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 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 research “An Iterative Hybrid Agile Methodology for Developing Archiving Systems”, with the massive growth of the organizations files, the needs for archiving system become a must. A lot of time is consumed in collecting requirements from the organization to build an archiving system. Sometimes the system does not satisfy and meet the organization needs. The aim of this research is to propose a domain-based requirement engineering system that efficiently and effectively develops different archiving systems based on new suggested technique named HyArchive: Hybrid Agile Archiving Technique that will help for developing an archiving system with best results. HyArchive merges the two most known agile methodologies: extreme programming (XP) and SCRUM. The technique is tested and proved to reduce time and effort consumed during analyzing and designing the archiving systems. It reduces the system errors that may happen at the early stages of the development of the system. The numerical result shows that it is effective, simple, and more efficient for developing an archiving system the new implemented technique.

In the paper “Short-Term Photovoltaic Power Generation Forecasting by Input-Output Structure of Weather Forecast Using Deep Learning “, hourly meteorological data and power generation data were used to predict sunshine, solar radiation, and solar power generation by the input-output variables of four models that are dependent on the weather forecast. The results show better predictions of data structures using weather forecasts than typical data structures. Meanwhile, the recurrent neural network (RNN) and the long short-term memory (LSTM), which are suitable for time-series data structures, performed better than the dynamic neural network (DNN). Model 4 provided the best results for the estimation of the sunshine and solar radiation.

November 2018

Jinan Fiaidhi, Lakehead University, Canada

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

This page is empty by intention.