

## Editorial

We bring the fifth issue of the fifteenth volume of the *Journal of Digital Information Management* with the technically enhanced research pieces.

In the opening paper on **“Dynamic Parse Approach of Ladder Diagram Based on Binary Logic Tree on the Soft PLC System”** the authors *Guanci Yang, Jing Yang* and *Shaobo Li* to achieve the control functions studied the compiling problem of ladder diagrams (LDs) that coordinate with a soft-PLC system. They designed the structure of the ladder diagrams based on the parallel logic relationship. The authors using statistical results viewed that the time overhead and interrupt response time showed that the proposed method performed better in most cases, indicating its superior capability to run the control logic.

*JIA Zhaoyang* and *CHEN Guangxue* in their paper on **“Study on Digital Image Inpainting Method Based on Multispectral Image Texture Synthesis”** using the multispectral image texture synthesis proposed the Digital image inpainting method. They have adopted the improved Criminisi algorithm to calculate the image gradient based on IHS space. They claimed based on the experimentation that the improved Criminisi algorithm is superior to traditional image inpainting algorithm.

*Yosra Ben Salem, Rihab Idodi, Karim Saheb Ettabaa, Kamel Hamrouni* and *Basel Solaiman* in their paper on **“High Level Mammographic Information Fusion For Real World Ontology Population”** proposed the ontology instantiating from real data related to the mammographic domain. They have validated their approach in the real world domain and the results were evaluated in terms of precision and recall by an expert.

In the paper on **“OCC-Mix Approach for Concurrent Mixture of Fixed and Mobile Transactions”** the authors *Ahmad Al-Qerem, Ala Hamarsheh* and *Shadi Nashwan* advocated a new optimistic based concurrency control protocol, called OCC-Mix. Their intention is to reduce the scars wasting and expensive resources of mobile environment. They carried out the simulation study which shown that the performance of these protocols is consistently much better than the traditional 2PL and OCC protocols in mixed transaction environments.

*Driss Allaki, Mohamed Dahchour* and *Abdeslam En-nouaary* in the last paper of the issue **“Building consistent UML models for better Model Driven Engineering”** viewed that the inconsistencies in the UML models would affect the productivity and the consideration of execution platforms. To solve this issue they proposed a constraint-based method that defines consistency rules expressed using the Epsilon Validation Language to automatically detect and fix the potential inconsistencies that could compromise the application of MDA through UML diagrams.

The papers we do hope contribute towards the improvement of the methodological features.

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