Preface

This book includes selected revised and extended papers from the 7th International Workshop on Agent-based Complex Automated Negotiation (ACAN2014), which was held in Paris, France, in May 2014.

Complex automated negotiations include various key issues to realize intelligent agent-mediated negotiations in realistic scenarios. Since these scenarios are complex and complicated, various techniques, models, theories, and methods that came from game theory, economics, intelligent control systems, heuristic algorithms, and interactions among humans have been applied to solve them effectively and efficiently.

Researchers are actively exploring these issues from different communities in autonomous agents and multiagent systems. They are, for instance, being studied in agent negotiation, multi-issue negotiations, auctions, mechanism design, electronic commerce, voting, secure protocols, matchmaking and brokering, argumentation, cooperation mechanisms, uncertainty modeling, distributed optimization, and decision making and support systems, as well as their application areas. The goal of our workshop is to bring together researchers from these various communities to learn about one author’s approaches to the problems, form their long-term collaborations, and solve these complex problems by applying and integrating knowledge studied in these different areas to accelerate progress toward scaling up to larger and more realistic applications.

ACAN has been closely and tightly cooperating with Automated Negotiating Agents Competition (ANAC), in which automated agents that have different negotiation strategies and are implemented by different developers compete against one another in different negotiation domains. Based on the great success of ANAC2010, ANAC2011, ANAC2012, and ANAC2013, ANAC2014 was also held within the International Conference on Autonomous Agents and Multiagent
Systems (AAMAS) 2014 in Paris. This book also includes an ANAC special part, where authors of selected finalist agents explain the strategies and ideas used in them.

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