

# 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 Science and Engineering Research Support soCietY and ICT Platform Society.

This issue contains 5 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 “A Review on Bug Report Assignment”, provides a study for the bug reports to inspire the necessity for the work on bug report assignment and the existing work that has been performed on bug report assignment with possible problems that arises while working with bug assignment are summarized. Also, the practical analysis using various machine learning algorithm has been performed on the basis of a number of attributes and number of classes on Eclipse project containing 10,000 bug reports.

In this paper “Review: Software Defect Prediction for Class Imbalance Datasets” the state of the art methodologies to deal with software defect prediction in the context of class imbalance problem has been reviewed. In recent years, several methodologies integrating solutions to enhance the induced classifiers in the presence of class imbalance by the usage of evolutionary techniques have been presented.

In this paper “An Integrated Framework for Prioritizing Software Specifications in Requirements Engineering”, it proposes the use of imprecise knowledge-based solutions over precise-knowledge based solutions for prioritizing software requirements to overcome the problem of decision making. In this regard, our proposed technique is an integration of Fuzzy Multi Criteria Decision Making (FMCDM), similarity measures and target-based approach to requirements prioritization using linguistic values of triangular fuzzy numbers. With the integrated framework, the challenge of making decisions under uncertain conditions are considered. The integrated framework was based on some defined criteria, a three-phased process comprising of five steps and a five-point scale used to determine the relative values of requirements. The result is the specification of a stepwise process of the computations that can be performed during decision making by the integrated technique proposed. It is hoped that when this technique is implemented, executed, evaluated and validated on case study, a promising results will be achieved. For validating the proposed technique, requirements from real-life case studies can be elicited, analysed, and reconciled for completeness and consistency.

This paper “A Conceptual Framework for Innovative E-Healthcare System” instigates with a definition of E-healthcare innovation and an understanding of how innovation occurs in healthcare. A conceptual framework is then developed which articulates the intervening variables that drive innovation in E-healthcare. Employing emerging technologies successfully will help firms distance themselves from the competition and monetize the benefits of these technologies. IT provides an avenue to enable the healthcare industry to flourish. Embracing this technology and its benefits creates an environment that is conducive to patients and care providers alike. Information systems work to create fluidity in the healthcare process. IS provides patients with better, safer,

faster, and more accurate treatments, and it allows the organization to monitor patients, inventories, billing processes, and trends in healthcare. The vision that information will be available online at any place, at any time, in multi-media form if relevant, by those who need it, serves healthcare professionals, patients, the public and hospitals. Ultimately, the framework will improve competitive advantage and deliver value to healthcare industry.

This paper presents “The Integration of MVC Framework in Rapid Application Development (RAD) Process Model” an innovative methodology for software development optimizing the features of a model-view-controller (MVC) framework. The MVC framework is integrated with the Rapid Application Development (RAD) process model in order to map the specified user requirements into the architecture making the individual components of the software application to be simultaneously developed. A software prototype is rapidly designed, implemented, tested in an iterative process. Quality of Service (QoS) software application development is guaranteed because users can be directly in the testing process.

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