Foreword and Editorial

International Journal of Software Engineering and Its Applications

We are very happy to publish this issue of an International Journal of Software Engineering and Its Applications by Global Vision Press.

This issue contains 4 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 research "Design and Implementation of a Personal Portfolio Multilateral Authentication System Based on Hyperledger Fabric", Although the blockchain technology has been developed mainly around bitcoin, it is also being studied for use in various fields. As a result, it is spreading not only to the applications of settlement and transaction utilizing the characteristics of bitcoin (virtual money) but also to the fields not directly related to money. In this paper, we propose a personal portfolio multi-lateral authentication system that guarantees the reliability and integrity of data by using the features of block chain technology on a distributed network. The proposed system could be submitted learning data to a peer in a distributed network by a learner. Then, it is verified through agreement between peers and recorded in a chronologically encrypted ledger. It is a system that provides learners' information in a safe and prompt manner between schools, the school to the certification authority, the school to the company, and the student to the company according to decisions of learners.

"Performance Analysis of AODV Protocol on MANET's Model with ViSim" explored that the usage of the MANET network models had increased a lot in the recent years due to various advantages of these networks. The major advantage was the size of the model and the network topology. The network of these models changes time to time due to the reason that the addition of nodes and separation of nodes to the network model is always possible and very frequent in these network models. Hence, it is very important and required to analyze the performance of these networks with the help of various routing protocols. The performance had analyzed with various performance metrics like the end to end delay of the network model, output of the network etc. The results are displayed and discussed in detail in the results section.

In the paper "Prediction of Heart Diseases through Artificial Intelligence and Data Mining", data mining is the computational procedure of discovering styles in huge statistics sets regarding strategies on the intersection of artificial intelligence, gadget studying, facts, and database systems. It is an interdisciplinary subfield of computer technological know-how. In now a day's lifestyles illnesses are increasing increasingly more. Data mining is one of the solutions for it, it helps us to overcome this problem by exploring old datasets. For any disease if it is identified at early stage treatment can be done easily. A wide range of data is produced in health care institutions, we will use that data to get some useful information. Data mining in medical sector helps doctors for diagnosis and treatment of diseases, this paper makes an effort to study and find interesting patterns from the data of patients.

In the research paper “Analyzing the Performance of M/G/1 and M/Er/1 Queuing Models on Data Centers”, cloud computing is the process of allocating the network access admission to a group of selected users having advanced and smart pattern of computing facilities on the plan of usefulness of the network permission for accessing the network resources whenever there's an demand for the facility to be provided from the cloud. It may be a customary term and thus the regular service that was being delivering the required services to the hosts among net. Here, the cloud computing mechanism is employed for describing each the list of platforms that were out there to the users for operating and additionally the many styles of applications which will be processed. The current technique was being thought about by most of the analyzers because of the most potential and therefore the most helpful space for the analysis and also for analysis in academe like universities and major research laboratories. Solely few notable works are revealed with regards to performance analysis in cloud computing. Generally the analytical models were geared toward coming up with the models that use the cloud and its services through that the performance of the model was analyzed and evaluated below numerous configurations and assumptions. These assumptions were based on the queuing theory and its accuracy is verified with numerical calculations and simulations. Present paper deals with the performance evaluation in-terms of steady state parameters of a small cloud server farm using single and multi server queuing models. Single server model include M/G/1 and M/Er/1.

December 2019

Jinan Fiaidhi, Lakehead University, Canada

Editor-in-chief of the December Issue on
International Journal of Software Engineering and Its Applications