Editorial Preface

Workflows Over Heterogeneous Cloud

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This regular issue of the International Journal of Web Services Research (IJWSR) has four papers.

The first paper, A Novel Completion-Time-Minimization Scheduling Approach of Scientific Workflows over Heterogeneous Cloud Computing Systems, aims to achieve near-optimal heterogeneous-cloud-based scientific workflow scheduling. Bukhari et al. propose a meta-heuristic-based scheduling method for scientific workflows to reduce the time of workflow completion through appropriately managing the acquisition and transmission delays required for inter-PM communications. Besides, their experimental results show that the proposed method outperformed the state-of-the-art ones in terms of multiple performance metrics.

In the second paper entitled Understanding the Determinants of Consumer Satisfaction with B&B Hotels: An Interpretive Structural Modeling Approach, Lin Xiao et al. explore the determinants of consumer satisfaction with bed-and-breakfast establishments (B&Bs) and build a hierarchical structure of these determinants. The hierarchical structure depicts how the factors influence each other and how customers can be satisfied in a step-by-step manner. Also, this paper provides actionable guidelines for B&B operators making marketing strategies to improve user experience.

In the third paper entitled Fused Collaborative Filtering with User Preference, Geographical and Social Influence for Point of Interest Recommendation, Jun Zeng et al. propose a unified point-of-interest recommendation framework, which fuses personalized user preference, geographical influence, and social reputation, to make high-quality POI recommendations. The experimental results on a real-world dataset demonstrated the effectiveness of the proposed method.

The fourth paper, ADOMC-NPR: Automatic Decision-making Offloading Framework for Mobile Computation using Nonlinear Polynomial Regression Model, aims to deal with an obstacle in executing computationally-intensive applications. Elhousieny et al. propose an automatic decision-making offloading framework for mobile computing. The experimental results show that the proposed framework composed of two phases named adaptive learning and modeling and runtime computation offloading performed better than a state-of-the-art technique by 73% concerning the time factor.

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IJWSR