

# Preface

This book contains the proceedings of the 13th German conference on Multiagent System Technologies (MATES 2015), which was held September 28–30, 2015, in Cottbus, Germany. The MATES conference series aims at the promotion of and cross-fertilization between the theory and application of intelligent agents and multiagent systems (MAS). It provides an interdisciplinary forum for researchers and members of business and industry to present and discuss the latest advances in agent-based computing with prototyped or fielded systems in various application domains.

The MATES 2015 conference was organized in cooperation with the Distributed Artificial Intelligence chapter of the German Society for Informatics (GI), and sponsored by the GI. Moreover, it was co-located with the 45th Symposium of the German Society for Informatics (INFORMATIK 2015). It also contained a joint session on “Multiagent Systems for Smart Energy” in cooperation with the GI Special Interest Group on energy information systems.

The set of regular MATES 2015 conference talks covered a broad area of topics of interest including MAS platforms and engineering, benchmarking and scalability, innovative and emerging applications, Smart Things working together (which was also the main motto of this year’s MATES conference), as well as quality aspects of MAS. In keeping with its tradition, MATES 2015 also offered two excellent invited keynotes by well-known, reputed scientists in the domain, covering relevant topics of the broad area of intelligent agent technology: Tom Holvoet from Katholieke Universiteit Leuven, Belgium, addressed the support of decentralized, cooperative, anticipatory traffic management using a novel, multiagent-based concept called “Delegate MAS”; Wolf Ketter from Erasmus University, Rotterdam, gave a vivid presentation of issues of sustainability in the context of his work on the *PowerTAC* initiative.

Furthermore, the MATES doctoral consortium (DC) program, chaired by Nils Bulling, offered PhD students a platform to present and to discuss their work in an academic professional environment. Students presented their PhD projects in joint sessions receiving feedback and suggestions from their peers and experienced researchers. Moreover, each PhD student was assigned a mentor offering the student the opportunity to interact with an expert in the field on an individual basis. The mentors gave personalized feedback on the students’ work and provided advice for their (academic) career development.

Overall, we received 27 submissions. Each paper was peer-reviewed by at least three members of an international Program Committee (PC). Eleven papers were accepted for long presentation, and two papers were accepted for short presentation. This volume includes selected and thoroughly revised contributions from the MATES 2015 conference, an invited paper, and extended abstracts of the best contributions to the DC. Each revised paper was reviewed again by two additional members of the MATES PC to yield the camera-ready versions contained in this book. It is our hope

that the balanced set of theoretical and application-oriented contributions contained in this volume will stimulate further research in multiagent systems and technologies.

As co-chairs and on behalf of the MATES Steering Committee, we are very thankful to the authors and invited speakers for contributing to this conference, Nils Bulling for chairing the DC and editing the DC contributions for this volume, the PC members and additional reviewers for their timely and helpful reviews of the submissions, as well as the local organization team of Gerd Wagner at BTU Cottbus, who also maintained the MATES 2015 conference homepage. They all contributed in making MATES 2015 a success. We are also indebted to Alfred Hofmann and the Springer LNAI team for their very kind and excellent assistance in publishing these proceedings and for their continuing support of the MATES conference over the past 13 years.

Finally, we hope you enjoy the proceedings of MATES 2015 and draw some useful inspiration and insights from the contributions.

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