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Road Traffic Congestion using Local Binary Pattern

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Abstract: Today's major problems in the world are traffic. reduce the traffic congestion in the world is several options. Now a days, road traffic is manager problem. The plan is proposed and implemented the entrepreneur and ceo of spacex and tesla using this tunnel boring tecnique. The clever technique is proposed by proposed work. To make used the image processing to estimate the traffic congestion in the power of real time. The representation of the visual traffic is provided by the proposed system which will help the authorities while monitoring the traffic. there are many techniques to proposed a system, it requires higher computation resource, the proposed system is lite on computation resource thus easier to run. Standard way of estimating the traffic equipment by examining the different ways like normal speed of the vehicle and so on. In the proposed system , the traffic is estimated like humans do. The humans analyze the traffic just by looking, just like that the proposed system works similarly by utilizing the advancement in recent technology in the field of Machine Learning algorithm and image processing. By utilizing this technology we can teach the computers to detect and estimate the amount of traffic in real time.

Keywords: Traffic Congestion

REFERENCES

- [1]. B. Tian, Y. Li, B. Li, D. Wen, "Rear-view vehicle detection and tracking by combining multiple parts for complex urban surveillance," IEEE Transactions on Intelligent Transportation Systems, vol.15, no.2, pp. 597– 606, April 2014.
- [2]. Y. Li, B. Li, B. Tian, F. Zhu, G. Xiong and K. Wang, "Vehicle detection based on the deformable hybrid image template," 2013 IEE International Conference on Vehicular Electronics and Safety, Dongguan, 2013, pp. 114-118.
- [3]. F. Xia and S. Zhang. Block-coordinate frank-wolfe optimization for counting objects in images. In Advances in Neural Information Processing Systems Workshops, 2016.
- [4]. Y. Yufei, J. W. C. van Lint, R. E. Wilson, F. van Wageningen-Kessels, and S. P. Hoogendoorn, "Real-time lagrangian traffic state estimator for freeways," IEEE Transactions on Intelligent Transportation Systems, vol. 13, no. 1, pp. 59–70, 2012.
- [5]. A. Arunmozhi and J. Park, "Comparison of HOG, LBP and Haar-Like Features for On-Road Vehicle Detection," 2018 IEEE International Conference on Electro/Information Technology (EIT), Rochester, MI, 2018, pp. 0362-0367.
- [6]. L. Weixing, S. Haijun, P. Feng, G. Qi and Q. Bin, "A fast pedestrian detection via modified HOG feature," 2015 34th Chinese Control Conference (CCC), Hangzhou, 2015, pp. 3870-3873
- [7]. DC. He and L. Wang (1990), "Texture Unit, Texture Spectrum, And Texture Analysis", Geoscience and Remote Sensing, IEEE Transactions on, vol. 28, pp. 509 512.
- [8]. T. Ojala, M. Pietikäinen, and D. Harwood (1994), "Performance evaluation of texture measures with classification based on Kullback discrimination of distributions", Proceedings of the 12th IAPR International Conference on Pattern Recognition (ICPR 1994), vol. 1, pp. 582 - 585.
- [9]. Jian Li, (2015) : 'QMUL_Junction_Datasets' at School of Elentronic Engineering and Computer Science, Queen Mary University of London.
- [10]. L. Wang and DC. He (1990), "Texture Classification Using Texture Spectrum", Pattern Recognition, Vol. 23, No. 8, pp. 905 - 910.



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Volume 2, Issue 6, June 2022

- [11]. Classification of Vehicle Make Based on Geometric Features and Appearance-Based Attributes Under Complex Background, Arunkumar K L, Ajit Danti, Manjunatha H, Springer 1035 (CCIS), pp 41-48
- [12]. A Novel Approach For Vehicle Recognition Based On The Tail Lights Geometrical Features In The Night Vision, K L Arunkumar, Ajit Danti, International Journal of Computer Engineering and Applications, Volume XI
- [13]. A Novel Approach for Detection and Recognition of Traffic Signs for Automatic Driver Assistance System Under Cluttered Background, MHT Arunkumar K L, Ajit Danti, Springer 1035 (CCIS), pp 407-419
- [14]. Estimation of vehicle distance based on feature points using monocular vision, KL Arunkumar, A Danti, HT Manjunatha, IEEE 8816996 (2019), 1-5
- [15]. Classification of Vehicle Type on Indian Road Scene Based on Deep Learning, KL Arunkumar, A Danti, HT Manjunatha, D Rohith, Springer, Singapore 1380 (2021), 1-10
- [16]. Indian Road Lanes Detection Based on Regression and clustering using Video Processing Techniques, HT Manjunatha, A Danti, KL ArunKumar, D Rohith Springer, Singapore 1380 (CCIS), 193-206
- [17]. Recognition of Vehicle using geometrical features of a tail light in the night vision, Arunkumar K L, Ajit Danti, National Conference on Computation Science and Soft Computing (NCCSSC-2018)
- [18]. S P Raghavendra, M.J.Adarsh, Shoieb Ahamed and J. Shree Hari, "Estimation of Human Age and Gender Based on LBP Features Using Two Level Decision by SVM" K. C. Santosh and B. Gawali (Eds.): RTIP2R 2020, CCIS 1380, pp. 82– 94, 2021. https://doi.org/10.1007/978-981-16-0507-9_8, Springer Nature Singapore Pte Ltd. 2021