Editorial Preface

Edge Computing Resources Planning

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This regular issue of the *International Journal of Web Services Research* (JWSR) collects five papers.

The first article, entitled "Resource Allocation Scheduling Algorithm Based on Incomplete Information Dynamic Game for Edge Computing," aims to address the multi-end user task offloading and edge resource allocation problem using a dynamic game-based approach. Wang *et al.* proposed an incomplete information dynamic multi-winner game-based approach to arrange multi-end user tasks over heterogeneous infrastructural edge resources. They also designed a resource allocation algorithm based on different priorities and task types to implement resource allocation in edge data centers. Experimental results indicate that the proposed approach can effectively optimize system performance in terms of time delay, energy consumption, and cost.

The second article, entitled "Probabilistic-QoS-Aware Multi-Workflow Scheduling Upon the Edge Computing Resources," aims to address the edge-resource-based workflow scheduling problem. Tang *et al.* proposed a probabilistic-QoS-aware multi-workflow scheduling framework by leveraging a probabilistic QoS aggregation model and a discrete firefly algorithm for generating workflow scheduling decisions. The proposed method is proven to guarantee low workflow completion time, cost, and deadline violation rate.

The third article, entitled "ResumeVis: Interactive Visualization of Resumes Based on Multi-Source Data," explores the decade characteristics and significant characteristics from a multi-source dataset. Wang *et al.* developed an interactive visualization system called ResumeVis to explore career patterns in the context of times, especially the correlations among the resume attributes. The system is proven to be helpful for both job seekers and human resources.

The fourth article, entitled "Integrating Community Interest and Neighbor Semantic for Microblog Recommendation," aims to address two inevitable problems in the microblog recommendation: the cold start of microblog users and the short length of microblog text. Gan *et al.* proposed a microblog information recommendation model by integrating community interest and neighbor semantics based on the Kullback-Leibler language model. The recommendation model enhances the description of user interests and the expression of microblogs' semantics. Real data from Sina Weibo was crawled to evaluate recommendation performance, and the empirical results demonstrated the proposed approach's effectiveness.

The fifth article, entitled "Bi-Objective Competition Pricing Model for Component Web Service Economy," investigates networked individual service providers' pricing behavior. Wang *et al.* proposed a bi-objective optimization model based on several mild assumptions. They demonstrated the NP-completeness of the single-objective version, which attempts to maintain a reasonable effectiveness-fairness trade-off from the individual service providers' perspective. The numerical experimentation and case study validated the proposed model's effectiveness.

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Liang-Jie (LJ) Zhang received his Ph.D. in Pattern Recognition and Intelligent Control from Tsinghua University. Currently, he is the Chief Technology Officer (CTO) and Senior Vice President of Kingdee International Software Group Company Limited. Dr. Zhang has published more than 160 technical papers in journals, book chapters, and conference proceedings. He has 50 granted patents. He was elected as an IEEE Fellow in 2011, and in the same year won the Technical Achievement Award "for pioneering contributions to Application Design Techniques in Services Computing" from the IEEE Computer Society. He has served as the President of Shenzhen Big Data Alliance since 2013. Dr. Zhang is the Editor-in-Chief of the International Journal of Web Services Research (IJWSR).