Preface

Research and development of autonomies have come a long way, and we are delighted to present the proceedings of the 4th IEEE International Workshop on Modeling Autonomic Communications Environments (MACE 2009). As in the last three years, this workshop was held as part of Manweek, the International Week on Management of Networks and Services, which took place in the culturally rich city of Venice in Italy. Manweek is now an umbrella of five workshops and conferences focusing on different aspects of network and service management, including MACE, distributed operations and management (DSOM), IP-based management (IPOM), towards multimedia and mobile networks (MMNS), and virtualization and middleware for next generation networks (NGNM). Further information of Manweek and the individual workshops and conferences can be found at http://www.manweek.org.

MACE started as an experiment, in 2006, and created a small community that now finds itself attracted back each year by a feeling of excitement and anticipation to share new advances and development. Certainly, MACE is not as shiny or practiced as other well-known conferences and workshops, but we consider this a feature of the workshop itself. New ideas, a little rough around the edges (and sometimes more than a little), often quite unfinished, pop out and provoke extensive discussion. Science needs this kind of exploratory adventure, and we have been strongly motivated to continue preserving this atmosphere of exploration and discussion in this year’s technical program.

This year, the submissions were closely related to the main themes of the workshop. We saw new architectural designs as well as new applications of autonomic principles to specific networking problems. This depicts a maturity in the domain, which is entering a second round of research work taking advantages from the lessons learned in the last few years. We can call this part of MACE the “renewal of autonomies,” acknowledging that we still have some way to go towards defining additional principles and fully establishing autonomic management as the standard for use.

We are very proud to present you this year’s proceedings as a volume of Springer’s Lecture Notes in Computer Science (LNCS) again. This book presents the accepted papers of the technical sessions of MACE 2009. We had, overall, 13 submissions, of which we accepted 6 as full papers. Furthermore, we allowed three submissions as short papers. Each paper was reviewed by at least three experts in the domain. Furthermore, to make sure that the accepted papers provided an interesting program, we discussed all submissions and all the reviews provided by the MACE TPC in full detail. We believe that, to support the objectives of MACE, this effort was well-worth doing and we hope that this book provides you with cutting-edge ideas, thoughtful presented solutions and pursuable experiments.
Finally, we would like to thank the many people whose hard work and commitment were essential to the success of MACE 2009. Foremost amongst these are the researchers who submitted papers to the workshop. We would like to express our gratitude to the MACE Technical Program Committee for their advice and support through all the stages of the workshop preparation. We thank all reviewers for their fair and helpful reviews. We thank the IEEE Communications Society and the Autonomic Communications Forum (AFC) for support and sponsorship of MACE. Most of the more time-consuming practical and logistical organization tasks for the workshop were handled by the members of the Manweek 2009 Organizing Committee – this made our jobs significantly easier, and for that we are very grateful. Finally, we wish to acknowledge the financial support of the Manweek sponsors, whose contributions were hugely instrumental in helping us run what we hope was a stimulating, rewarding and, most importantly, an enjoyable workshop for all its participants.

October 2009

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