# Table of Contents

Introduction ....................................................... 1  
*John-Jules Ch. Meyer, Milind Tambe*

## Agent Modeling

Knowledge Level Software Engineering .......................... 6  
*Fausto Giunchiglia, Anna Perini, Fabrizio Sannicolo*

Emotions and Personality in Agent Design and Modeling .... 21  
*Piotr J. Gmytrasiewicz, Christine L. Lisetti*

The $\Psi$ Calculus: An Algebraic Agent Language .......... 32  
*David Kinny*

Evolving Real-Time Local Agent Control  
for Large-Scale Multi-agent Systems ......................... 51  
*Thomas Wagner, Victor Lesser*

## Formal Specification and Verification of Agents

On the Epistemic Feasibility of Plans  
in Multiagent Systems Specifications .......................... 69  
*Yves Lespérance*

On Multi-agent Systems Specification via Deontic Logic .... 86  
*Alessio Lomuscio, Marek Sergot*

Agents and Roles: Refinement in Alternating-Time Temporal Logic .... 100  
*Mark Ryan, Pierre-Yves Schobbens*

The Computational Complexity of Agent Verification .......... 115  
*Michael Wooldridge, Paul E. Dunne*

## Agent Architectures and Languages

A Goal-Based Organizational Perspective on Multi-agent Architectures ... 128  
*Manuel Kolp, Paolo Giorgini, John Mylopoulos*

$\mathcal{MINERVA}$ - A Dynamic Logic Programming Agent Architecture .... 141  
*João Alexandre Leite, José Júlio Alferes, Luís Moniz Pereira*

Running AgentSpeak(L) Agents on SIM_AGENT .................. 158  
*Rodrigo Machado, Rafael H. Bordini*
Agent Communication

Ontological Overhearing ...................................................... 175
  Marco Aiello, Paolo Busetta, Antonia Donà, Luciano Serafini

Agent Dialogues with Conflicting Preferences .......................... 190
  Leila Amgoud, Simon Parsons

An Abstract Machine for Classes of Communicating Agents
Based on Deduction ............................................................ 206
  Pierre Bonzon

A Formal Semantics for ProxyCommunicative Acts ................. 221
  Marcus J. Haber, Sanjeev Kumar, Philip R. Cohen, David R. McGee

Commitment Machines ....................................................... 235
  Pınar Yolum, Munindar P. Singh

Collaborative Planning and Resource Allocation

Generating Bids for Group-Related Actions
in the Context of Prior Commitments .................................... 248
  Luke Hunsberger

Dynamic Distributed Resource Allocation:
A Distributed Constraint Satisfaction Approach ........................ 264
  Pragnesh Jay Modi, Hyuckchul Jung, Milind Tambe, Wei-Min Shen,
  Shrinivas Kulkarni

Improving Optimality of n Agent Envy-Free Divisions ............. 277
  Stephen W. Nuchia, Sandip Sen

Trust and Safety

Trustworthiness of Information Sources and Information Pedigrees .... 290
  Wei Liu, Mary-Anne Williams

Revisiting Asimov’s First Law: A Response to the Call to Arms ...... 307
  David V. Pynadath, Milind Tambe

Formal Theories of Negotiation

Formal Theories of Negotiation. Section Introduction .................. 321
  Frank Dignum

A Stable and Feasible Payoff Division for Coalition Formation
in a Class of Task Oriented Domains ..................................... 324
  Maria Victoria Belmonte, Ricardo Conejo, José Luis Pérez-de-la-Cruz,
  Francisco Triguero
## Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antisocial Agents and Vickrey Auctions</td>
<td>335</td>
</tr>
<tr>
<td><em>Felix Brandt, Gerhard Weiβ</em></td>
<td></td>
</tr>
<tr>
<td>Formalizing a Language for Institutions and Norms</td>
<td>348</td>
</tr>
<tr>
<td><em>Marc Esteva, Julian Padget, Carles Sierra</em></td>
<td></td>
</tr>
<tr>
<td>Simple Negotiating Agents in Complex Games:</td>
<td>367</td>
</tr>
<tr>
<td>Emergent Equilibria and Dominance of Strategies</td>
<td></td>
</tr>
<tr>
<td><em>Peyman Faratin, Mark Klein, Hiroki Sayama, Yaneer Bar-Yam</em></td>
<td></td>
</tr>
<tr>
<td>Optimal Negotiation Strategies for Agents with Incomplete Information</td>
<td>377</td>
</tr>
<tr>
<td><em>S. Shaheen Fatima, Michael Wooldridge, Nicholas R. Jennings</em></td>
<td></td>
</tr>
<tr>
<td>Implicit Negotiation in Repeated Games</td>
<td>393</td>
</tr>
<tr>
<td><em>Michael L. Littman, Peter Stone</em></td>
<td></td>
</tr>
<tr>
<td>Dialogues for Negotiation: Agent Varieties and Dialogue Sequences</td>
<td>405</td>
</tr>
<tr>
<td><em>Fariba Sadri, Francesca Toni, Paolo Torroni</em></td>
<td></td>
</tr>
<tr>
<td><strong>Agents for Hand-Held, Mobile, or Embedded Devices</strong></td>
<td></td>
</tr>
<tr>
<td>Agents for Hand-Held, Mobile, or Embedded Devices.</td>
<td></td>
</tr>
<tr>
<td>Section Introduction</td>
<td>422</td>
</tr>
<tr>
<td><em>Tim Finin</em></td>
<td></td>
</tr>
<tr>
<td>KSACI: A Handheld Device Infrastructure for Agents Communication</td>
<td>423</td>
</tr>
<tr>
<td>*Ryan L. Albuquerque, Jomi F. Hübner, Gustavo E. de Paula,</td>
<td></td>
</tr>
<tr>
<td><em>Jaime S. Sichman, Geber L. Ramalho</em></td>
<td></td>
</tr>
<tr>
<td>LEAP: A FIPA Platform for Handheld and Mobile Devices</td>
<td>436</td>
</tr>
<tr>
<td><em>Federico Bergenti, Agostino Poggi</em></td>
<td></td>
</tr>
<tr>
<td>FIPA-OS Agent Platform for Small-Footprint Devices</td>
<td>447</td>
</tr>
<tr>
<td><em>Mikko Laukkonen, Sasu Tarkoma, Jani Leinonen</em></td>
<td></td>
</tr>
<tr>
<td><strong>Author Index</strong></td>
<td>461</td>
</tr>
</tbody>
</table>
Intelligent Agents VIII
8th International Workshop, ATAL 2001 Seattle, WA, USA, August 1-3, 2001 Revised Papers
Meyer, J.-J.C.; Tambe, M. (Eds.)
2002, XII, 468 p., Softcover
ISBN: 978-3-540-43858-8