Message from TACS 2006 Chairs

Welcome to the IEEE International Workshop on Trusted and Autonomic Computing Systems (TACS 2006) and to Vienna, Austria.

As computer systems become increasingly large and complex, their trustworthiness and self-manageability play an important role in supporting the next-generation science, engineering, and commercial applications. For critical applications, users rely on the confidentiality, correctness, and availability provided by such systems. A complicating factor is that the technology used to develop large and complex systems introduce new kinds of accidental and deliberate faults causing such systems to fail. Designing, analyzing, and evolving such complex systems is non-trivial. Autonomic computing appears to be a promising solution to this problem. It will enable systems to manage themselves by providing self-optimization, self-healing, self-configuration, and self-protection. Trusted and autonomic computing and communications need synergistic research efforts covering many disciplines, ranging from computer science and engineering, the natural sciences, to the social sciences. It requires scientific and technological advances in a wide variety of fields, as well as new software, system architectures, and communication systems that support the effective and holistic integration of the constituent technologies.

Reacting to this increased need for developing large and complex trustworthy systems, researchers have contributed significantly to advancements in the theory, design, implementation, analysis, and application of autonomic and trusted computing. This international workshop is aimed at promoting the exchange of the latest ideas, novel designs, theoretical and experimental results, and case studies among computer scientists, industry professionals, and researchers over the world. It provides insights into research activities in this nascent area through 10 articles from 7 countries selected after a careful review process. The selected papers span a broad range of research themes in the trusted and autonomic computing areas, such as, developing trusted software, predicting trust, security protocols, recovery and anti-spam mechanisms, autonomic services, multicast, components, and database systems.

This event and program would not have been possible without the dedicated efforts of the steering and program committees. We would like to thank all the authors for submitting their high quality research results, and the reviewers for their insightful reviews. We also gratefully acknowledge the IEEE Computer Society and Vienna University of Technology for sponsoring the conference. We are grateful to the organizers of The IEEE 20th International Conference on Advanced Information Networking and Applications (AINA 2006) for hosting the workshop.

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