevsky, I. Sutskever, and G. E. Hinton, "Imagenet classification with deep convolutional neural networks," in NIPS, 2012.
- [8]. Z. Cao, T. Simon, S.-E. Wei, and Y. Sheikh, "Realtime multi-person 2d pose estimation using part affinity fields," in CVPR, 2017.
- [9]. Z. Yang and R. Nevatia, "A multi-scale cascade fully convolutional network face detector," in ICPR, 2016.
- [10]. C. Chen, A. Seff, A. L. Kornhauser, and J. Xiao, "Deepdriving: Learning affordance for direct perception in autonomous driving," in ICCV, 2015.