Foreword and Editorial

International Journal of Science and Engineering for Smart Vehicles

We are very happy to publish this issue of an International Journal of Science and Engineering for Smart Vehicles by Global Vision Press.

This issue contains 3 articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

The paper entitled "Developing Multi-Directional Broadcasting for Both Highway and Urban Vehicular Sensor Networks", vehicular Sensor Network (VSN) has to ensure the prompt dissemination of critical sensing data to all vehicles within Region of Interest (ROI) to avoid various road dangers. In order for VSN to provide safe road services on both highways and urban roads, it must have broadcasting protocols that can efficiently deliver hazardous messages to all nearby vehicles. This paper proposes a mobility prediction based multi-directional broadcasting (MPMB) protocol for both highway and urban VSNs. The MPMB protocol consists of (i) mobility prediction phase and (ii) broadcasting phase. In the mobility prediction phase, each vehicle predicts the Link Available Time (LAT) of its all neighbor vehicles through periodical beaconing. In the broadcasting phase, each broadcasting vehicle adaptively selects a vehicle with the largest LAT value predicted in the previous mobility prediction phase as a rebroadcasting vehicle each possible directional sector.

In the research paper "Emission Characteristics of Single Cylinder Compression Ignition (CI) Engine", expanding expenses of oil, fast development of industrialization and the worldwide pattern of urbanization alongside their expanding contamination by supplanting existing fuel. The point of study is to break down the performance and discharge qualities existing single barrel four stroke compression Ignition (CI) engine changed over into double fuel mode. In the current investigations the impact of compressed fossil fuel (CNG) gas acceptance on the performance on double fuel engine instead of single fuel. CNG utilised as fuel and Diesel or Biodiesel utilized as pilot fuel on double fuel mode, Karavera (Thevetia Peruviana) and Surahonne (Calophyllum inophyllum) Biodiesel ar utilised. Double fuel mode is one in all the higher methods to manage emanations from CI engines and quickly replacement existing fuel engine. Examinations is completed underneath engine centre condition, investigate the performance and outflow qualities of single chamber CI engine on double fuel mode by utilizing CNG as fuel and Diesel or biodiesels (Karavera and Surahonne) pilot fuels by unsteady injection temporal order 230 , 260 and one hundred ninety bTDC. Brake Thermal potency and Brake specific fuel utilization at double fuel technique of CNG fuel offers most popular outcomes over pure fuel engine in any respect engine hundreds. The reduction in CO and HC discharges on double fuel mode for all lots and what is more crest weight rise. By seventieth CNG fuel substitution rate.

In the paper "Traffic Supervision System Using Hyg12 Load Sensors", they present a comprehensive presentation of the transport monitoring system. The present monitoring system works with the help of count sensors, microcontroller and other units necessary to advise the drivers whoever using the busy roads. The current system works by processing the data that collects from the sensors in the ground of the roads. The primary goal of this traffic

monitoring system was to collect the movement of vehicles that were moving on a selected busy road over a period and suggest the drivers take other available routes in the city such that to reduce the congestion on the city roads. Based on the number of vehicles that were on the road by crossing the sensor units were calculated and the suggestion was given to drivers whoever using such roads. Depending on the traffic signal lights of the monitoring system, the drivers can take the decision of diverting the vehicle to other possible routes such that the congestion in heavy traffic roads can be avoided such that the time travelling time of the passengers can be reduced. The results were discussed in the results section and the future scope of the traffic monitoring system was also discussed in the conclusion section.

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Editors of the November Issue on
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