

**PAPERS PUBLISHED**

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- 2) **S.Vasantha Kumar**, R. Sivanandan (2018) Traffic Congestion Quantification for Urban Heterogeneous Traffic using Public Transit Buses as Probes. *Periodica Polytechnica Transportation Engineering*, <https://doi.org/10.3311/PPtr.9218>, Vol. 47, Issue 4, pp.257-267. (Impact factor: 1.08)
- 3) **S.Vasantha Kumar**, (2017) “Traffic Flow Prediction using Kalman Filtering Technique”, *Procedia Engineering*, Vol. 187, pp. 582-587.
- 4) **S.Vasantha Kumar**, “GPS based study of speed characteristics of private and government buses in selected bus routes in Tamilnadu, India”, *International Journal of Civil Engineering and Technology (IJCET)*, Volume 8, Issue 6, June 2017, pp. 813– 819.
- 5) **S Vasantha Kumar**, Himanshu Gulati and Shivam Arora (2017), “Estimation of fuel loss due to idling of vehicles at a signalized intersection in Chennai, India”, *IOP Conf. Series: Materials Science and Engineering*, Vol.263, doi:10.1088/1757- 899X/263/3/032028, pp.1-6.
- 6) **S Vasantha Kumar**, Himanshu Gulati and Shivam Arora (2017), “Traffic Feasibility Study for a Grade Separator at a Busy Intersection in Vellore”, *IOP Conf. Series: Materials Science and Engineering*, Vol.263, doi:10.1088/1757-899X/263/3/032029, pp.1-8.
- 7) **S Vasantha Kumar**, Himanshu Gulati and Shivam Arora (2017), “Design of a rotary for an uncontrolled multi-leg intersection in Chennai, India”, *IOP Conf. Series: Materials Science and Engineering*, Vol.263, doi:10.1088/1757-899X/263/3/032030, pp.1-8.
- 8) G. Omkar and **S. Vasantha Kumar** (2018) “Finite Difference Formulation of Lighthill Whitham Richards (LWR) Macroscopic Model for Traffic Flow Prediction”, *International Journal of Applied Mathematics*, Vol.31, No.5, pp. 603-610.
- 9) **S.Vasantha Kumar**, P. Priyadharshini, B. Dhanalakshmi and K. Settu, (2018) “Study of Traffic Flow at a Three Leg Busy Intersection in Vellore, India”, *IOP Conf. Series: Materials Science and Engineering*, Vol. 396, No.1, doi:10.1088/1757-899X/396/1/012015

- 10) G. Omkar and **S. Vasantha Kumar**, “Short-Term Prediction of Intersection Turning Volume using Seasonal ARIMA Model”, *Transportation Letters The International Journal of Transportation Research* (Impact factor: 1.5), DOI 10.1080/19427867.2019.1645476, Published online on July 20, 2019.
- 11) S.Vigneshwaran, and **S. Vasantha Kumar**, (2019) “Urban Land Cover Mapping and Change Detection Analysis Using High Resolution Sentinel-2A Data”, *Environment and Natural Resources Journal*, Vol.17, Issue 1, pp.22-32 (Published online: 5 Oct 2018).
- 12) S.Vigneshwaran, **S.Vasantha Kumar**, (2018) “Extraction of Built-Up Area using High Resolution Sentinel-2A and Google Satellite Imagery”, *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences (ISPRS Archives)*, Vol. XLII-4/W9, pp. 165-169.
- 13) S.Vigneshwaran, **S.Vasantha Kumar**, (2019) “Comparison of Classification Methods for Urban Green Space Extraction using Very High Resolution Worldview-3 Imagery”, *Geocarto International* (Impact factor: 2.365), Published online on 18-09-19, <https://doi.org/10.1080/10106049.2019.1665714>.

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- 1) **S.Vasantha Kumar**, “Traffic Flow Prediction using Kalman Filtering Technique for Applications in Intelligent Transportation Systems”, *10<sup>th</sup> International Scientific Conference Transbaltica 2017: Transportation Science and Technology*, Vilnius Gediminas Technical University, May 4–5, 2017, Vilnius, Lithuania.
- 2) G. Omkar and **S. Vasantha Kumar**, “Time series Decomposition Model for Traffic Flow Forecasting in Urban Midblock Sections”, *IEEE International conference on “Smart Technologies for Smart Nations”*, REVA University, Bengaluru, India, 17-19 August, 2017, pp.720-723 (Available in IEEE explore).
- 3) G. Omkar and **S. Vasantha Kumar**, “Development of Simple Exponential Smoothing Model for Traffic Flow Prediction under Heterogeneous Traffic Conditions”, *ASCE’s India Conference on Urbanization Challenges in Emerging Economies*, The Institution of Engineers (India) and Indian Institute of Technology Delhi, India, 12-14, December, 2017, pp.659-666 (Available in ASCE Library), ISBN 978-0-7844-8202-5 (PDF).
- 4) **S Vasantha Kumar**, P. Priyadharshini, B. Dhanalakshmi and K. Settu, “Study of Traffic Flow at a Three Leg Busy Intersection in Vellore, India”, *2<sup>nd</sup> International Conference on Global Colloquium in Recent Advancements and Effectual Researches in Engineering, Science and Technology (RAEREST)*, St. Joseph's College of Engineering and Technology, Palai, Kottayam, Kerala, India, April 20-21, 2018, pp. 7-8.
- 5) S.Vigneshwaran, **S.Vasantha Kumar**, “Extraction of Built-Up Area using High Resolution Sentinel-2A and Google Satellite Imagery”, *International Conference on Geomatics and Geospatial Technology 2018 (GGT 2018)*, Kuala Lumpur, Malaysia, pp. 27-31.

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- 8) Sangeetha Gaikadi and **S.Vasantha Kumar**, Use of simple NDVI for assessment of urban green cover in Vellore using very high resolution Worldview-4 satellite data, International Conference on “Innovative Trends in Civil Engineering for Sustainable Development” (ITCSD2019), September 13-15, 2019 at NIT, Warangal, ISBN: 978-93- 89354-46-1 pp.371-372.

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- 2) Suresh, A., and **S.Vasantha Kumar**, “Study of Road Traffic Accidents in Krishnagiri – Walajahpet Highway (Nh-46) of Tamilnadu, India”, Sixth Colloquium on Transportation Systems Engineering and Management (CTSEM 2019), Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, June 14-15 2019, pp. 24.
- 3) Shishodiya Ghanshyam Singh and **S.Vasantha Kumar**, “Study of Mode-Wise Comparison of Effective Roadway Utilization on an Urban Arterial Road With Presence of Side Friction Characteristics”, Proceedings of 4<sup>th</sup> National Conference on Road and Infrastructure, April 4-5, 2019, RASTA Center for Road Technology Bangalore, pp.288-293, ISBN: 978-93-5367-163-1.