This special issue of the International Journal of Web Services Research (JWSR) collects four papers related to Service Trustworthiness, Accountability and Testing. They are all extended versions from papers published IEEE International Conference on Web Services (ICWS) and IEEE International Conference on Services Computing (SCC).

The first paper is titled *Connecting the Average and the Non-Average: A Study of the Rates of Fault Detection in Testing WS-BPEL Services*. Jia, Mei, Chan, Yu, and Tse examine test case prioritization for WS-BPEL applications in both the average scenarios and adverse scenarios. They observe a strong linear correlation between the effectiveness in the average and adverse scenarios.

The second paper is titled *A Trust-Powered Technique to Facilitate Scientific Tool Discovery and Recommendation*. Zhang, Lee, Votava, Lee, Wang, Srim, Saini, Rao, and Nemani propose to leverage human trust to facilitate software service selection and recommendation. They build a trust model that leverages the implicit human factor to help quantify the trustworthiness of candidate services. The performance factor is studied and experience is reported based on their prototyping system.

The third paper is titled *Modeling Accountable Cloud Services Based on Dynamic Logic for Accountability*. Zou, Wang, and Orgun create a new form of process algebra called Accountable Process Algebra (APA) to tackle the issue of unmanaged accountability of cloud computing services. They also propose an Obligation Flow Diagram (OFD) for conflict resolution and model verification.

The fourth paper is titled *A Practical Approach towards Automatic Testing of Web Services Interoperability*. Elia, Laranjeiro, and Vieira propose a practical testing process to examine interoperability of web services. Empirical studies are reported.

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