Preface

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Biographical notes: Martin Gilje Jaatun received an MSc (siv.ing.) in Telematics from the Norwegian Institute of Technology (NTH) in 1992. Currently, he is a Research Scientist at SINTEF ICT, where he heads the Information Security Group in the department of Software Engineering, Safety and Security. His primary research interests are computer and communications security, recently focusing on information security challenges in process control environments in the offshore petroleum industry. He is a Member of the IEEE Computer Society.

Professor Chunming Rong leads the research group 'Distributed Sensor and Control Systems (DISCOS)' at the University of Stavanger, and serves as an Adjunct Professor at the University of Oslo. He received ConocoPhilips Communication Award 2007 and Editor's Choice award for his paper in Discrete Mathematics in 1999. He is an Associated Editor in several international journals and leads four major Norwegian research projects. He also participates actively in industrial projects for enabling future information convergence. His research interests include computer and network security, wireless communications, computer logic reasoning and semantic web technology.

Frode Eika Sandnes received a BSc in Computing Science from the University of Newcastle Upon Tyne, England, and a PhD in Computer Science from the University of Reading, England. Currently, he is a Full Professor in the Department of Computer Science at the Oslo University College. He is a

Member of a handful of journal editorial boards including *Journal of Software and Systems* (Elsevier) and involved in the organisation of many technical conferences. His current research focuses on human computer interaction, and in particular ubiquitous and pervasive technologies, novel interaction styles, universal design, skill transfer, text input and touch technologies.

This special issue is dedicated to the best papers presented at the fifth international conference on Autonomic and Trusted Computing 2008 (ATC'08) that took place during June 23–25, 2008, in Oslo, Norway. ATC'08 attracted 75 submissions from 21 countries worldwide of which only 26 manuscripts were accepted as regular papers. The fine selection of papers presented herein was selected based on the referee reports and recommendations made by the technical programme committee as well as the presentations made at the conference. We have considered academic quality, timeliness and relevance during the selection process.

The selected papers cover many aspects of autonomic and trusted computing, reflecting the diversity of the many interesting papers presented at the conference. Prothmann, Tomforde, Rochner, Branke, Hähner, Müller-Schloer and Schmeck applied organic computing to the control of traffic lights in an urban environment, allowing them to autonomously react to changing traffic conditions. She and Leung investigated individual agent's wealth in minority games, showing how privileged agents can outperform other agents in the same model. Ziener and Teich proposed new methods for checking the correctness of control flow instructions issued during the execution of programmes for embedded RISC CPUs. Glaubious, Tidwell, Gill and Smart summarised their work on scheduling policy design which is an important issue in autonomic systems, and presented a new algorithm for computing an optimal scheduling policy. Jaatun, Grøtan and Line presented how remote access to safety instrumented systems on offshore installations can be achieved in a secure manner; thus, preventing security threats from influencing the autonomous safety systems.

Each contribution has been significantly revised in terms of quantity and quality and represents a more updated take on the authors' current research. Each paper has gone through a rigorous review process involving at least three anonymous reviewers that are top experts in the field.

We as editors are grateful for the authors for their hard work and prompt responses to our request and the anonymous reviewers for making their valuable expertise available.