

## GUEST EDITORIAL PREFACE

# Special Issue on New Techniques of Services Computing

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The services computing is a new cross-discipline and widely accepted paradigm that leverages both science and technology needed to bridge the gap between business services and IT/telecommunication services. With the emergency of new techniques such as Big Data, Mobile Computing, Cloud Computing, etc., new trends of services computing techniques emerge for developing new computing technology to enable larger-scale business services efficiently and effectively. This special issue includes the best papers selected from the Eighth Asia-Pacific Services Computing Conference. This year, we have received 205 submissions, and after a rigorous peer review process, a number of 15 papers with highest scores were selected by the program committee to be invited to be submitted to International Journal of Web Service Research. In this special issue, we present five high quality research articles on new topics that are promising in current emerging Services Computing solutions. We believe the designs proposed in these ten articles will help to inspire

more interesting and promising solutions in this research area.

In the first paper, “Automatic Construction of Service Network based on OpenCyc”, Xiaocao Hu et al. propose Service Network as an infrastructure that allows users to discover, deploy, synthesize and compose Web Services automatically. The authors present an approach for the automatic construction of Service Network.

In the second paper, “Regularity and Variability: Growth Patterns of Online Friendships”, Lun Zhang et al. employ multinomial logistic regression to discover that network connectedness lead to the differences in the growth patterns of online friendships, while a user’s personal strategy of online friendship formation has a nil effect on explaining the differences in growth patterns of online friendships.

In the third paper, “Improving Recommendation Accuracy and Diversity via Multiple Social Factors and Social Circles”, Yong Feng et al. propose a novel recommendation model

which considers more comprehensive social factors including individual preference, interpersonal trust influence, interpersonal interest similarity and interpersonal closeness degree to improve the recommendation accuracy.

In the fourth paper, “An integrated framework for semantic service composition using answer set programming”, Yilong Yang et al. present an integrated framework for semantic service composition using answer set programming which integrates designed workflow with nested composition.

In the fifth paper, “Improve Distributed Client LifecycleControl in ShadowStream”, Junhua Yan et al. develop a novel distributed client lifecycle control scheme, which matches the desired experimental scenario with real viewers’ behavior in physical world, to get rid

of restrictions caused by the limited number of stable viewers in live-testing streaming networks.

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