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 2 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.

In the paper "Performance Analysis According to RSU Range of VANET-based Communication Vehicle", VANET is a special kind of MANET adapted to the communication between vehicles. It has the characteristics of moving at high speed, and is classified into V2I and V2V communication methods. In order to develop VANET-based vehicle wireless communication technology, it is necessary to establish a test environment and synchronize vehicle mobility in various road scenarios. However, when the experimental environment is built, the equipment is expensive, and the road traffic situation is difficult to predict. The purpose of this paper is to implement a simulation of a Vehicluar Ad-Hoc network for urban environment that can be used for testing purposes. Such environment can be used to design better MAC protocols in VANET. In this paper, they propose a scheme for experiments in a similar environment to actual urban traffic, and analyze the performance by dividing it into V2I and V2V nodes according to the RSU coverage.

The research paper "Prediction of Required Specification for the Development of Future Gasoline Turbo Engine Standards through Time Series Analysis" explored that Environmental regulations have been tightened since Volkswagen's diesel gates. In order to cope with environmental regulations, eco-friendly cars should be developed, but due to the high price, it is difficult to be accepted by all consumers. In addition, as customer needs diversify, the product life cycle is shortening. Manufacturers need to innovate their processes to diversify their products and reduce lead times. This paper aims to predict long-term future engine torque in order to secure development efficiency and competitiveness of internal combustion engines, which are the major components of automobiles. Sales data for 20 years from 1998 to 2017 were used, with weights based on sales volume. Based on the above data, time series analysis was conducted using three methods, MA, ARIMA, and Fitted Regression. The results of the prediction for each segment were derived, and the engine can be used to plan the engine with appropriate torque.

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**Editors of the July Issue on
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