Preface

Embedded and ubiquitous computing systems have considerably increased their scope of application over the past few years, and they now also include mission- and business-critical scenarios. The advances call for a variety of compelling issues, including dependability, real-time, quality-of-service, autonomy, resource constraints, seamless interaction, middleware support, modeling, verification, validation, etc.

The International Workshop on Software Technologies for Future Embedded and Ubiquitous Systems (SEUS) brings together experts in the field of embedded and ubiquitous computing systems with the aim of exchanging ideas and advancing the state of the art about the above-mentioned issues. I was honored to chair the sixth edition of the workshop, which continued the tradition of past editions with high-quality research results. I was particularly pleased to host the workshop in the wonderful scenario of Capri, with its stunning views and traditions.

The workshop started in 2003 as an IEEE event, and then in 2007 it became a flagship event of the IFIP Working Group 10.2 on embedded systems. The last few editions, held in Hakodate (Japan), Vienna (Austria), Seattle (USA), Gyeongju (Korea), and Santorini (Greece), were co-located with the IEEE International Symposium on Object/Component/Service-Oriented Real-Time Distributed Computing (ISORC).

This year, SEUS was held as a stand-alone event for the first time, and, despite the additional organizational difficulties, it resulted in a high-quality event, with papers from four continents (from USA, Europe, East Asia and Australia), (co-) authored and presented from senior scientists coming from academia or leading industrial research centers.

SEUS 2008 would not have been possible without the effort of many people, first of all, the authors, who contributed with their invaluable advances in the field. I am particularly thankful to the Program Co-chairs, Uwe Brinkshulte and Tony Givargis, and to the Program Committee members for their great work in selecting the best papers and making up the technical program that is contained this book. I would also like to thank Local Arrangements Chairs Marcello Cinque, Domenico Cotroneo, and Isabella Scarpa, for their effort in organizational issues. I am greatly thankful to Kane Kim and Franz Rammig for their continuous support and advice. Finally, thanks are due to Springer and to the following supporting institutions: IFIP WG 10.2; the Federico II University of Naples, that hosted the workshop in its congress center in Anacapri; and the Italian Inter-universities Consortium for Informatics (CINI) for organizational support.

October 2008

Stefano Russo
Message from the Program Co-chairs

It was a great pleasure for us to welcome attendees to Capri and to announce the technical program of the 6th IFIP Workshop on Software Technologies for Future Embedded and Ubiquitous Systems (SEUS 2008). Following the success of SEUS 2007, the first workshop edition sponsored by IFIP, the current edition continued with its focus on topics like emerging applications, software architecture and programming models, model-driven development, quality-of-service and performance, middleware and operating systems, synthesis, verification and protection, pervasive and mobile systems, organic computing, real-time, and wireless embedded systems. In contrast to previous editions, SEUS 2008 was held as a stand-alone event for the first time.

SEUS 2008 was a forum where researchers and practitioners with substantial experience and serious interests in advancing the state of the art and the state of practice in the field of future embedded and ubiquitous computing systems gather and engage in a review of the areas, exchange of significant developments, and brain-storm on promising directions for future research. The program was composed of invited and submitted contributions, both undergoing a strict review process by the international and well-reputed Program Committee. We selected 38 high-quality papers, contributions that present advances in integrating the fields of embedded computing and ubiquitous systems.

Many people worked hard to make SEUS 2008 a success. We would like to thank the Program Committee members and the reviewers for their hard work and for their input in the selection of papers. We would also like to thank all those who submitted papers for their efforts and for the quality of their submissions. Furthermore, this conference would not have been possible without the great work of the General Chair, Stefano Russo, and the local arrangements provided by Marcello Cinque, Domenico Cotroneo and Isabella Scarpa. Finally, special thanks to Kane Kim for his invaluable support and advice.

October 2008

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