Guest Editorial Preface

Special Issue on Emerging Technologies in E-Commerce and Computing

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INTRODUCTION

The economy of a country is highly dependent on its e-commerce implementation in its business organizations with the use of recent computing technologies. Nowadays, business organizations are using their data to understand the behaviors of customers using data science, data analytics, and predictive analytics. To understand the consumer and to improve the quality of business, e-commerce companies are also using machine learning, artificial intelligence-based approaches and trying to apply deep learning for a better understanding of their datasets. In this context, e-commerce is on the driving position to promise its contribution such as online shopping, online food services, e-healthcare, e-care, e-solutions etc. E-commerce covers all aspects of system design and research in a systems framework, computing techniques, quality of design, software and system testing assurance, security, and its emerging applications.

However, despite all the developments that happened in the past, e-commerce is still in growing phase which needs improvements in planning, analysis, design, implementation and maintenance or support with the help of IT experts. In this special issue, we aim to explore the complexity and challenges in adopting the e-commerce infrastructure via the involvement of computing technologies. The empirical studies and conceptual contributions will enhance the understanding of problems to design and implement e-commerce infrastructure and applications via using information technology as per the expectations and requirements of end-users.

In this special issue total, 38 papers were submitted. After the rigorous review followed by two round of additional review by the associate editors, finally, six papers are accepted for inclusion.

The first manuscript is entitled to "Influence of Social Media Analytics on Online Food Delivery Systems". The author has taken very interesting theme and they have used twitter data to analyze the influence of social media data on the sale of food through the e-commerce mode. This paper covers the impact of social media and its related issues such as; decision making, marketing strategy, consumer behavior analysis, and improving brand reputation in terms of online food delivery.

The second manuscript is entitled to "Artificial Bee Colony-Based Approach for Privacy Preservation of Medical Data". This manuscript initially identifies the needs of the security and privacy of healthcare data. To overcome the existing security issues of the medical data, an improved artificial bee colony (ABC) approach is applied to improved security and privacy issues. The proposed model is validated and tested through the medical dataset and found to be an effective solution.

The third manuscript is based on "Construction and Application of a Regional Medical Information-Sharing System Based on Big Data". This paper covers the usages of big data technology for medical information sharing among different service stations. It may be found useful during the e-healthcare services and information extraction and sharing among different hospitals.

The fourth manuscript is on "Hybrid Load-Balanced Scheduling in Scalable Cloud Environment". This paper reported better quality of service (QoS) performance using genetic algorithm based artificial neural network scheduling algorithm. The results were simulated using the cloudsim 3.0 and performance is analyzed in terms of different parameters such as; simulation time, average start time, average finish time, execution time and utilization percentage of computing resources (VMs).

The fifth manuscript covers the review on "Review of Fault Tolerance Frameworks in the Cloud". In this survey author has analyzed the existing fault tolerance techniques and their impacts on the cloud. A comparison is made using different metrics such as; failure prediction, detection strategy, failure history, VM placement etc. This review may found to be useful for the future cloud researchers to identify the better fault tolerance techniques and their impact on e-commerce applications.

Finally, the sixth manuscript is entitled on "Construction of Lightweight Big Data Experimental Platform Based on Dockers Container". This paper emphasizes on the usages of docker software using linux environment. The proposed approach provides approx 10% improvements in term of host occupancy rate and memory occupancy rate and most important part is that system found to be stable along with these improvements.

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