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Editorial

This new issue of the *Journal of Digital Information Management* shows the breadth of different digital information systems with six papers.

Kevin Xu, and his colleagues in the opening paper brief the conceptual differences between a “data model” and a “programming Language” and more specifically addressed the Enterprise-Participant model as a semantic equivalent to the class of total recursive functions. The authors further described the platform for the programming language *Froglingo* where it incorporates the EP data model which is a monolith that consolidates the multiple software components of traditional software architecture. In their paper, “*Froglingo, a Programming Language empowered by a Total-Recursive-Equivalent Data Model*” they have focused the concept of ease of use by proposing a mathematical definition for the concept of data models and by relating *Froglingo* with other programming language through the analysis of types and higher-order functions.

Hebah Nasereddin in her paper on “*New Technique to Deal with Dynamic Data Mining in the Database*” has raised the significant questions on data mining such as how can the data be preprocessed in order to help improve the quality of the data, and consequently the mining results and how can the new updated data be preprocessed in order to help improve the quality of the data, efficiency, and simplify of the mining process. He tried to find solutions for dynamic data mining process that is able to take into considerations all updates (insert, update, and delete problems) into account, in his research.

In the third paper on “*Route Maintenance using Link State Prediction for Dense Mobile Ad hoc Networks*” Sharmila Sankar and V. Sankaranarayanan proposed a new ad hoc route maintenance protocol called Route Maintenance using Link State Prediction (RM-LSP) that utilized the node locality to enhance resilience against mobility. They claim that the RM-LSP reduced the overhead of route failure recovery in source end and attempts to improve route efficiency and network throughput. The initial experimentation has documented that the RM-LSP delivered packets efficiently while substantially reducing control overhead in various environments. They further visualized immense benefits in dense scenarios.

Semantic tagging of the web content using metadata enables to process text. Boutheina Smine, Rim Faiz and Jean-Pierre Desclés in their paper on “*A semantic annotation model for indexing and retrieving learning objects*” proposed a model which consists of a semantic annotation of learning objects and automatic semantic annotation. They have created semantic inverted index which can able to find relevant learning objects for queries.

The Brain Computer Interfaces as a significant component of Human-Computer Interaction acts as a communication channel between the brain and a computer program or application. Sofien Gannouni, Nasser Alrayes, Abdulmajeed Alameer Abdulrahman Alsaudi and Ahmad Alabdulkareem in their paper on “*b-mail: a Brain-Controlled Mail Client*” proposed an efficient email client which would enable severely motor-disabled people to open, compose, send, reply and forward emails. They found that this client has performed a real-time classification of user’s brain activity signals using the P300 technique and performs the appropriate corresponding actions.

Mohsin Naqvi, Kashif Hussain, Sohail Asghar and Simon Fong have addressed the limitations of the current temporal association mining in database content updating. They in their paper on “*Role of Segment Progressive Filter in Dynamic Data mining*” have introduced the Incremental Standing method for Segment Progressive Filter (ISPF) that can support the database update and mine updated datasets. They have applied the scan reduction technique in their experiments to generate all candidate k-item sets to form 2-candidate item sets directly. The testing has recorded the algorithm results with clear illustrations.

This issue shows the wide range and the exciting research that it addressed many areas and provides a good platform for researchers in the respective domains to showcase their inferences and communicate to a wider circle of researchers.

Editors