This issue of the *International Journal of Web Services research* collects five articles on various topics of Web services.

The first article is titled “Security Personalization for Internet and Web Services.” Yee and Korba address the issue of how to define and negotiate security concerns related to Web services. They propose a security personalization approach that allows Web service providers and customers to negotiate to an agreed-upon personalized security policy.

The second article is titled “Automating the composition of transactional Web services.” Montagut et al. address how to take transactional consistency into consideration, in addition to functional requirements, in the selection process of Web services composition. Based on the acceptable termination states model, they propose an approach to automate the design of transactional composite Web services. Coordination rules are automatically extended.

The third article is titled “Pattern-based Translation of BPMN Process Models to BPEL Web Services.” Ouyang et al. explore effective translation from business process modeling notation (BPMN) that is a graph-oriented language typically used by domain analysts to business process execution language for Web services that is block-structured language typically used by software developers. In addition to direct mapping between perfectly block-structured fragments in BPMN models, their work focuses on identifying quasi-structured fragments and flow-based acyclic fragments in BPMN models that can be turned into perfectly structured ones and a combination of structured constructs and control links.

The fourth article is titled “Data Mining in Web Services Discovery and Monitoring.” Nayak examines the application of data mining in the domain of Web services and some challenges. The author presents a case study of applying the clustering data mining technique to facilitate Web services discovery process, in addition to recommending several data mining applications that may leverage problems regarding the discovery and monitoring of Web services.

The fifth article is titled “Constructing Home Network Systems and Integrated Services Using Legacy Home Appliances and Web Services.” Nakamura et al. present a case study of how to adapt legacy designs into an SOA-based system to improve programmatic interoperability among multi-vendor appliances. They report their experience of transforming home electric appliances with infrared remote controls (legacy appliances) into SOA-based home network system.
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