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Traffic Congestion Detection for Smart and Control Transportation Management

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The modern terrain of asphalt and motorways have become a standard of everyday life in a developed and developing nation. The rise in usage of motor vehicles has lead to the need to better regulate their use. These roadways have always been a way to transport us, our goods, and ideas throughout the age of homo sapiens up on mud to stone to brick, and now to petroleum distilled hydrocarbons. The goal of this project has been to be able to detect traffic congestions presence and levels via the analysis of the images gathered from traffic cameras that would indicate to the system the current flow status and give warning to the operators that could then relay the information to drivers within the affected area or take action themselves to resolve any issue if possible. Since the implementation of traffic monitoring systems are largely based on visual acuity of human operators using video monitoring cameras in tandem with other secondary sensing and monitoring devices in traffic control centers throughout the grid, it would be sensible to use the same system however enhancing it by the automation of the task of identifying and tallying vehicles flowing through the field of view of the camera at any given time. This would require the use of image processing algorithms and techniques within the bounds of the software tool MATLAB and other companion tools that would automatically indicate the presence of vehicles within a certain frame to further deduce the concentration of vehicle within the area. © 2022, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.

Author keywords

Image processing;   Traffic congestion ;   Traffic monitoring

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☐ 1   Kiunsi, R.B.
A review of traffic congestion in Dar es Salaam city from the physical planning perspective
(2013) *J Sustain Develop*, 6 (2), p. 94. Cited 34 times.

☐ 2   Gerla, M., Lee, E.-K., Pau, G., Lee, U.

Internet of vehicles: From intelligent grid to autonomous cars and vehicular clouds

(2014) *2014 IEEE World Forum on Internet of Things, WF-IoT 2014*, art. no. 6803166, pp. 241-246. Cited 575 times.
doi: 10.1109/WF-IoT.2014.6803166

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☐ 3   *Porter BE (2011) Handbook of Traffic Psychology*
         1st edition. Academic Press

☐ 4   Hymel, K.M., Small, K.A., Dender, K.V.

Induced demand and rebound effects in road transport

(Open Access)

(2010) *Transportation Research Part B: Methodological*, 44 (10), pp. 1220-1241. Cited 183 times.
www.elsevier.com/inca/publications/store/5/4/8/
doi: 10.1016/j.trb.2010.02.007

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☐ 5   Horowitz, R., Varaiya, P., de Wit, C.C.
         (2012) *Traffic Monitoring and Control Systems and Tools*
         Berkeley, CNRS NeCS Team Grenoble France

☐ 6   Xiao, L., Wang, Z.

Internet of things: A new application for intelligent traffic monitoring system

(2011) *Journal of Networks*, 6 (6), pp. 887-894. Cited 60 times.
http://ojs.academypublisher.com/index.php/jnw/article/view/0606887894/3155
doi: 10.4304/jnw.6.6.887-894

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☐ 7   Dharani, S.J., Anitha, V.
         Traffic density count by optical flow algorithm using image processing
         (2014) *Int J Innov Res Sci Eng Technol*, 3 (2). Cited 4 times.

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