

NICHOLAS ROBERT JENNINGS

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I. PERSONAL RECORD**Appointments Held**

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| 2016- | Vice-Provost (Research), Imperial College |
| 2016- | Professor of Artificial Intelligence, Imperial College |
| 2016- | Visiting Professor, Electronics and Computer Science, Univ. of Southampton |
| 2015-16 | Head of the Electronics and Computer Science Department, Univ. of Southampton |
| 2014-16 | Regius Professor of Computer Science, Univ. of Southampton |
| | (a post bestowed by Queen Elizabeth II on her Diamond Jubilee
to "recognise exceptionally high quality research") |
| 2010-15 | Chief Scientific Advisor for National Security to the UK Government |
| 2008-10 | Associate Dean (Research and Enterprise), Faculty of Engineering, Science and Mathematics, Univ. of Southampton |
| 2000-14 | Professor, Electronics and Computer Science, Univ. of Southampton |
| 1998-99 | Professor, Electronic Engineering, Queen Mary Univ. of London |
| 1995-98 | Reader, Electronic Engineering, Queen Mary Univ. of London |
| 1989-95 | Lecturer, Electronic Engineering, Queen Mary Univ. of London |
| 1988-89 | Research Assistant, Electronic Engineering, Queen Mary Univ. of London |

Qualifications

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| 1992 | PhD Artificial Intelligence, Queen Mary University of London |
| 1988 | BSc (Hons.) Computer Science (First Class), University of Exeter |

National Honours

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| 2016 | Companion of The Order of the Bath (CB)
"For services to Computer Science and National Security Science" |
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Fellowships and Professional Society Memberships

- Fellow of the German Research Centre for AI (2012)
- Fellow of the Association for the Advancement of Artificial Intelligence (2010)
- Fellow of the Institute of Electrical and Electronic Engineers (2008)
- Member of Academia Europaea (2008)
- Fellow of the Society for the Study of AI and Simulation of Behaviour (2006)
- Fellow of the Royal Academy of Engineering (2005)
- Fellow of the Institution of Engineering and Technology (2004)
- Chartered IT Professional (2004)
- Fellow of the British Computer Society (2003)
- Fellow of the European Artificial Intelligence Association (2003)
- Chartered Engineer (2003)

External Appointments

- Advisor to:
 - Aerogility (www.aerogility.com) (2000-)
 - Contact Engine (www.contactengine.com) (2017-)
 - Crossword Cybersecurity (www.crosswordcybersecurity.com) (2016-)
 - Mentat (www.ment.at) (2016-)
 - Reliance Cyber Science (relianceacsn.co.uk) (2016-)
- Trustee of the Building Research Establishment (2015-)

- Non-Executive Board member of CERT-UK (2014-16)
- Founding Director of Int. Foundation on Autonomous Agents and Multi-Agent Systems (1998-2012)
- Distinguished Adjunct Professor at King Abdulaziz University, Saudi Arabia (2011-)

II. RESEARCH AND SCHOLARSHIP

My long-term research goal is to develop artificial intelligence systems for large-scale, open and dynamic environments. I focus on how to endow individual autonomous agents with the ability to act and interact in flexible ways and with effectively engineering systems that contain both humans and agents. I am interested in these issues from their fundamental principles, through design, to their application in particular problem domains. My research has made advances in: models of automated negotiation, mechanisms and algorithms for inter-agent cooperation and coordination, models of trust and reputation, perspectives and methodologies for agent-oriented software engineering and the science of human-agent collectives.

Citations

- > 70,000 citations and h-index = 112 (Google Scholar, August 2017)
- ISI Web of Science “highly cited” in both the Computer Science and the Engineering categories
- Top 25 in the world for h-index for Computer Science (www.cs.ucla.edu/~palsberg/h-number.html)

Impact

I was the lead system architect for one of the world’s first industrial deployments of multi-agent technology, in the area of electricity transportation, and have subsequently been involved with deployments of agent-based solutions for: environmental sensor network monitoring in the Briksdalsbreen glacier in Norway and in the River Solent in Southampton; controlling Daimler-Chrysler’s engine manufacturing production lines; workforce scheduling within BT; interpreting seismic data for oil exploration with BHP Billiton; managing supply chains and providing in-theatre situational awareness with BAE Systems; assessing and predicting race conditions for the 2012 British Olympic sailing team; disaster assessment and response planning with Rescue Global; analysing and predicting home energy use for those in fuel poverty with the Centre for Sustainable Energy and scheduling the repair of aircraft engines with Rolls-Royce. All of these systems have been used operationally — saving and improving lives, protecting the environment, making business processes more efficient, providing insight on complex data science problems, and helping to win gold medals.

I have been involved with a number of start-ups. At Aerogility, formerly Lostwax, I am involved with the design and roll-out of a decision support tool suite that optimises the scheduling and maintenance activities for fleets of aircraft and allows forward simulation of strategic policy and resourcing choices. This system has been used by: BAE Systems for the Tornado, Harrier, Typhoon, Nimrod and Hawk fleets; Lockheed Martin for the F-22 Raptor and F-35 fleets; Sikorsky Aerospace Services for the S-92 fleet; and Boeing for the TLCS UK Chinook fleet. At Mentat, I work on machine learning technologies for real-time analysis of sensor data for enterprise applications. At Contact Engine, I work on using artificial intelligence techniques to help improve and personalise consumer interactions. At Crossword and Reliance Cyber Science, I provide strategic advice on a broad range of cyber security challenges and opportunities.

Awards

- *The Engineer’s “Collaborate to Innovate” Award* for ORCHID (2016)
- *The Engineer’s Award for Best Aerospace and Defence Project* for ALADDIN (2009)
- *BAE Systems Chairman’s Award* for ALADDIN’s Technology Transfer activities (2009)
- *International Conf. on Autonomous Agents and Multi-Systems Best Industrial Demonstrator Award* (2008)
- *International Foundation for Autonomous Agents and Multi-Agent Systems Special Recognition Award* for paper: “Intelligent agents: theory and practice” *The Knowledge Engineering Review* [> 10,000 citations]
- *The Engineer’s Award for Large Company/Univ. Collaboration* for ARGUS II (2007)
- *ACM Autonomous Agents Research Award* (2003) for contributions to agent-based computing
- *IEE Achievement Medal* (2000) for contributions to agent-based computing
- *Computer and Thought Award* (1999) for contributions to multi-agent systems. [The most prestigious award for a young AI researcher and first time in the award’s 40-year history the recipient was based in Europe]

International Competitions

- Winner US State Department's TAG Challenge on social mobilization and rapid information gathering (2012) (wikipedia.org/wiki/Tag_Challenge)
- Second place in RoboCup Rescue Simulation League (2010)
- Winner 1st and 2nd International Competitions on the Lemonade Stand Game (2010 & 2011) (www.ecs.soton.ac.uk/about/news/3005)
- Winner RoboCup Rescue infrastructure development competition (2007)
- Winner 1st and 2nd International Competitions on Agent Reputation and Trust (2006 & 2007) (www.lips.utexas.edu/art-testbed/competition.htm)
- Winner 20th Anniversary Iterated Prisoner's Dilemma Competition (2004) (www.prisoners-dilemma.com)
- International Trading Agent Competitions (www.sics.se/tac) in: Market Design (3rd in 09, 1st in 07); Travel Game (3rd in 06, 4th in 05, 2nd in 02; 3rd in 01) and Supply Chain Management (2nd in 05, 6th in 04).

Research Fellows and Students

- Current:

PhD students: A. Augustin (14-), M. Kahn (14-), E. Manino (15-), R. Pruna (14-), N. V. Q. Truong (15-)

Research Fellows: Y. Luo (17-)

- Previous:

Research Fellows: A. Bye (Royal Society Industrial Fellow) (06-09), R. Cavalcante (09-11), G. Chalkiadakis (06-11), A. Chapman (09-10), V. D. Dang (04-06), R. K. Dash (05-07), E. David (03-06), P. S. Dutta (05-06), E. Elkind (RCUK Fellow) (07-09), A. Farinelli (07-09), P. Faratin (95-00), E. Gerding (05-07), S. Ghosh (10-13), M. Gibney (97-00), M. He (04-06), G. Hines (11-13), L. M. J. Hogg (98-01), M. Johnson (94-95), N. C. Karunatillake (06-09), A. Lomuscio (99-00), X. Luo (01-06), T. Michalak (09-11), E. Munoz de Cote (08-10), V. Naroditskiy (09-14), T. J. Norman (96-99), P. Panzarasa (99-02), S. Paurobally (02-05), M. Polukarov (07-10), J. Pople (91-93), Z. Rabinovich (07-10), T. Rahwan (06-13), S. D. Ramchurn (04-09), V. Robu (09-14), A. Rogers (03-06), C. Skinner (09-10), J. Stein (94-95), S. Stein (07-15), R. Stranders (10-12), W. T. L. Teacy (06-09, 12-15), L. Tran-Thanh (11-15), P. Turner (95-03), L. Z. Varga (91-93), M. Venanzi (14-15), I. A. Vetsikas (05-11), M. Vinyals (12-14), T. Voice (09-12), P. Vytelingum (06-11), S. Williamson (09-10), F. Wu (11-14), D. Yuen (05-07), D. Zhao (14-16).

PhD students graduated:

1. P. Faratin (2000) "Automated service negotiation between autonomous computational agents"
2. L. M. J. Hogg (2001) "Control of social reasoning in resource bounded agents"
3. S. Kalenka (2001) "Modelling social interaction attitudes in multi-agent systems"
4. C. B. Excelente-Toledo (2003) "The dynamic selection of coordination mechanisms in multi-agent systems"
5. P. Anthony (2003) "Bidding agents for multiple heterogeneous on-line auctions"
6. S. K. Bussmann (2003) "An agent-oriented design methodology for production control"
7. M. He (2004) "Bidding strategies for autonomous trading agents" [**Nominated for ECCAI Distinguished Dissertation award**]
8. V. D. Dang (2004) "Coalition formation and operation in virtual organisations"
9. S. D. Ramchurn (2004) "Multiagent negotiation using trust and persuasion"
10. Y. Z. Wei (2005) "A market-based approach to recommender systems"
11. T. D. Nguyen (2005) "A heuristic model for concurrent bilateral negotiations in incomplete information settings"
12. P. S. Dutta (2005) "Adaptive distributed resource allocation using cooperative information-sharing"
13. R. K. Dash (2006) "Distributed mechanisms for multi-agent systems: analysis and design" [**Winner BCS Distinguished Dissertation award**]
14. Y. K. Kenya (2006) "Optimal allocation and scheduling of demand in deregulated energy markets" (registered at Technical University of Vienna)
15. T. D. Huynh (2006) "Trust and reputation in open multi-agent systems"
16. N. A. Haque (2006) "Resource allocation in communications networks using market-based agents"
17. N. C. Karunatillake (2006) "Argumentation-based negotiation in a social context"
18. P. Vytelingum (2006) "The structure and behaviour of the continuous double auction"
19. J. Patel (2007) "A trust and reputation model for agent-based virtual organisations"

20. W. T. L. Teacy (2007) "Agent-based trust and reputation in the context of inaccurate information sources"
21. T. Rahwan (2007) "Algorithms for coalition formation in multi-agent systems" [Winner BCS Distinguished Dissertation award]
22. V. Narayanan (2008) "A learning-based approach to modelling bilateral, adaptive agent negotiations"
23. S. Stein (2008) "Flexible provisioning for service workflows" [Honourable mention for European AI Association's Distinguished Dissertation award]
24. I. Ponka (2009) "Commitment models and concurrent negotiation strategies in dynamic service markets"
25. M. Allen-Williams (2009) "Bayesian learning for multi-agent coordination"
26. J. Kho (2009) "Decentralised control of wireless sensor networks"
27. A. C. Chapman (2009) "Control of large distributed systems using games with pure strategy Nash equilibria"
28. R. C. Kota (2009) "Decentralised methods for self-adapting agent organisations"
29. S. A. Williamson (2009) "Valuing communication in multi-agent coordination"
30. A. Papakonstantinou (2010) "Mechanism design for the elicitation of costly probabilistic estimates in next generation citizen sensor networks"
31. R Stranders (2010) "Decentralised coordination of information gathering agents" [Nominated BCS Distinguished Dissertation award]
32. B. Shi (2011) "Analysis and design of competing double auction marketplaces"
33. H. S. Packer (2011) "Evolving ontologies with online learning and forgetting algorithms"
34. A. M. Sykulski (2011) "The exploration-exploitation trade-off in sequential decision making problems"
35. K. S. Macarthur (2012) "Multi-agent coordination for dynamic, decentralised task allocation"
36. L. Tran-Thanh (2012) "Budget-limited multi-arm bandits" [Runner-up BCS Distinguished Dissertation award & Honourable mention for European AI Association's Distinguished Dissertation award]
37. F. M. D. Fave (2012) "Theory and practice of coordination algorithms exploiting the Generalised Distributive Law"
38. C. Williams (2013) "Practical strategies for agent-based negotiation in complex environments"
39. O. Prymak (2013) "Achieving accurate opinion consensus in large multi-agent systems"
40. J. McInerney (2014) "Intelligent agents for mobile location services"
41. M. Venanzi (2014) "Trust-based algorithms for fusing crowdsourced estimates of continuous quantities"
42. C. A. Baker (2016) "A combined mechanism for UAV explorative path planning, task allocation and predictive placement"
43. T. Panagopoulos (2016) "Efficient control of domestic space heating systems and intermittent energy resources"
44. Z. Beck (2016) "Collaborative search and rescue by heterogeneous robot teams"
45. E. Alkayal "Agents for cloud computing applications" (writing up)
46. A. Zenonos "Coordinating measurements for participatory sensing applications" (writing up)

Academic visitors: J Campos (94-95), K. Decker (02-03), S. Fatima (08), A. Giovannucci (06-07), K. Larson (08), V. R. Lesser (05), M. Mamokas (17), R. A. Micello (08), E. Oliveira (98), T. Paulussen (02), T. Penya-Alba (13), I. Rahwan (02), C. Sierra (96- 97), N. Stefanovitch (09), M. Vinyals (10), Z. Wei (13-14), Z. Xu (09-10), F. Zambonelli (99-00), Y. Zick (12), C. Zhang (96)

Funding Secured [TOTAL: £25.61M]. Red = current project

Dates	Funding Body	Title	Other Investigators	Value
16-21	MoD and US Army Research Lab	Distributed Analytics and Information Sciences International Technology Alliance	S. Stein	810k
16-21	Royal Academy of Engineering & Roke	Roke / Royal Academy of Engineering Research Chair in Cyber Security	V. Sassone	889k
16-18	EPSRC	Future everyday interaction with the autonomous Internet of Things	E. Costanza, J. Fischer, T. Rodden & S. Ramchurn	806k
15-17	EPSRC	Cyber security solutions for smart traffic control systems	L. Tran-Thanh & B. An	249k

Curriculum Vitae

11-16	EPSRC	Human-agent collectives: From foundations to applications (ORCHID) Winner of The Engineer's "Collaborate to Innovate" Award (2016).	T. Rodden, A. Rogers, L. Moreau, S. Roberts	6470k
12-16	EPSRC	Distributed sensing, control and decision making in multi-agent autonomous systems	S. Veres, A. Rogers, E. Rogers, J. Scanlan	1316k
13-16	EPSRC	International centre for infrastructure futures	B. Collins, S. Ramchurn, B. Bahaj	322k
10-13	EPSRC	Intelligent agents for home energy management	A. Rogers, N. Stanton, B. Bahaj	813k
09-14	Secure Meters Ltd	Intelligent decentralised energy-aware systems	A. Rogers	1500k
08-10	Systems Engineering for Autonomous Systems Defence Technology Centre	Control and management of mobile sensors	A. Rogers & S. Roberts	367k
05-11	EPSRC / BAE Systems	Autonomous learning agents in decentralised data and information networks Winner BAE Chairman's Awards for "Innovation" (2008) and "Enhancing Customer Performance" (2009). Winner of The Engineer award for "Best Defence and Aerospace Project" (2009).	Univ Oxford, Bristol & Imperial, BAE Systems	5470k
04-10	EPSRC	Market-based control of complex computational systems	Univ. Liverpool & Birmingham, HP, BT & BAE	689k
08-09	EPSRC	Autonomic supply chains in computational economies	A. Rogers & D. MacBeth	120k
06-09	Data & Information Fusion Defence Technology Centre	Adaptive energy-aware sensor networks	A. Rogers & N. White	508k
06-09	Data & Information Fusion Defence Technology Centre	Self-organising multi-agent systems	General Dynamics, BT, QinetiQ, Imperial College	404k
02-08	DTI / EPSRC / MoD	Decentralised data fusion Winner of The Engineer's Large Company / University Collaboration Award (2007).	Univ. Oxford, QinetiQ, BAE Systems & Rolls Royce	436k
04-07	EPSRC	Virtual organisations for eScience	Univ. Liverpool	259k
04-06	EPSRC	Southampton / Chicago Grid activity	L Moreau, D de Roure and I. Foster	40k
03-06	BAE Systems	Engineering practical multi-agent systems using game theory		73k
03-06	Data & Information Fusion Defence Technology Centre	Agent-based control systems		463k
03-06	EPSRC / DTI	Trust & reputation in Grid applications	M. Luck	124k
02-05	EPSRC	Argumentation and social influence	Univ of Aberdeen & Dundee	69k
00-05	Mobile virtual centre of excellence	Agents in future generation mobile communication systems (MobileVCE)	Many universities and industrial partners	421k
01-05	EPSRC	Mobile handsets in cooperative agent networks	D. de Roure & L. Moreau	214k
00-04	BT Research	Coalition formation for virtual organisations		138k
00-04	EPSRC / QinetiQ	Mobile agents negotiating for itinerant users in a distributed enterprise	D. de Roure, W. Hall, & L. Moreau	263k
03-04	EPSRC	Adaptive divide and conquer	Univ of Liverpool, Sheffield Birmingham, & Nottingham	60k
00-03	EU	Network of excellence on agent-based computing	M. Luck	502k
00-03	HP Research Labs	Knowledge acquisition for negotiating agents	N. Shadbolt	153k
01-03	EU	Managing intrusiveness in pervasive environments	D. de Roure, M. Luck & L. Moreau	187k
98-02	EPSRC	Practical negotiation for electronic commerce	K. Binmore & M. Wooldridge	163k
98-01	DERA	Team-oriented problem solving		98k

98-00	Marconi Comms Systems	Information brokerage		120k
96-00	Nortel Networks	Negotiating agents for telecommunications		150k
97-00	EPSRC	Agent-based connection admission control	L. Cuthbert & J. Griffiths	128k
96-99	EPSRC	Using agents in a virtual laboratory	Univ Durham & Strathclyde	164k
96-99	EPSRC	Practical rationality in resource bounded agents	J. Bell	162k
95-98	BT Research	Negotiating agents for e-commerce applications		45k
96-97	BHP	Feature extraction from large scientific data sets		12k
94-97	DTI / EPSRC	Agent-based business process management	BT, ICI & Univ. Loughborough	220k
94-95	JRC ISPRA	Information economies for sharing earth observation data		10k

Patents

- US patent for negotiation technology with co-inventors at Variab.ly
- European patent for decentralised coordination with co-inventors at BAE Systems
- European and Canadian patent for flexible agent based negotiators with co-inventors at Nortel Networks
- European, US & Japanese patent for autonomous agent architecture with co-inventors at ZUNO
- European and US patent for intelligent agents in business process management with co-inventors at BT Research Labs, ICI Engineering and Loughborough University

Conference Leadership and Participation

- Co-initiator and conference co-chair of 1st Int. Conf. on the Practical Applications of Intelligent Agents and Multi-Agent Systems (1996)
- Co-initiator and conference co-chair for ACM's 1st Int. Conf. on Autonomous Agents (1997)
- Co-initiator Int. Workshop on Agent Theories, Architectures and Languages series. Co-chair 1st (1994), 2nd (1995), 3rd (1996) and 6th (1999) workshops
- Co-initiator and co-organiser of UK Special Interest Group on Multi-Agent Systems (UKMAS) (1996-2000)
- Program co-chair 3rd Int. Conf. on Multi-Agent Systems (1998)
- General co-chair 3rd Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (2004)
- Selected keynote and major presentations:
 - Scientific Discourse, Royal Institution (London, UK) 6/17
 - Ideas Lab, World Economic Forum (Davos, Switzerland) 1/17
 - 7th Int. Conf. on Agents and AI (Lisbon, Portugal) 1/15
 - 3rd Int. Conf. on Computational Sustainability (Copenhagen, Denmark) 7/12
 - 1st Abe Mamdani Memorial Lecture (London, UK) 2/12
 - 1st Patterson Lecture (Warwick, UK) 1/12
 - 1st Int. W. on Uncertainty Reasoning and Multi-Agent Systems for Sensor Networks (Belfast, Northern Ireland) 6/11
 - 3rd Int. Symposium on Intelligent Distributed Computing (Ayia Napa, Cyprus) 10/09
 - The BCS Computer Journal Lecture (London, UK) 6/09
 - 1st Int. Conf. on Visions of Computer Science (London, UK) 9/08
 - 22nd Int. Sym. on Computer and Information Science (Ankara, Turkey) 11/07
 - 8th Int. Conf. on Business Information Systems (Karlsruhe, Germany) 03/07
 - 33rd Int. Conf. on Current Trends in Theory and Practice of Computer Science (Horrachov, Czech Republic) 01/07
 - 18th Belgium-Dutch Conf. on AI (Namur, Belgium) 10/06
 - 5th IEEE/WIC/ACM Int. J. Conf. on Web Intelligence and Intelligent Agent Technology (Compiègne, France) 9/05
 - 1st Int. Workshop on Autonomous Intelligent Systems (St. Petersburg, Russia) 6/05
 - PriceWaterhouseCoopers E-Business Lect. (Leuven, Belgium) 4/05
 - Int. Workshop on Intelligent Information Management Systems (Shanghai, China) 3/05
 - 2nd Int. Conf. on AI in Engineering and Technology (Kota Kinabulu, Malaysia) 8/04
 - 1st Int. Conf. on Autonomic Computing (New York, USA) 5/04
 - The BCS Sidney Michaelson Memorial Lecture (Edinburgh, UK) 4/04
 - German Nat. Conf. on AI (Hamburg, Germany) 9/03

- 2nd Int. Conf. on Autonomous Agents & Multi-Agent Systems (Melbourne, Australia) 7/03 [*ACM Autonomous Agents Research Award Lecture*]
- Int. Conf. on Intelligent Information Technology (Beijing, China) 9/02
- IFIP Intelligent Information Processing Conf. (Montreal, Canada) 8/02
- 2nd Multiagent Systems Workshop of Central & Eastern Europe (Krakov, Poland) 9/01
- 4th Pacific Rim Int. Workshop on Multi-Agent Systems (Taipei, Taiwan) 7/01
- 2nd Int. Conf. on Intelligent Data Engineering (Shatin, Hong Kong) 12/00
- 16th ACM Conf. on Object-Oriented Programming, Systems, Languages, & Applications (Minneapolis, USA) 10/00
- 6th Pacific Rim Conf. on AI (Melbourne, Australia) 9/00
- 1st Int. Workshop on Group Decision and Negotiation (Glasgow, UK) 7/00
- 15th European Conf. on Cybernetics and Systems Research (Vienna, Austria) 4/00
- 5th Int. Conf. on Practical Aspects of Agents & Multiagent Systems (Manchester, UK) 4/00
- 18th Humphrey Davis Lecture (London, UK) 3/00
- Distinguished Lecture Series in Software Engineering (Austin, USA) 2/00
- 19th Int. Conf. on Expert Systems and Applied AI (Cambridge, UK) 12/99
- 4th Int. Conf. on Cooperative Information Systems (Edinburgh, UK) 9/99
- 16th Int. J. Conf. on AI (Stockholm, Sweden) 8/99 [*Computers and Thought Lecture*]
- 9th European Workshop on Multi-Agent Systems (Valencia, Spain) 6/99
- 12th Int. Conf. on Industrial and Engineering Applications of AI (Cairo, Egypt) 6/99
- 1st Catalanian Conf. on Artificial Intelligence (Taragona, Spain) 10/98
- European IT Conf. (Brussels, Belgium) 11/97
- 5th Int. Conf. on Cognitive Science (San Sebastian, Spain) 7/97
- 1st Int. Conf. on Practical Aspects of Agents & Multi-Agent Systems (London, UK) 4/96
- 1st Int. Conf. on Multi-Agent Systems (San Francisco, USA) 6/95
- 2nd Int. Conf. on Cooperating Knowledge Based Systems (Keele, UK) 6/94
- Int. Conf. on Solving Complex Problems with Agent Systems (Bielefeld, Germany) 2/94
- 1st Int. Workshop on Cooperative Knowledge Processing (Trento, Italy) 6/91
- Member steering committees for: Int. Workshop on Agent Theories, Architectures and Languages (ATAL) (1994-2007; chair: 2004-2007); Int. Conf. on Autonomous Agents (1997-2006); Int. Conf. on Multi-Agent Systems (ICMAS) (1996-98); European Workshop on Multi-Agent Systems (1997-2001); Int. Conf. on Electronic Commerce (2003); and UK Workshop on Multi-Agent Systems (1996-2003)
- Co-organiser OOPSLA Workshop on Agent Oriented Methodologies (2002), IJCAI Workshop on AI and Autonomic Computing (2003), AAMAS Workshop on Smart Grid Technologies (2005), AAMAS Workshop on Defence Applications of Multi-Agent Systems (2005), Fusion Workshop on Autonomous Agents for Data and Information Fusion (2006), AAMAS Workshop on Applications of Agent Technology to Disaster Management (2006), Dagstuhl on Negotiation and Market Engineering (2006), AAMAS Workshop on Optimisation in Multi-Agent Systems (2008 and 2009)
- Programme or Senior Programme committee [SPC] member: Autonomous Agents and Multi-Agent Systems (AAMAS) (02 [SPC], 03 [SPC], 05 [SPC]; 07 [SPC]; 08 [SPC]; 09, 10 [SPC]); Int. Conf. on Multi-Agent Systems (95, 96, 98, 00: all); Autonomous Agents (97, 98, 99 [SPC], 00 [SPC], 01 [SPC]: all); Agent Theories, Architectures and Languages (94, 95, 96, 97, 98, 99, 00, 01: all); Practical Applications of Agents and Multi-agent Systems (96, 97, 98, 99); Association for Advancement of AI (AAAI) (98, 07, 08, 10 [SPC]); European Workshop on Multi-Agent Systems (97, 98, 99, 00, 01); Australian Distributed AI Workshop (95, 96); Agent-Mediated Electronic Commerce (98, 99, 00, 02, 03, 04, 05); Agent Oriented Software Engineering (00, 01, 02, 03); Intelligent Agents for Telecoms Applications (96, 97, 98); Int. Semantic Web Conf. (02); World Wide Web Conf. (03, 06); Automated Planning and Scheduling (03); ACM E-Commerce Conf. (04, 07, 09, 10 [SPC]); Autonomic Computing (04, 05); European Conf. on AI (00 [SPC], 06)

Service to Journals and Grant Awarding Bodies

- Founding editor-in-chief of the Int. Journal of Autonomous Agents and Multi-Agent Systems. [First journal in this area; 1998-2002]
- Editorial board member of: J. of Computer Science and Technology (2004-08), Int. J. of Autonomous Agents and Multi-Agent Systems (2003-13), ACM Trans. on Internet Technology (2003-09), Computational Intelligence (2003-09), Int. J. of Applied Logic (2003-11), Int. J. of Electronic Commerce Research (2002-10), Int. J. of Web Semantics (2002-10), J. of Logic and Computation (1998-11), Int. J. of AI Communications (1996-04), The Knowledge Engineering Review (1994-08), AISB Journal (2004-05)

- Referee for following international journals: ACM Computing Surveys, ACM Trans. on Internet Technology, ACM Trans. on Software Engineering and Methodology, Acta Informatica, Artificial Intelligence, AI Review, AI and Law, Chemical Engineering Communications, Comms. of the ACM, The Computer Journal, Computational Intelligence, Concurrent Engineering Research and Applications, Decision Support Systems, Electronic Commerce Research Journal, Int. J. Man-Machine Studies, IEE Proc. on Software, IEE Proc. on Distributed Systems Engineering, IEE Electronics Letters, IEEE Intelligent Systems, IEEE Journal on Selected Areas of Communications, IEEE Internet Computing, IEEE Trans. on Systems Man and Cybernetics, IEEE Trans. on Data and Knowledge Engineering, IEEE Spectrum, IEEE Trans. on Robotics and Automation, Information Fusion Journal, Intelligent and Cooperative Information Systems, Intelligent Systems Engineering, Journal of the ACM, Journal of AI Research, Journal of Web Semantics, Machine Learning Journal, Pervasive and Mobile Computing, Software Practice and Experience, User Modelling and User-Adaptation Interaction
- Grant evaluator: Engineering and Physical Sciences Research Council; Biotechnology and Biological Sciences Research Council; Economic and Social Research Council; Natural Environment Research Council; Medical Research Council; European Research Council; Fulbright Scholarship Program; Oxford Martin School, The Leverhulme Trust; The Nuffield Foundation; The Royal Academy of Engineering; The Royal Society; The British Academy; The Royal Irish Academy; The European Science Foundation; The (US) National Science Foundation; The (US) Department of Homeland Security; The Netherlands Computer Science Research Foundation; The Australian Research Council; Science Foundation Ireland; The Swiss National Science Foundation; The Norwegian Research Council; The Research Council of Canada; The Polish Science Foundation, The Welsh Government, and The Israel Science Foundation

III. POLICY AND ADVISORY ROLES

As the UK Government's Chief Scientific Advisor (CSA) for National Security, I worked with a range of departments and agencies both in the UK and abroad. I was responsible for scientists and engineers who work in the natural, physical, information and social sciences, and championed science at board level. My team responded to urgent operational situations and delivered new capabilities that helped keep the country safe and secure. I devised and deployed new mechanisms for delivering innovative technologies in partnership with academia, government labs and a range of companies (both large and small). I was the inaugural post holder and created this multi-agency section from scratch.

I also worked closely with two Government CSAs, Sir Mark Walport and Sir John Beddington, as a member of the network of departmental CSAs that provide scientific advice to government.

Scientific Policy

- Government Office of Science:
 - Foresight panel member on: Cognitive Systems (2003), CyberTrust (2003), Intelligent Infrastructure Systems (2004) and The Future of Identity (2013)
 - Blakett review team member on: Cybersecurity (2010), Low Probability High Impact Events (2011), Wide-Area Biological Detection (2013), Internet of Things (2014), and Influence and Persuasion (2016)
 - Technology and Innovation Futures working group (2015-16)
 - Several Departmental Science and Engineering reviews, including Ministry of Defence and DSTL
- Reports:
 - Prime Minister's Council for Science and Technology (2013) "The age of algorithms" that led to the creation of the Alan Turing Institute
 - Royal Academy of Engineering (2015) "Connecting data: driving productivity and innovation"
 - House of Commons Science & Technology Committee (2016) "Robotics and artificial intelligence"
 - Royal Society (2017) "Machine learning: the power and promise of computers that learn by example"
 - Defence and Security Accelerator (2017) "Future technology trends in security"
- Contributions to Green and White papers, including: National Security Strategy and Strategic Defence and Security Review (2015), National Security through Technology (2012), The UK Cyber Security Strategy (2011), and Securing Britain in an Age of Uncertainty (2010)

- Contributions to the National Risk Register, leading the cyber risks group (2013-)

Advisory Roles

- National Security Council: Science and Technology Committee (2013-)
- Several Science Advisory Committees in the National Security area (2010-)
- Royal Academy of Engineering:
 - Engineering Policy Committee (2016-)
 - Research and Secondments Committee (2008-11)
 - Membership Panel (2008-11)
 - Industrial Secondment Scheme (Chair: 2008-2010)
- Newton Prize Committee (2017-)
- Royal Society: University Research Fellows Appointment Panel (2009-2013)
- European Research Council: Informatics Panel for Advanced Fellowships (2008-12)
- RCUK Global Uncertainties Programme: Strategic assessor (2012-13)
- IEE: IT Sector Panel (2002-2006)
- European Network of Excellence in Agent-Based Computing: Management Board (1999-2002)
- Defence Scientific Advisory Council: Register of independent members (1997-)
- EPSRC: Information Technology Computing College (1997-2015)
- UK Computing Research Committee: Member (2004-); Membership Committee (2007-10)
- Advisory boards for:
 - BAE Systems Technology Foresight (2016-)
 - RCUK Partnership for Conflict, Crime and Security Research programme (2013-16)
 - EPSRC Autonomous and Intelligent Systems programme (2012-2016)
 - Southampton University Academic Centre of Excellence in Cyber Security Research (2012-16)
 - Imperial College Institute for Security Science and Technology (2011-16)
 - UK National Research and Training Initiative in Large-Scale Complex IT Systems (2007-12)
 - Web Science Research Initiative (2006-10)
 - Defence Technology Centre on Systems Engineering and Integrated Systems (2005-08)
 - IBM Autonomic Computing Initiative (2002-05)
 - German Research Centre for AI (DFKI) (2000-2012)

IV. UNIVERSITY LEADERSHIP

At Imperial, I am responsible for developing and delivering the College's research strategy and for enhancing the quality, impact, management and delivery of research. The College has 1500 academic staff, 2500 research staff and 3500 PhD students. The total research budget is £475 million and this includes engagement with 500+ corporate partners. Our overarching aim is to achieve enduring excellence for the benefit of society. Key areas of focus include: nurturing research talent; sustaining world-class core academic disciplines; fostering multidisciplinary research; ensuring our research informs, influences and impacts; and establishing effective

partnerships. To enable this, we need to have world-class research facilities and infrastructure, a vibrant and healthy research environment and adequate research funding.

Imperial College

2016- Vice-Provost (Research)
 2016- President's Board
 2016- Provost's Board

University of Southampton

2015-16 Head of the Electronics and Computer Science Department (110 academics, 1500 students)
 2011-15 Founding Head of the Agents, Interaction and Complexity Research Group (14 academics, 50 RFs and PhD students)
 2008-10 Associate Dean (Research and Enterprise) for Faculty of Engineering, Science and Mathematics
 2008-10 University's Research and Enterprise Leadership Group
 2008-10 Chair Faculty Research and Enterprise Committee
 2008-10 Faculty Strategy and Policy Committee
 2008-10 Member of Senate
 2007 Responsible for Computer Science RAE return (outcome: rated joint second in terms of GPA)
 2007-10 University's Knowledge Creation and Transfer Management Board
 2004-07 Advisory Panel for University's Research Support Office
 2003-08 Deputy Head of School (Research)
 2001-08 Chair School's Research Committee
 2001-11 Head Intelligence, Agents, Multimedia Research Group (18 academics, 100 RFs and PhD students)
 2001 Responsible for Computer Science RAE return (outcome: move from 5 to 5*)

Queen Mary University of London

1995-99 Head of the Intelligent Systems Research Group (4 academics, 12 RFs and PhD students)

V. EDUCATION

Courses taught (responsible for course design and delivery): *Programming Fundamentals* introduced principles behind production of quality software and the Pascal programming language (year 1); *Programming Languages* detailed the key structures present in modern high-level programming languages (year 2); *Data Structures* explored the use and development of data structures in programming systems (year 2); *Information Systems Design* covered a broad range of topics related to the design and implementation of distributed information systems (years 3 and 4); *Artificial Intelligence* covered the theories and principles behind the design of intelligent systems (years 3 and 4); *Network Programming* introduced basic concepts of programming for the Internet (year 2); *Intelligent Agents* advanced topics in multiagent systems (years 3 and 4); *E-Business Techniques* advanced information processing techniques for E-Business applications and electronic marketplaces (years 3 and 4). Also taught on the *Software Engineering* and *Human Computer Interaction* modules of the British Telecom MSc (coordinated by the University of London and attended by BT employees). Supervised numerous final year and MSc projects

Examination duties: External examiner for University of Edinburgh MSc in Artificial Intelligence (1999-02). External examiner for Computer Science Undergraduate Degrees at Universities of York (03-05), Sabah (Malaysia) (04-06), Bath (06-08) and Etisalat (UAE) (05-07). PhD examiner at Universities of: Aberdeen, Hebrew University (Israel), Edinburgh, Essex, EPFL (Switzerland), Imperial College, Loughborough, Mannheim (Germany), Maastricht (Netherlands), Queensland Univ. of Technology (Australia), Queen Mary, Southampton, Strathclyde, Surrey, Swinburne Univ. of Technology (Australia), Sydney (Australia), Technical Univ. of Eindhoven (Netherlands), University College Dublin, UCL, Universitat Autònoma de Barcelona (Spain), Universitat Politècnica de Catalunya (Spain), Warwick, Westminster

VI. PUBLICATIONS

BOOKS

1. H. Gimpel, **N. R. Jennings**, G. E. Kersten, A. Okenfels and C. Weinhardt (eds.) (2008) *"Negotiation, auctions and market engineering"* Springer.
2. S. Bussmann, **N. R. Jennings** and M. Wooldridge (2004) *"Multiagent systems for manufacturing control: A design methodology"* Series on Agent Technology, Springer.
3. **N. R. Jennings** and Y. Lesperance (eds.) (2000) *"Intelligent agents VI"* Springer.
4. **N. R. Jennings** and M. Wooldridge (eds.) (1998) *"Agent technology: foundations, applications and markets"* Springer.
5. J. P. Müller, M. Wooldridge and **N. R. Jennings** (eds.) (1997) *"Intelligent agents III"* Springer.
6. G. M. P. O'Hare and **N. R. Jennings** (eds.) (1996) *"Foundations of distributed artificial intelligence"* John Wiley & Sons.
7. M. J. Wooldridge and **N. R. Jennings** (eds.) (1995) *"Intelligent agents"* Springer.
8. **N. R. Jennings** (1994) *"Cooperation in industrial multi-agent systems"* World Scientific Publishing.

JOURNALS

1. V. Robu, M. Vinyals, A. Rogers and **N. R. Jennings** (2017) "Efficient buyer groups with prediction-of-use electricity tariffs" *IEEE Trans on Smart Grids*.
2. R. Meir, M. Polukarov, J. S. Rosenschein and **N. R. Jennings** (2017) "Acyclic games and iterative voting" *Artificial Intelligence*.
3. S. Stein, E. H. Gerding, A. Nedeia, A. Rosenfeld and **N. R. Jennings** (2017) "Market interfaces for electric vehicle charging" *Journal of AI Research* **59** 175-227.
4. A. A Panagopoulos, S. Maleki, M. Venanzi, A. Rogers and **N. R. Jennings** (2017) "Advanced economic control of electricity-based space heating systems in domestic coalitions with shared intermittent energy resources" *ACM Trans. on Intelligent Systems and Technology* **8** (4) 59.1-59.27.
5. S. D. Ramchurn, T. D. Huynh, Y. Ikuno, J. Flann, L. Moreau, **N. R. Jennings**, J. E. Fischer, W. Jiang, T. Rodden, E. Simpson, S. Reece, S. J. Roberts and F. Wu (2016) "HAC-ER: A disaster response system based on human-agent collectives" *Journal of AI Research* **57** 661-708.
6. V. Robu, G. Chalkiadakis, R. Kota, A. Rogers and **N. R. Jennings** (2016) "Rewarding cooperative virtual power plant formation using scoring rules" *Energy* **117** (1) 19-28.
7. A. Alan, E. Costanza, S. D. Ramchurn, J. Fischer, T. Rodden and **N. R. Jennings** (2016) "Tariff Agent: Interacting with a future smart energy system at home" *ACM Trans. on Computer-Human Interaction* **23** (4) 25.1-25.28.
8. M. Venanzi, J. Guiver, P. Kohli and **N. R. Jennings**, (2016) "Time-sensitive Bayesian aggregation for crowdsourcing" *Journal of AI Research* **56** 517-545.
9. B. Shi, E. H. Gerding and **N. R. Jennings** (2016) "An equilibrium analysis of trading across multiple double auction marketplaces using fictitious play" *Electronic Commerce Research and Applications* **17** (3) 134-149.
10. S. D. Ramchurn, F. Wu, J. Fischer, S. Reece, W. Jiang, S. J. Roberts, T. Rodden and **N. R. Jennings** (2016) "Human-agent collaboration for disaster response" *Journal of Autonomous Agents and Multi-Agent Systems* **30** (1) 82-111.
11. M de Weerd, E. H. Gerding, S. Stein, V. Robu and **N. R. Jennings** (2015) "Intention-aware routing of electric vehicles" *IEEE Trans. on Intelligent Transportation Systems* **17** (5) 1472-1482.
12. T. Rahwan, T. Michalak, E. Elkind, M. Wooldridge and **N. R. Jennings** (2015) "A hybrid exact algorithm for complete set partitioning" *Artificial Intelligence* **230** 14-50.

13. T. Rahwan, T. P. Michalak, M. Wooldridge and **N. R. Jennings** (2015) "Coalition structure generation" *Artificial Intelligence* **229** 139-174.
14. S. Ghosh, S. Reece, A. Rogers, S. J. Roberts, A. Malibari and **N. R. Jennings** (2015) "Modelling the thermal dynamics of buildings: a latent force model approach" *ACM Trans. on Intelligent Systems and Technology* **6** (1) 7.1-7.27.
15. T. Michalak, P. Szczepanski, T. Rahwan, A. Chrobak, S. Brânzei, M. Wooldridge and **N. R. Jennings** (2014) "Implementation and computation of a value for generalized characteristic function games" *ACM Trans on Economics and Computation* **2** (4) 16.1-16.35.
16. **N. R. Jennings**, L. Moreau, D. Nicholson, S. Ramchurn, S. Roberts, T. Rodden and A. Rogers (2014) "On human-agent collectives" *Communications of ACM* **57** (12) 80-88.
17. V. Naroditskiy, **N. R. Jennings**, P. van Hentenryck and M. Cebrian (2014) "Crowdsourcing contest dilemma" *Royal Society Interface* **11** (99) 20140532.
18. S. Reece, S. J. Roberts, S. Ghosh, A. Rogers and **N. R. Jennings** (2014) "Efficient state-space inference of periodic latent force models" *Journal of Machine Learning Research* **15** 2337-2397.
19. F. Biermann, V. Naroditskiy, T. D. Nguyen, M. Polukarov, A. Rogers and **N. R. Jennings** (2014) "Task assignment with controlled and autonomous agents" *Mathematical Social Sciences* **71** 116-121.
20. G. de Clippel, V. Naroditskiy, M. Polukarov, A. Greenwald and **N. R. Jennings** (2014) "Destroy to save" *Games and Economic Behaviour* **86** 392-404.
21. L. Tran-Thanh, S. Stein, A. Rogers and **N. R. Jennings** (2014) "Efficient crowdsourcing of unknown experts using multi-armed bandits" *Artificial Intelligence* **214** 89-111.
22. A. C. Chapman, D. S. Leslie, A. Rogers and **N. R. Jennings** (2014) "Learning in unknown reward games: application to sensor networks" *The Computer Journal* **57** (6) 875-892.
23. M. Vinyals, K. S. Macarthur, A. Farinelli, S. D. Ramchurn and **N. R. Jennings** (2014) "A message-passing approach to decentralised parallel machine scheduling" *The Computer Journal* **57** (6) 856-874.
24. A. Farinelli, A. Rogers and **N. R. Jennings** (2014) "Agent-based decentralised coordination for sensor networks using the max-sum algorithm" *Journal of Autonomous Agents and Multi-Agent Systems* **28** (3) 337-380.
25. J. McInerney, S. Stein, A. Rogers and **N. R. Jennings** (2013) "Breaking the habit: Measuring and predicting departures from routine in individual human mobility" *Pervasive and Mobile Computing* **9** (6) 808-822.
26. V. Robu, E. H. Gerding, S. Stein, D. C. Parkes, A. Rogers and **N. R. Jennings** (2013) "An online mechanism for multi-unit demand and its application to plug-in hybrid electric vehicle charging" *Journal of AI Research* **48** 175-230.
27. A. Rutherford, M. Cebrian, I. Rahwan, S. DSouza, J. McInerney, V. Naroditskiy, M. Venanzi, **N. R. Jennings**, J. R. de Lara, E. Wahlstedt and S. U. Miller (2013) "Targeted social mobilization in a global manhunt" *PLoS ONE* **8** (9) e74628.
28. M. Vasirani, R. Kota, R. L. G. Cavalcante, S. Ossowski and **N. R. Jennings** (2013) "An agent-based approach to virtual power plants of wind generators and electric vehicles" *IEEE Trans on Smart Grids* **4** (3) 1314-1322.
29. A. C. Chapman, D. S. Leslie, A. Rogers and **N. R. Jennings** (2013) "Convergent learning algorithms for unknown reward games" *SIAM J. of Control and Optimisation* **51** (4) 3154-3180
30. T. Baarslag, K. Fujita, E. H. Gerding, K. Hindriks, T. Ito, **N. R. Jennings**, C. Jonker, S. Kraus, R. Lin, V. Robu and C. R. Williams (2013) "Evaluating practical negotiating agents: Results and analysis of the 2011 international competition" *Artificial Intelligence* **198** 73-103.
31. T. P. Michalak K. V. Aadithya, P. L. Szczepanski, B. Ravindran and **N. R. Jennings** (2013) "Efficient computation of the Shapley value for game-theoretic network centrality" *Journal of AI Research* **46** 607-650.
32. I. Rahwan, S. DSouza, A. Rutherford, V. Naroditskiy, J. McInerney, M. Venanzi, **N. R. Jennings** and M. Cebrian (2013) "Global manhunt pushes the limits of social mobilisation" *IEEE Computer* **46** (4) 68-75.
33. R. Stranders, E. Munoz de Cote, A. Rogers and **N. R. Jennings** (2013) "Near-optimal continuous patrolling with teams of mobile information gathering agents" *Artificial Intelligence* **195** 63-105.

34. Z. Rabinovich, V. Naroditskiy, E. H. Gerding and **N. R. Jennings** (2013) "Computing pure Bayesian Nash equilibria in games with finite actions and continuous types" *Artificial Intelligence* **195** 106-139.
35. B. Shi, E. H. Gerding, P. Vytelingum and **N. R. Jennings** (2013) "An equilibrium analysis of market selection strategies and fee strategies in competing double auction marketplaces" *Journal of Autonomous Agents and Multi-Agent Systems* **26** (2) 245-287.
36. V. Naroditskiy, M. Polukarov and **N. R. Jennings** (2013) "Optimal payments in dominant strategy mechanisms for single-parameter domains" *ACM Trans on Economics and Computation* **1** (1) 4.1-4.21.
37. M. A. Osborne, S. J. Roberts, A. Rogers and **N. R. Jennings** (2012) "Real-time information processing of environmental sensor network data using Bayesian Gaussian processes" *ACM Trans on Sensor Networks* **9** (1) 1.1-1.32.
38. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2012) "A heuristic approximation method for the Banzhaf index for voting games" *Int. Journal of Multi-Agent and Grid Systems* **8** (3) 257-274.
39. V. Naroditskiy, I. Rahwan, M. Cebrian and **N. R. Jennings** (2012) "Verification in referral-based crowdsourcing" *PLoS ONE* **7** (10) e45924. [doi:10.1371/journal.pone.0045924]
40. T. Voice, M. Polukarov and **N. R. Jennings** (2012) "Graph coalition structure generation" *Journal of AI Research* **45** 165-196.
41. W. T. L. Teacy, **N. R. Jennings**, A. Rogers and M. Luck (2012) "A hierarchical Bayesian trust model based on reputation and group behaviour" *Artificial Intelligence* **193** 149-185.
42. R. Kota, N. Gibbins and **N. R. Jennings** (2012) "Decentralised approaches for self-organising agent systems" *ACM Trans on Autonomous and Adaptive Systems* **7** (1) 1.1-1.28.
43. T. Rahwan, T. Michalak, M. Wooldridge and **N. R. Jennings** (2012) "Anytime coalition structure generation in multi-agent systems with positive or negative externalities" *Artificial Intelligence* **186** 95-122.
44. L. Tran-Thanh, A. Rogers and **N. R. Jennings** (2012) "Long-term information collection with energy harvesting wireless sensors: A multi-armed bandit based approach" *Journal of Autonomous Agents and Multi-Agent Systems* **25** (2) 352-394.
45. S. D. Ramchurn, P. Vytelingum, A. Rogers and **N. R. Jennings** (2012) "Putting the 'smarts' into the smart grid: A grand challenge for artificial intelligence" *Comms of the ACM* **55** (4) 86-97.
46. X. Luo, C. Miao, **N. R. Jennings**, M. He and Z. Shen (2012) "KEMNAD: A knowledge engineering methodology for negotiating agent development" *Computational Intelligence* **28** (1) 51-105.
47. P. Vytelingum, T. D. Voice, S. D. Ramchurn, A. Rogers and **N. R. Jennings** (2011) "Theoretical and practical foundations of large-scale agent-based micro-storage in the smart grid" *Journal of AI Research* **42** 765-813. [Honourable mention for the 2016 IJCAI-JAIR best paper prize]
48. A. C. Chapman, A. C. Rogers, D. S. Leslie and **N. R. Jennings** (2011) "A unifying framework for iterative approximate best response algorithms for distributed constraint optimisation problems" *The Knowledge Engineering Review* **26** (4) 411-444.
49. S. Stein, E. Gerding, A. Rogers, K. Larson and **N. R. Jennings** (2011) "Algorithms and mechanisms for procuring services with uncertain durations using redundancy" *Artificial Intelligence* **175** 2021-2060.
50. R. Cavalcante, A. Rogers, I. Yamada and **N. R. Jennings** (2011) "Distributed asymptotic minimization of sequences of convex functions by a broadcast adaptive subgradient method" *IEEE J. of Selected Topics in Signal Processing* **5** (4) 739-753.
51. S. D. Ramchurn, P. Vytelingum, A. Rogers and **N. R. Jennings** (2011) "Agent-based homeostatic control for green energy in the smart grid" *ACM Trans. on Intelligent Systems and Technology* **2** (4) 35.1-35.28
52. S. Stein, T. R. Payne and **N. R. Jennings** (2011) "Robust execution of service workflows using redundancy and advance reservations" *IEEE Trans. on Services Computing* **4** (2) 125-139.
53. A. C. Chapman, A. Rogers and **N. R. Jennings** (2011) "Benchmarking hybrid algorithms for distributed constraint optimisation games" *Journal of Autonomous Agents and Multi-Agent Systems* **22** (3) 385-414.
54. A. Rogers, A. Farinelli, R. Stranders and **N. R. Jennings** (2011) "Bounded approximate decentralised coordination via the max-sum algorithm" *Artificial Intelligence* **175** (2) 730-759

55. A. Papakonstantinou, A. Rogers, E. H. Gerding and **N. R. Jennings** (2011) "Mechanism design for the truthful elicitation of costly probabilistic estimates in distributed information systems" *Artificial Intelligence* **175** (2) 648-672.
56. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2010) "Sequential auctions for common value objects with budget constrained bidders" *Int. J of Multiagent and Grid Systems* **6** (5) 403-414.
57. A. C. Chapman, R. A. Micillo, R. Kota and **N. R. Jennings** (2010) "Decentralised dynamic task allocation using overlapping potential games" *The Computer Journal* **53** (9) 1462-1477.
58. S. D. Ramchurn, A. Farinelli, K. S. Macarthur, M. Polukarov and **N. R. Jennings** (2010) "Decentralised coordination in RoboCup rescue" *The Computer Journal* **53** (9) 1447-1461.
59. J. Kho, L. Tran-Thanh, A. Rogers and **N. R. Jennings** (2010) "An agent-based distributed coordination mechanism for wireless visual sensor nodes using dynamic programming" *The Computer Journal* **53** (8) 1277-1290.
60. G. Chalkiadakis, E. Elkind, E. Markakis, M. Polukarov and **N. R. Jennings** (2010) "Cooperative games with overlapping coalitions" *Journal of AI Research* **39** 179-216.
61. Z. Rabinovich and **N. R. Jennings** (2010) "A hybrid controller based on the egocentric perceptual principle" *Robotics and Autonomous Systems* **58** (9) 1039-1048.
62. I. A. Vetsikas and **N. R. Jennings** (2010) "Bidding strategies for realistic multi-unit sealed bid auctions" *Journal of Autonomous Agents and Multi-Agent Systems* **21** (2) 265-291.
63. P. Padhy, R. K. Dash, K. Martinez and **N. R. Jennings** (2010) "A utility-based adaptive sensing and multi-hop communication protocol for wireless sensor networks" *ACM Trans. on Sensor Networks* **6** (3), 27.1-27.39.
64. T. Rahwan, S. D. Ramchurn, A. Giovannucci and **N. R. Jennings** (2009) "An anytime algorithm for optimal coalition structure generation" *Journal of AI Research* **34** 521-567.
65. N. C. Karunatillake, **N. R. Jennings**, I. Rahwan and P. McBurney (2009) "Dialogue games that agents play within a society" *Artificial Intelligence* **173** (9-10) 935-981.
66. S. D. Ramchurn, R. K. Dash, A. Giovannucci, J. Rodriguez-Aguilar, C. Mezzetti and **N. R. Jennings** (2009) "Trust-based mechanisms for robust and efficient task allocation in the presence of execution uncertainty" *Journal of AI Research* **35** 119-159.
67. S. Stein, T. R. Payne and **N. R. Jennings** (2009) "Flexible provisioning of web service workflows" *ACM Trans on Internet Technology* **9** (1) 2.1-2.45.
68. A. Rogers, D. D. Corkill and **N. R. Jennings** (2009) "Agent technologies for sensor networks" *IEEE Intelligent Systems* **24** (2) 13-17.
69. S. Stein, T. R. Payne and **N. R. Jennings** (2009) "Flexible selection of heterogeneous and unreliable services in large-scale grids" *Philosophical Trans. of the Royal Society A* **367** (1897) 2483-2494.
70. J. Kho, A. Rogers and **N. R. Jennings** (2009) "Decentralised control of adaptive sampling in wireless sensor networks" *ACM Trans on Sensor Networks* **5** (3) 19.1-19.35.
71. I. Rezek, D. S. Leslie, S. Reece, S. J. Roberts, A. Rogers, R. K. Dash and **N. R. Jennings** (2008) "On similarities between inference in game theory and machine learning" *Journal of AI Research* **33** 259-283.
72. Y. K. Peña and **N. R. Jennings** (2008) "Optimal combinatorial electricity markets" *Int. J. of Web Intelligence and Agent Systems* **6** (2) 123-135.
73. S. S. Fatima, W. Wooldridge and **N. R. Jennings** (2008) "A linear approximation method for the Shapley value" *Artificial Intelligence* **172** (14) 1673-1699.
74. P. Vytelingum, D. Cliff and **N. R. Jennings** (2008) "Strategic bidding in continuous double auctions" *Artificial Intelligence* **172** (14) 1700-1729.
75. E. H. Gerding, R. K. Dash, A. Byde and **N. R. Jennings** (2008) "Optimal strategies for bidding agents participating in simultaneous Vickrey auctions with perfect substitutes" *Journal of AI Research* **32** 939-982.
76. Y. Z. Wei, **N. R. Jennings**, L. Moreau and W. Hall (2008) "User evaluation of a market-based recommender system" *Journal of Autonomous Agents and Multi-Agent Systems* **17** (2) 251-269.

77. R. K. Dash, P. Vytelingum, A. Rogers, E. David and **N. R. Jennings** (2007) "Market-based task allocation mechanisms for limited capacity suppliers" *IEEE Trans. on Systems Man and Cybernetics (Part A)* **37** (3) 391-405.
78. A. Rogers, R. K. Dash, S. D. Ramchurn, P. Vytelingum and **N. R. Jennings** (2007) "Coordinating team players within a noisy iterated Prisoner's Dilemma tournament" *Theoretical Computer Science* **377** (1-3) 243-259.
79. E. David, A. Rogers, **N. R. Jennings**, J. Schiff, S. Kraus and M. H. Rothkopf (2007) "Optimal design of English auctions with discrete bid levels" *ACM Trans on Internet Technology* **7** (2), 12.1-12.34.
80. R. Ghanea-Hercock, E. Gelenbe, **N. R. Jennings**, O. Smith, D. N. Allsopp, A. Healing, H. Duman, S. Sparks, N. C. Karunatillake and P. Vytelingum (2007) "Hyperion – Next generation battlespace information services" *The Computer Journal* **50** (6) 632-645.
81. X. Luo and **N. R. Jennings** (2007) "A spectrum of compromise aggregation operators for multi-attribute decision making" *Artificial Intelligence* **171** (2-3) 161-184.
82. T. Rahwan and **N. R. Jennings** (2007) "An algorithm for distributing coalitional value calculations among cooperating agents" *Artificial Intelligence* **171** (8-9) 535-567.
83. I. Rahwan, L. Sonenberg, **N. R. Jennings** and P. McBurney (2007) "STRATUM: A methodology for designing heuristic agent negotiation strategies" *Int. J. of Applied Artificial Intelligence* **21** (6) 489-527.
84. A. Rogers, E. David, J. Schiff and **N. R. Jennings** (2007) "The effects of proxy bidding and minimum bid increments within eBay auctions" *ACM Trans on the Web* **1** (2) 9.1-9.28.
85. S. D. Ramchurn, C. Sierra, L. Godo and **N. R. Jennings** (2007) "Negotiating using rewards" *Artificial Intelligence* **171** (10-15) 805-837.
86. D. Nguyen, S. G. Thompson, J. Patel, W. T. L. Teacy, **N. R. Jennings**, M. Luck, V. Dang, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray and N. J. Fiddian (2006) "Delivering services by building and running virtual organisations" *British Telecom Technology Journal* **24** (1) 141-152.
87. X. Luo, **N. R. Jennings** and N. Shadbolt (2006) "Acquiring user strategies and preferences for negotiating agents: a default then adjust method" *Int. J. of Human Computer Studies* **64** (4) 304-321.
88. W. T. L. Teacy, J. Patel, **N. R. Jennings** and M. Luck (2006) "TRAVOS: Trust and reputation in the context of inaccurate information sources" *Journal of Autonomous Agents and Multi-Agent Systems* **12** (2) 183-198.
89. T. D. Huynh, **N. R. Jennings** and N. R. Shadbolt (2006) "An integrated trust and reputation model for open multi-agent systems" *Journal of Autonomous Agents and Multi-Agent Systems* **13** (2) 119-154.
90. A. Rogers, A. Prügel-Bennett and **N. R. Jennings** (2006) "Phase transitions and symmetry breaking in genetic algorithms with crossover" *Theoretical Computer Science* **358** (1) 121-141.
91. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2006) "Multi-issue negotiation with deadlines" *Journal of AI Research* **27** 381-417.
92. M. He, **N. R. Jennings** and A. Prügel-Bennett (2006) "A bidding strategy for buying multiple goods in multiple English auctions" *ACM Trans. on Internet Technology* **6** (4) 465-496.
93. S. Paurobally and **N. R. Jennings** (2005) "Protocol engineering for web services conversations" *Int. J. Engineering Applications of Artificial Intelligence* **18** (2) 237-254.
94. D. de Roure, **N. R. Jennings** and N. Shadbolt (2005) "The Semantic Grid: Past, present and future" *Proc. of the IEEE* **93** (3) 669-681.
95. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "A comparative study of game theoretic and evolutionary models for software agents" *Artificial Intelligence Review* **23** (2) 187-205.
96. M. Huhns, M. Singh, M. Burstein, K. Decker, E. Durfee, T. Finin, L. Gasser, H. Goradia, **N. R. Jennings**, K. Lakartaju, H. Nakashima, V. Parunak, J. Rosenschein, A. Ruvinsky, G. Sukthankar, S. Swarup, K. Sycara, M. Tambe, T. Wagner, L. Zavala (2005) "Research directions for service-oriented multiagent systems" *IEEE Internet Computing* **9** (6) 65-70.
97. J. Patel, W. T. L. Teacy, **N. R. Jennings**, M. Luck, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian, S. Thompson (2005) "Agent-based virtual organisations for the Grid" *Int. J. Multiagent and Grid Systems* **1** (4) 237-249.

98. A. Rogers, E. David and **N. R. Jennings** (2005) "Self organised routing for wireless micro-sensor networks" *IEEE Trans. on Systems, Man and Cybernetics (Part A)* **35** (3) 349-359.
99. N. Haque, **N. R. Jennings** and L. Moreau (2005) "Resource allocation in communication networks using market-based agents" *Int. J. Knowledge Based Systems* **18** (4-5) 163-170.
100. C. B. Excelente-Toledo and **N. R. Jennings** (2005) "Using reinforcement learning to coordinate better" *Computational Intelligence* **21** (3) 217-245.
101. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "Bargaining with incomplete information" *Annals of Mathematics and Artificial Intelligence* **44** (3) 207-232.
102. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2005) "A market-based approach to recommender systems" *ACM Trans. on Information Systems* **23** (3) 227-266.
103. P. S. Dutta, **N. R. Jennings** and L. Moreau (2005) "Cooperative information sharing to improve distributed learning in multi-agent systems" *Journal of AI Research* **24** 407-463.
104. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2005) "Learning users' interests by quality classification in market-based recommender systems" *IEEE Trans. on Knowledge and Data Engineering* **17** (12) 1678-1688.
105. T. D. Nguyen and **N. R. Jennings** (2005) "Managing commitments in multiple concurrent negotiations" *Int. J. Electronic Commerce Research and Applications* **4** (4) 362-376.
106. N. Haque, **N. R. Jennings** and L. Moreau (2005) "Scalability and robustness of a market-based network resource allocation system" *Netnomics* **7** (2) 69-96.
107. S. S. Fatima, M. J. Wooldridge and **N. R. Jennings** (2004) "An agenda based framework for multi-issue negotiation" *Artificial Intelligence* **152** (1) 1-45.
108. T. J. Norman, A. Preece, S. Chalmers, **N. R. Jennings**, M. Luck, V. D. Dang, T. D. Nguyen, V. Deora, J. Shao, W. A. Gray and N. J. Fiddian (2004) "Agent-based formation of virtual organisations" *Int. J. Knowledge Based Systems* **17** (2-4) 103-111.
109. C. B. Excelente-Toledo and **N. R. Jennings** (2004) "The dynamic selection of coordination mechanisms" *Journal of Autonomous Agents and Multi-Agent Systems* **9** (1-2) 55-85.
110. J. J. Castro-Schez, **N. R. Jennings**, X. Luo and N. Shadbolt (2004) "Acquiring domain knowledge for negotiating agents: a case study" *Int. J. of Human-Computer Studies* **61** (1) 3-31.
111. M. He and **N. R. Jennings** (2004) "Designing a successful trading agent using fuzzy techniques" *IEEE Trans. on Fuzzy Systems* **12** (3) 389-410.
112. S. D. Ramchurn, C. Sierra, L. Godo and **N. R. Jennings** (2004) "Devising a trust model for multi-agent interactions using confidence and reputation" *Int. J. of Applied Artificial Intelligence* **18** (9-10) 833-852.
113. S. D. Ramchurn, D. Huynh and **N. R. Jennings** (2004) "Trust in multiagent systems" *The Knowledge Engineering Review* **19** (1) 1-25.
114. A. R. Lomuscio, M. Wooldridge and **N. R. Jennings** (2003) "A classification scheme for negotiation in electronic commerce" *Int. J. of Group Decision and Negotiation* **12** (1) 31-56.
115. X. Luo, **N. R. Jennings**, N. Shadbolt, H. Leung and J. H. Lee (2003) "A fuzzy constraint based model for bilateral, multi-issue negotiations in semi-competitive environments" *Artificial Intelligence* **148** (1-2) 53-102.
116. I. Rahwan, S. D. Ramchurn, **N. R. Jennings**, P. McBurney, S. Parsons and L. Sonenberg (2003) "Argumentation-based negotiation" *The Knowledge Engineering Review* **18** (4) 343-375.
117. X. Luo, J. H. Lee, H. Leung and **N. R. Jennings** (2003) "Prioritised fuzzy constraint satisfaction problems: axioms, instantiation and validation" *Int. J. of Fuzzy Sets and Systems* **136** (2) 155-188.
118. **N. R. Jennings** and S. Bussmann (2003) "Agent-based control systems" *IEEE Control Systems Magazine* **23** (3) 61-73.
119. M. He, **N. R. Jennings** and H. Leung (2003) "On agent-mediated e-commerce" *IEEE Trans. on Knowledge and Data Engineering* **15** (4) 985-1003.
120. P. Anthony and **N. R. Jennings** (2003) "Developing a bidding agent for multiple heterogeneous auctions" *ACM Trans. on Internet Technology* **3** (3) 185-217.
121. M. He and **N. R. Jennings** (2003) "SouthamptonTAC: An adaptive autonomous trading agent" *ACM Trans. on Internet Technology* **3** (3) 218-235.

122. M. He, H. Leung and **N. R. Jennings** (2003) "A fuzzy logic based bidding strategy for autonomous agents in continuous double auctions" *IEEE Trans. on Knowledge and Data Engineering* **15** (6) 1345-1363.
123. R. K. Dash, D. C. Parkes and **N. R. Jennings** (2003) "Computational mechanism design: A call to arms" *IEEE Intelligent Systems* **18** (6) 40-47.
124. F. Zambonelli, **N. R. Jennings** and M. Wooldridge (2003) "Developing multiagent systems: the Gaia methodology" *ACM Trans. on Software Engineering and Methodology* **12** (3) 317-370. [Selected as an ISI New Hot Paper: <http://www.esi-topics.com/nhp/2005/may-05-FrancoZambonelli.html>]
125. S. Paurobally, P. J. Turner and **N. R. Jennings** (2003) "Automating negotiation for m-services" *IEEE Trans. on Systems, Man, and Cybernetics (Part A)* **33** (6) 709-724.
126. C. B. Excelente-Toledo and **N. R. Jennings** (2003) "Learning when and how to coordinate" *Int. J. of Web Intelligence and Agent Systems* **1** (3-4) 203-218.
127. P. Panzarasa, **N. R. Jennings** and T. J. Norman (2002) "Formalising collaborative decision making and practical reasoning in multi-agent systems" *Journal of Logic and Computation* **12** (1) 55-117.
128. T. J. Norman and **N. R. Jennings** (2002) "Constructing a virtual training laboratory using intelligent agents" *Int. J. of Continuous Engineering and Life-Long Learning* **12** (1-4) 201-213.
129. J. Sabater, C. Sierra, S. Parsons and **N. R. Jennings** (2002) "Engineering executable agents using multi-context systems" *Journal of Logic and Computation* **12** (3) 413-442.
130. C. Reed, T. J. Norman and **N. R. Jennings** (2002) "Negotiating the semantics of agent communication languages" *Computational Intelligence* **18** (2) 229-252.
131. X. Luo, C. Zhang and **N. R. Jennings** (2002) "A hybrid model for sharing information between fuzzy, uncertain and default reasoning models in multi-agent systems" *Int. J. of Uncertainty, Fuzziness and Knowledge-Based Systems* **10** (4) 401-450.
132. P. Faratin, C. Sierra and **N. R. Jennings** (2002) "Using similarity criteria to make issue trade-offs in automated negotiations" *Artificial Intelligence* **142** (2) 205-237.
133. P. Panzarasa and **N. R. Jennings** (2002) "Social influence, negotiation and cognition" *Simulation Modelling Practice and Theory* **10** (5-7) 417-453.
134. **N. R. Jennings** (2001) "An agent-based approach for building complex software systems" *Comms. of the ACM* **44** (4) 35-41.
135. F. Zambonelli, **N. R. Jennings** and M. Wooldridge (2001) "Organisational rules as an abstraction for the analysis and design of multi-agent systems" *Int. J. of Software Engineering and Knowledge Engineering* **11** (3) 303-328.
136. P. Panzarasa, **N. R. Jennings** and T. J. Norman (2001) "Going public and the sale of shares with heterogeneous investors: agent-based computational modelling and computer simulations" *Int. J. of Group Decision and Negotiation* **10** (5) 423-470.
137. L. M. J. Hogg and **N. R. Jennings** (2001) "Socially intelligent reasoning for autonomous agents" *IEEE Trans. on Systems, Man and Cybernetics (Part A)* **31** (5) 381-399.
138. P. Panzarasa and **N. R. Jennings** (2001) "Negotiation and joint commitments in multi-agent systems" *Sozionik Aktuell* **3** 65-81.
139. P. Panzarasa, T. J. Norman and **N. R. Jennings** (2001) "Social mental shaping: modelling the impact of sociality on autonomous agents' mental states" *Computational Intelligence* **17** (4) 738-782.
140. **N. R. Jennings**, P. Faratin, A. R. Lomuscio, S. Parsons, C. Sierra and M. Wooldridge (2001) "Automated negotiation: prospects, methods and challenges" *Int. J. of Group Decision and Negotiation* **10** (2) 199-215. [Selected as an ISI Emerging Research Front Paper: <http://www.esi-topics.com/erf/2005/april05-NickJennings.html>]
141. **N. R. Jennings**, P. Faratin, T. J. Norman, P. O'Brien and B. Odgers (2000) "Autonomous agents for business process management" *Int. J. of Applied Artificial Intelligence* **14** (2) 145-189.
142. **N. R. Jennings**, P. Faratin, T. J. Norman, P. O'Brien, B. Odgers and J. L. Alty (2000) "Implementing a business process management system using ADEPT: a real-world case study" *Int. J. of Applied Artificial Intelligence* **14** (5) 421-463.

143. **N. R. Jennings** (2000) "On agent-based software engineering" *Artificial Intelligence* **117** (2) 277-296.
144. N. Vulkan and **N. R. Jennings** (2000) "Efficient mechanisms for the supply of services in multi-agent environments" *Int. J. of Decision Support Systems* **28** (1-2) 5-19.
145. M. Wooldridge, **N. R. Jennings** and D. Kinny (2000) "The Gaia methodology for agent-oriented analysis and design" *Journal of Autonomous Agents and Multi-Agent Systems* **3** (3) 285-312.
146. M. Wooldridge and **N. R. Jennings** (1999) "Software engineering with agents: pitfalls and pratfalls" *IEEE Internet Computing* **3** (3) 20-27.
147. M. J. Wooldridge and **N. R. Jennings** (1999) "Cooperative problem solving" *Journal of Logic and Computation* **9** (4) 563-592.
148. R. J. Gallimore, **N. R. Jennings**, H. S. Lamba, C. L. Mason and B. J. Orenstein (1999) "Cooperating agents for 3D scientific data interpretation" *IEEE Trans. on Systems, Man and Cybernetics (Part C)* **29** (1) 110-126.
149. **N. R. Jennings**, K. Sycara and M. Wooldridge (1998) "A roadmap of agent research and development" *Journal of Autonomous Agents and Multi-Agent Systems* **1** (1) 7-38.
150. S. Parsons, C. Sierra and **N. R. Jennings** (1998) "Agents that reason and negotiate by arguing" *Journal of Logic and Computation* **8** (3) 261-292.
151. P. Faratin, C. Sierra and **N. R. Jennings** (1998) "Negotiation decision functions for autonomous agents" *Int. J. of Robotics and Autonomous Systems* **24** (3-4) 159-182.
152. **N. R. Jennings**, T. J. Norman and P. Faratin (1998) "ADEPT: An agent-based approach to business process management" *ACM SIGMOD Record* **27** (4) 32-39.
153. F. M. T. Brazier, B. M. Dunin-Keplicz, **N. R. Jennings** and J. Treur (1997) "DESIRE: modelling multi-agent systems in a compositional formal framework" *Int. J. of Cooperative Information Systems* **6** (1) 67-94.
154. **N. R. Jennings** and J. R. Campos (1997) "Towards a social level characterisation of socially responsible agents" *IEE Proc. on Software* **144** (1) 11-25.
155. J. M. Corera, I. Laresgoiti and **N. R. Jennings** (1996) "Using ARCHON, Part 2: Electricity transportation management" *IEEE Expert* **11** (6) 71-79.
156. **N. R. Jennings**, J. A. Pople and E. H. Mamdani (1996) "Designing a re-usable coordination module for cooperative industrial control applications" *IEE Proc. on Control Theory and Applications* **143** (1) 91-102.
157. H. S. Nwana, L. C. Lee and **N. R. Jennings** (1996) "Coordination in software agent systems" *British Telecom Technology Journal* **14** (4) 79-88.
158. **N. R. Jennings**, P. Faratin, M. J. Johnson, T. J. Norman, P. O'Brien and M. E. Wiegand (1996) "Agent-based business process management" *Int. J. of Cooperative Information Systems* **5** (2&3) 105-130.
159. **N. R. Jennings**, E. H. Mamdani, J. M. Corera, I. Laresgoiti, F. Perriolat, P. Skarek and L. Z. Varga (1996) "Using ARCHON to develop real-world DAI applications Part 1" *IEEE Expert* **11** (6) 64-70.
160. F. Perriolat, P. Skarek and L. Z. Varga and **N. R. Jennings** (1996) "Using ARCHON, Part 3: Particle accelerator control" *IEEE Expert* **11** (6) 80-86.
161. **N. R. Jennings** (1995) "Controlling cooperative problem solving in industrial multi-agent systems using joint intentions" *Artificial Intelligence* **75** (2) 195-240.
162. **N. R. Jennings** and A. J. Jackson (1995) "Agent-based meeting scheduling: a design and implementation" *IEE Electronics Letters* **31** (5) 350-352.
163. **N. R. Jennings** and M. J. Wooldridge (1995) "Applying agent technology" *Int. J. of Applied Artificial Intelligence* **9** (4) 351-369.
164. J. Huang, **N. R. Jennings** and J. Fox (1995) "An agent-based approach to health care management" *Int. J. of Applied Artificial Intelligence* **9** (4) 401-420.
165. M. J. Wooldridge and **N. R. Jennings** (1995) "Intelligent agents: theory and practice" *The Knowledge Engineering Review* **10** (2) 115-152. [Recipient of Special Recognition in 2008 from Int. Foundation for Autonomous Agents and Multi-Agent Systems]
166. L. Z. Varga, **N. R. Jennings** and D. Cockburn (1994) "Integrating intelligent systems into a cooperating community for electricity distribution management" *Int. J. of Expert Systems with Applications* **7** (4) 563-579.

167. T. Wittig, **N. R. Jennings** and E. H. Mamdani (1994) "ARCHON—A framework for intelligent cooperation" *IEE-BCS J. of Intelligent Systems Engineering* **3** (3) 168-179.
168. **N. R. Jennings** (1993) "Commitments and conventions: the foundation of coordination in multi-agent systems" *The Knowledge Engineering Review* **Inno8** (3) 223-250.
169. **N. R. Jennings** (1993) "Specification and implementation of a belief-desire-joint-intention architecture for collaborative problem solving" *Int. J. of Intelligent and Cooperative Information Systems* **2** (3) 289-318.
170. **N. R. Jennings**, L. Z. Varga, R. P. Aarnts, J. Fuchs and P. Skarek (1993), "Transforming stand-alone expert systems into a community of cooperating agents" *Int. J. of Engineering Applications of Artificial Intelligence* **6** (4) 317-331.
171. **N. R. Jennings**, E. H. Mamdani, I. Laresgoiti, J. Perez and J. Corera (1992) "GRATE: A general framework for cooperative problem solving" *IEE-BCS J. of Intelligent Systems Engineering* **1** (2) 102-114.
172. R. P. Aarnts, J. Corera, J. Perez, D. Gureghian and **N. R. Jennings** (1991) "Examples of cooperative situations and their implementation" *Vleermuis J. of Software Research* **3** (4) 74- 81.

CONFERENCES

1. [A. Zenonos, S. Stein and N. R. Jennings \(2017\) "A trust-based coordination system for participatory sensing applications" Proc. 5th AAAI Conf. on Human Computation and Crowdsourcing, Quebec City, Canada.](#)
2. [E. Alkayal, M. Abulkhair and N. R. Jennings \(2017\) "Automated negotiation using parallel particle swarm optimization for cloud computing applications" Proc. Int. Conf. on Computer and Applications, Dubai, UAE.](#)
3. A. Augustin, M. Venanzi, A. C. Rogers and **N. R. Jennings** (2017) "Bayesian aggregation of categorical distributions with applications in crowdsourcing" *Proc. 25th Int. Joint Conf. on AI*, Melbourne, Australia 1411-1417.
4. S. Stein, E. H. Gerding, A. Nedeia, A. Rosenfeld and **N. R. Jennings** (2017) "Evaluating market user interfaces for electric vehicle charging using Bid2Charge" *Proc. 25th Int. Joint Conf. on AI*, Melbourne, Australia 4939-4943.
5. Y. Zhang, B. An, L. Tran-Thanh, Z. Wang, J. Gan and **N. R. Jennings** (2017) "Optimal escape interdiction on transportation networks" *Proc. 25th Int. Joint Conf. on AI*, Melbourne, Australia 3936-3944.
6. S. Stein, S. Eshghi, S. Maghsudi, L. Tassioulas, R. K. E. Bellamy and **N. R. Jennings** (2017) "Heuristic Algorithms for Influence Maximization in Partially Observable Social Networks" *Proc. 3rd Int. Workshop on Social Influence Analysis*, Melbourne, Australia 20-32.
7. M. Waniek, L. Tran-Thanh, T. Michalak and **N. R. Jennings** (2017) "The dollar auction with spiteful players" *Proc. 31st AAAI Conference on Artificial Intelligence*, San Francisco, USA 736-742.
8. E. Manini, L. Tran-Thanh and **N. R. Jennings** (2016) "Efficiency of active learning for the allocation of workers on crowdsourced classification tasks" *Proc. NIPS Workshop on Crowdsourcing and Machine Learning*, Barcelona, Spain.
9. R. T. Pruna, M. Polukarov and **N. R. Jennings** (2016) "An asset pricing model with loss aversion and its stylized facts" *Proc. IEEE Sym. on Computational Intelligence for Financial Engineering and Economics*, Athens, Greece 1-8.
10. E. Alkayal, M. Abulkhair and **N. R. Jennings** (2016) "Efficient task scheduling using multi-objective particle swarm optimization in cloud computing" *Proc. 41st IEEE Conf. on Local Computer Networks Workshops*, Dubai, UAE 17-24.
11. C. A. B. Baker, S. D. Ramchurn, W. L. T. Teacy and **N. R. Jennings** (2016) "Planning search and rescue missions for UAV teams" *Proc. 22nd European Conf. on AI*, The Hague, Holland 1777-1782.
12. S. Obratsova, Z. Rabinovich, E. Elkind, M. Polukarov and **N. R. Jennings** (2016) "Trembling hand equilibria of plurality voting" *Proc. 25th Int. Joint Conf. on AI*, New York, USA 440-446.

13. S. Stein, E. Gerding, A. Nedeia, A. Rosenfeld and **N. R. Jennings** (2016) "Bid2Charge: Market user interface design for electric vehicle charging" *Proc. 15th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Singapore 882-890. [Winner of best Innovative Applications paper award & Honourable mention for best paper award]
14. D. Zhao, S. D. Ramchurn and **N. R. Jennings** (2016) "Fault tolerant mechanism design for general task allocation" *Proc. 15th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Singapore 323-331.
15. L. Tran-Thanh, H. Xu, and **N. R. Jennings** (2016) "Playing repeated security games with no prior knowledge" *Proc. 15th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Singapore 104-112.
16. Z. Beck, W. T. L. Teacy, A. C. Rogers and **N. R. Jennings** (2016) "Online planning for collaborative search and rescue by heterogeneous robot teams" *Proc. 15th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Singapore 1024-1032.
17. A. Zenonos, S. Stein and **N. R. Jennings** (2016) "An algorithm to coordinate measurements using stochastic human mobility patterns in large-scale participatory sensing settings" *Proc. 30th AAAI Conference on Artificial Intelligence*, Phoenix, USA 3936-3942.
18. A. T. Alan, E. Costanza, S. Ramchurn, J. Fischer, T. Rodden and **N. R. Jennings** (2015) "Managing energy tariffs with agents: A field study of a future smart energy system at home" *Proc. 1st Int. Workshop on Smart Cities: People, Technology and Data*, Osaka, Japan 1551-1558.
19. M. Polukarov, S. Obratzsova, Z. Rabinovich, A. Kruglyi and **N. R. Jennings** (2015) "Convergence to equilibria in strategic candidacy" *Proc. 24th Int. Joint Conf. on AI (IJCAI)*, Buenos Aires, Argentina 624-630.
20. M. Venanzi, W. T. L. Teacy, A. Rogers and **N. R. Jennings** (2015) "Bayesian modelling of community-based multidimensional trust for participatory sensing under data sparsity" *Proc. 24th Int. Joint Conf. on AI (IJCAI)*, Buenos Aires, Argentina 717-724.
21. F. Wu, S. Ramchurn, W. Jiang, J. Fischer, T. Rodden and **N. R. Jennings** (2015) "Agile planning for real-world disaster response" *Proc. 24th Int. Joint Conf. on AI (IJCAI)*, Buenos Aires, Argentina 132-138.
22. L. Tran-Thanh, Y. Xia, T. Qin and **N. R. Jennings** (2015) "Efficient algorithms with performance guarantees for the stochastic multiple-choice knapsack problem" *Proc. 24th Int. Joint Conf. on AI (IJCAI)*, Buenos Aires, Argentina 403-409.
23. E. Simpson, M. Venanzi, P. Kohli, S. Reece, S. J. Roberts and **N. R. Jennings** (2015) "Scalable Bayesian combination of text features and crowdsourced labels for efficient classification of documents and social media messages" *Proc. 24th Int. World Wide Web Conf. (WWW 2015)*, Florence, Italy 992-1002.
24. W. T. L. Teacy, S. Julier, R. De Nardi, A. Rogers and **N. R. Jennings** (2015) "Observation modelling for vision-based target search by unmanned aerial vehicles" *Proc. 14th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Istanbul, Turkey 1607-1614.
25. A. A. Panagopoulos, M. Alam, A. Rogers and **N. R. Jennings** (2015) "ADA-HEAT: A general adaptive intelligent agent for domestic heating control" *Proc. 14th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Istanbul, Turkey 1295-1303.
26. A. Zenonos, S. Stein and **N. R. Jennings** (2015) "Coordinating measurements for air pollution monitoring in participatory sensing settings" *Proc. 14th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Istanbul, Turkey 493-501.
27. S. D. Ramchurn, E. Simpson, J. Fischer, T. D. Huynh, Y. Ikuno, S. Reece, W. Jiang, F. Wu, J. Flann, S. J. Roberts, L. Moreau, T. Rodden and **N. R. Jennings** (2015) "HAC-ER: A disaster response system based on human-agent collectives" *Proc. 14th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Istanbul, Turkey 533-541. [Winner of best Innovative Applications paper award]

28. S. Obratzsova, E. Markakis, M. Polukarov, Z. Rabinovich and **N. R. Jennings** (2015) "On the convergence of iterative voting: How restrictive should restricted dynamics be?" *Proc. 29th AAAI Conference on AI*, Austin, USA 993-999.
29. A. Panagopoulos, G. Chalkiadakis and **N. R. Jennings** (2015) "Towards optimal solar tracking: a dynamic programming approach" *Proc. 29th AAAI Conference on AI*, Austin, USA 695-701.
30. L. Tran-Thanh, A. Rosenfeld, S. D. Ramchurn and **N. R. Jennings** (2015) "Crowdsourcing complex workflows under budget constraints" *Proc. 29th AAAI Conference on AI*, Austin, USA 1298-1304.
31. D. Zhao, S. Ramchurn, E. H. Gerding and **N. R. Jennings** (2015) "Balanced trade reduction for dual-role exchange markets" *Proc. 29th AAAI Conference on AI*, Austin, USA 1064-1070.
32. V. Naroditskiy, S. Stein, M. Tonin, L. Tran-Thanh, L. Vlassopoulos and **N. R. Jennings** (2014) "Referral incentives in crowd funding" *Proc. 2nd Int. Conf. on Human Computation and Crowdsourcing*, Pittsburgh, USA 171-183.
33. V. Robu, M. Vinyals, A. Rogers and **N. R. Jennings** (2014) "Efficient buyer groups for prediction-of-use electricity tariffs" *Proc. 28th Conf. on AI (AAAI)*, Quebec City, Canada 451-457.
34. F. Wu and **N. R. Jennings** (2014) "Regret-based multi-agent coordination with uncertain task rewards" *Proc. 28th Conf. on AI (AAAI)*, Quebec City, Canada 1492-1499.
35. L. Tran-Thanh, L. Stavrogianis, V. Naroditskiy, V. Robu, P. Key and **N. R. Jennings** (2014) "Efficient regret bounds for online bid optimisation in budget-limited sponsored search auctions" *Proc. 30th Int. Conf. on Uncertainty in AI*, Quebec City, Canada 809-818.
36. J. Fischer, S. D. Ramchurn, F. Wu, W. Jiang, T. Rodden and **N. R. Jennings** (2014) "Social implications of agent-based planning support for human teams" *Int. Conf. on Collaboration Technologies and Systems*, Minneapolis, USA 310-317.
37. E. Costanza, J. Fischer, S. D. Ramchurn, J. Colley, T. Rodden and **N. R. Jennings** (2014) "Doing the laundry with agents: a field trial of a future smart energy system in the home" *Proc. SIGCHI Conf. on Human Factors in Computing Systems (CHI)*, Toronto, Canada 813-822.
38. L. Tran-Thanh, T. D. Huynh, A. Rosenfeld, S. D. Ramchurn and **N. R. Jennings** (2014) "BudgetFix: Budget limited crowdsourcing for interdependent task allocation with quality guarantees" *Proc. 13th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Paris, France 477-484.
39. A. Alan, E. Costanza, J. Fischer, S. Ramchurn, T. Rodden and **N. R. Jennings** (2014) "A field study of human-agent interaction for electricity tariff switching" *Proc. 13th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Paris, France 965-972.
40. M. Vinyals, V. Robu, A. Rogers and **N. R. Jennings** (2014) "Prediction-of-use games: a cooperative game theory approach to sustainable energy tariffs" *Proc. 13th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Paris, France 829-836.
41. A. Rogers, S. Ghosh, R. Wilcox and **N. R. Jennings** (2013) "A scalable low-cost solution to provide personalised home heating advice to households" *Proc. 5th ACM Workshop On Embedded Systems for Energy-Efficient Buildings*, Rome, Italy, 1-8. [Winner best paper award]
42. M. Venanzi, A. Rogers and **N. R. Jennings** (2013) "Trust-based heteroscedastic Gaussian processes for crowdsourcing spatial functions" *Proc. 1st Int. Conf. on Human Computation and Crowdsourcing*, Palm Springs, USA 182-189.
43. V. Capraro, M. Venanzi, M. Polukarov and **N. R. Jennings** (2013) "Cooperative equilibria in iterated social dilemmas" *Proc. 6th Int. Sym. on Algorithmic Game Theory*, Aachen, Germany 146-158.
44. J. McInerney, A. Rogers and **N. R. Jennings** (2013) "Modelling heterogeneous location habits in a human population with applications to location prediction under data sparsity" *Proc. ACM Int. Joint Conf. on Pervasive and Ubiquitous Computing (UbiComp)*, Zurich, Switzerland 469-478.
45. T. Michalak, T. Rahwan, P. Szczepanski, R. Narayanam, **N. R. Jennings** and M. Wooldridge (2013) "Computational analysis of connectivity games with application to investigation of terrorist networks" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China 293-301.

46. F. Wu, S. Zilberstein and **N. R. Jennings** (2013) "Monte-Carlo expectation maximization for decentralized POMDPs" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China 317-403.
47. S. Stein, E. H. Gerding, V. Robu, M de Weerd and **N. R. Jennings** (2013) "Intention-aware routing to minimise delays at electric vehicle charging stations" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China, 83-89.
48. T. Rahwan, T. Nguyen, T. Michalak, M. Polukarov, M. Croitoru and **N. R. Jennings** (2013) "Coalitional games via network flows" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China, 324-331.
49. L. Tran-Thanh, T. Nguyen, T. Rahwan, A. Rogers and **N. R. Jennings** (2013) "An efficient vector-based representation for coalitional games" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China, 383-389.
50. V. Robu, D. Parkes, T. Ito and **N. R. Jennings** (2013) "Efficient interdependent value combinatorial auctions with single-minded bidders" *Proc. 23rd Int. Joint Conf. on AI (IJCAI)*, Beijing, China, 339-345.
51. J. McInerney, A. Rogers and **N. R. Jennings** (2013) "Learning periodic human behaviour models from sparse data for crowdsourcing aid delivery in developing countries" *Proc. 29th Int. Conf. on Uncertainty in AI (UAI)*, Washington, USA 401-410.
52. L. Tran-Thanh, M. Venanzi, A. Rogers and **N. R. Jennings** (2013) "Efficient budget allocation with accuracy guarantees for crowdsourcing classification tasks" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA 901-908.
53. S. Brânzei, T. Michalak, T. Rahwan, K. Larson, and **N. R. Jennings** (2013) "Matching with externalities and attitudes" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA 295-302.
54. V. Naroditskiy, S. Ceppi, V. Robu and **N. R. Jennings** (2013) "Redistribution in online mechanisms" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA 651-658.
55. M. Venanzi, A. Rogers and **N. R. Jennings** (2013) "Trust-based fusion of untrustworthy information in crowdsourcing applications" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA, 829-836.
56. Y. Zick, M. Polukarov and **N. R. Jennings** (2013) "Taxation and stability in cooperative games" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA, 523-530.
57. E. H. Gerding, S. Stein, V. Robu, D. Zhao, and **N. R. Jennings** (2013) "Two-sided online markets for electric vehicle charging" *Proc. 12th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Minnesota, USA, 989-996.
58. J. E. Fischer, S. D. Ramchurn, M. Osborne, O. Parson, T. D. Huynh, M. Alam, N. Pantidi, S. Moran, K Bachour, S. Reece, E. Costanza, T. Rodden and **N. R. Jennings** (2013) "Recommending energy tariffs and load shifting based on smart household usage profiling" *Proc. Int. Conf. on Intelligent User Interfaces*, Santa Monica, USA 383-394.
59. V. Naroditskiy, M. Guo, L. Dufton, M. Polukarov and **N. R. Jennings** (2012) "Redistribution of VCG payments in public project problems" *Proc. 8th Int. Workshop on Internet and Network Economics* Liverpool, UK 323-336.
60. E. Costanza, S. D. Ramchurn and **N. R. Jennings** (2012) "Understanding domestic energy consumption through interactive visualisation: a field study" *Proc. 14th ACM Int. Conf. on Ubiquitous Computing*, Pittsburgh, USA 216-225.
61. R. Kota, V. Robu, G. Chalkiadakis, A. Rogers and **N. R. Jennings** (2012) "Cooperatives for demand side management" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 969-974.
62. F. Wu, **N. R. Jennings** and X. Chen (2012) "Sample-based policy iteration for constrained DEC-POMDPs" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 858-863.
63. G. Hines, T. Rahwan and **N. R. Jennings** (2012) "An anytime algorithm for finding an epsilon-core in non-transferable utility coalitional games" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 414-419.
64. C. R. Williams, V. Robu, E. H. Gerding and **N. R. Jennings** (2012) "Negotiating concurrently with unknown opponents in complex, real-time domains" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 834-839.
65. L. Tran-Thanh, S. Stein, A. Rogers and **N. R. Jennings** (2012) "Efficient crowdsourcing of unknown experts using multi-armed bandits" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 768-773.
[Honourable mention for best paper award]

66. I. Vetsikas, S. Stein and **N. R. Jennings** (2012) "Multi-unit auctions with a stochastic number of asymmetric bidders" *Proc. 20th European Conf. on AI (ECAI)*, Montpellier, France 816-821.
67. J. McInerney, S. Stein, A. Rogers and **N. R. Jennings** (2012) "Exploring periods of low predictability in daily life mobility" *Proc. Pervasive Workshop on the Nokia Mobile Data Challenge*, Newcastle, UK.
68. L. Tran-Thanh, M. Polukarov, A. Chapman, A. Rogers and **N. R. Jennings** (2012) "Knapsack-based optimal policies for budget-limited multi-armed bandits" *Proc. 26th AAAI Conf.* Toronto, Canada, 1134-1140. [Honourable mention for best paper award, 2 out of 1129 submissions]
69. T. Rahwan, T. Michalak and **N. R. Jennings** (2012) "A hybrid algorithm for coalition structure generation" *Proc. 26th AAAI Conf.* Toronto, Canada 1443-1354.
70. L. Dufton, V. Naroditskiy, M. Polukarov and **N. R. Jennings** (2012) "Optimizing payments in dominant-strategy mechanisms for multi-parameter domains" *Proc. 26th AAAI Conf.* Toronto, Canada 1347-1354.
71. V. Robu, R. Kota, G. Chalkiadakis, A. Rogers and **N. R. Jennings** (2012) "Cooperative virtual power plant formation using scoring rules" *Proc. 26th AAAI Conf.* Toronto, Canada, 370-376.
72. A. Rogers, S. D. Ramchurn and **N. R. Jennings** (2012) "Delivering the smart grid: challenges for autonomous agents and multi-agent systems research" *Proc. 26th AAAI Conf.* Toronto, Canada, 2166-2172.
73. F. M. Delle Fave, A. Farinelli, A. Rogers and **N. R. Jennings** (2012) "A methodology for deploying the max-sum algorithm and a case study in unmanned aerial vehicles" *Proc. 24th Conf. on Innovative Applications of AI*, Toronto, Canada, 2275-2280.
74. F. Ishowo-Oloko, I. Rahwan, P. Vytelingum and **N. R. Jennings** (2012) "A storage pricing mechanism for learning agents in the Masdar City smart electricity grid" *Proc. 3rd Int. Workshop on Agent Technology for Energy Systems*, Valencia, Spain 81-88.
75. O. Prymak, A. Rogers and **N. R. Jennings** (2012) "Efficient sharing of conflicting information in large decentralised teams" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 543-550.
76. G. Chalkiadakis, V. Markakis and **N. R. Jennings** (2012) "Coalitional stability in structured environments" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 779-786.
77. T. Voice, S. D. Ramchurn and **N. R. Jennings** (2012) "On coalition formation with sparse synergies" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 223-230
78. R. Stranders, L. Tran-Thanh, F. M. Delle Fave, A. Rogers and **N. R. Jennings** (2012) "DCOPS and bandits: Exploration and exploitation in decentralised coordination" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 289-297.
79. S. Stein, S. Williamson and **N. R. Jennings** (2012) "Decentralised channel allocation and information sharing for teams of cooperative agents" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 231-238.
80. W. L. Teacy, G. Chalkiadakis, A. Farinelli, A. Rogers, **N. R. Jennings**, S. McClean and G. Parr (2012) "Decentralized Bayesian reinforcement learning for online agent collaboration" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 417-424.
81. S. Stein, E. H. Gerding, V. Robu and **N. R. Jennings** (2012) "A model-based online mechanism with pre-commitment and its application to electric vehicle charging" *Proc. 11th Int. Conference on Autonomous Agents and Multi-Agent Systems*, Valencia, Spain 669-676.
82. F. M. Delle Fave, A. Rogers, Z. Xu, S. Sukkarieh and **N. R. Jennings** (2012) "Deploying the max-sum algorithm for coordination and task allocation of unmanned aerial vehicles for live imagery collection" *Proc. IEEE Int. Conf. on Robotics and Automation (ICRA)*, St Pauls, USA, 469-476.
83. M. Guo, V. Naroditskiy, V. Conitzer, A. Greenwald and **N. R. Jennings** (2011) "Budget-balanced and nearly efficient randomized mechanisms: Public goods and beyond" *Proc. 7th Int. Workshop on Internet and Network Economics*, Singapore 158-169.
84. L. Tran-Thanh, M. Polukarov, A. Chapman, A. Rogers and **N. R. Jennings** (2011) "On the existence of pure strategy Nash equilibria in integer-splittable weighted congestion games" *Proc. 4th Int. Sym. on Algorithmic Game Theory*, Salerno, Italy 236-253.

85. V. Robu, S. Stein, E. H. Gerding, D. C. Parkes, A. Rogers and **N. R. Jennings** (2011) "An online mechanism for multi-speed electric vehicle charging" *Proc. 2nd Conf. on Auctions, Market Mechanisms and their Applications*, New York, USA.
86. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2011) "Automated analysis of weighted voting games" *Proc. 13th Int. Conf. on Electronic Commerce*, Liverpool UK.
87. T. Rahwan, T. Michalak, E. Elkind, P. Faliszewski, M. Wooldridge and **N. R. Jennings** (2011) "Constrained coalition formation" *Proc. 25th Conf. on AI (AAAI)*, San Francisco, USA 719-725.
88. K. Macarthur, R. Stranders, S. D. Ramchurn and **N. R. Jennings** (2011) "A distributed anytime algorithm for dynamic task allocation in multi-agent systems" *Proc. 25th Conf. on AI (AAAI)*, San Francisco, USA 701-706.
89. T. Voice, S. D. Ramchurn, P. Vytelingum, A. Rogers and **N. R. Jennings** "Decentralised control of micro-storage in the smart grid" *Proc. 25th Conf. on AI (AAAI)*, San Francisco, USA 1421-1427.
90. A. C. Chapman, S. A. Williamson and **N. R. Jennings** (2011) "Filtered fictitious play for perturbed-observation potential games and decentralised POMDPs" *Proc. 27th Conf. on Uncertainty in AI*, Barcelona, Spain, 77-85.
91. H. S. Packer, N. Gibbins and **N. R. Jennings** (2011) "An on-line algorithm for semantic forgetting" *Proc. 22nd Int. J. Conf. on AI (IJCAI)*, Barcelona, Spain 2704-2709.
92. T. Rahwan, T. Michalak and **N. R. Jennings** (2011) "Minimum search to establish worst-case guarantees in coalition structure generation" *Proc. 22nd Int. J. Conf. on AI (IJCAI)*, Barcelona, Spain, 338-343
93. C. Williams, V. Robu, E. H. Gerding and **N. R. Jennings** (2011) "Using Gaussian processes to optimise concession in complex negotiations against unknown opponents" *Proc. 22nd Int. J. Conf. on AI (IJCAI)*, Barcelona, Spain 432-438.
94. R. Cavalcante, A. Rogers and **N. R. Jennings** (2011) "Consensus acceleration in multi-agent systems with the Chebyshev semi-iterative method" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan 165-172.
95. E. H. Gerding, V. Robu, S. Stein, D. Parkes A. Rogers and **N. R. Jennings** (2011) "Online mechanism design for electric vehicle charging" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan 811-818.
96. S. D. Ramchurn, P. Vytelingum, A. Rogers and **N. R. Jennings** (2011) "Agent-based control for decentralised demand side management in the smart grid" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan, 5-12. **[Honourable mention for best application paper award]**
97. F. M. Delle Fave, R. Stranders, A. Rogers and **N. R. Jennings** (2011) "Bounded decentralised coordination over multiple objectives" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan 371-378.
98. G. Chalkiadakis, V. Robu, R. Kota, A. Rogers and **N. R. Jennings** (2011) "Cooperatives of distributed energy resources for efficient virtual power plants" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan 787-794.
99. N. Stefanovitch, A. Farinelli, A. Rogers and **N. R. Jennings** (2011) "Resource-aware junction trees for efficient multi-agent coordination" *Proc. 10th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Taipei, Taiwan 363-370.
100. K. A. Macarthur, S. D. Ramchurn and **N. R. Jennings** (2011) "Decentralised parallel machine scheduling for multi-agent task allocation" *Proc. 4th Int. Workshop on Optimisation in Multi-Agent Systems*, Taipei, Taiwan.
101. Y. Bachrach, M. Polukarov and **N. R. Jennings** (2010) "The good, the bad and the cautious: safety level cooperative games" *Proc. 6th Int. Workshop on Internet and Network Economics*, Stanford, USA, 432-443.
102. K. V. Aadithya, B. Ravindran, T. P. Michalak and **N. R. Jennings** (2010) "Efficient computation of the Shapley value for centrality in networks" *Proc. 6th Int. Workshop on Internet and Network Economics*, Stanford, USA, 1-13.
103. A. M. Sykulski, N. M. Adams and **N. R. Jennings** (2010) "On-line adaptation of exploration in the one-armed bandit with covariates problem" *Proc. 9th Int. Conf. on Machine Learning and Applications*, Washington, USA, 459-464.
104. H. S. Packer, N. M. Gibbins and **N. R. Jennings** (2010) "Forgetting fragments from evolving ontologies" *Proc. 9th Int. Semantic Web Conf. (ISWC)*, Shanghai, China, 577-592. **[Winner best student paper award]**

105. A. Rogers, A. Farinelli and **N. R. Jennings** (2010) "Self-organising sensors for wide area surveillance using the max-sum algorithm" *Proc. 1st Int. Workshop on Self-Organizing Architectures*, Cambridge, UK, 84-100.
106. H. S. Packer, N. M. Gibbins and **N. R. Jennings** (2010) "Collaborative learning of ontology fragments by cooperating agents" *Proc. IEEE/WIC/ACM Int. Conf. on Intelligent Agent Technology*, Toronto, Canada.
107. A. Sykulski, A. Chapman, E. Munoz de Cote and **N. R. Jennings** (2010) "EA²: The winning strategy for the inaugural lemonade stand game tournament" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 209-214.
108. T. Voice, R. Stranders, A. Rogers and **N. R. Jennings** (2010) "Hybrid continuous max-sum algorithms for decentralised coordination" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 61-66. [Honourable mention for best paper award]
109. S. Stein, E. H. Gerding and **N. R. Jennings** (2010) "Optimal task migration in service-oriented systems: algorithms and mechanisms" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 73-78.
110. T. Michalak, T. Rahwan and **N. R. Jennings** (2010) "Computational aspects of extending the Shapley value to coalitional games with externalities" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 197-202.
111. B. Shi, E. H. Gerding, P. Vytelingum and **N. R. Jennings** (2010) "An equilibrium analysis of competing double auction marketplaces using a fictitious play algorithm" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 575-580.
112. V. Robu, I. Vetsikas, E. H. Gerding and **N. R. Jennings** (2010) "Addressing the exposure problem of bidding agents using flexibly priced options" *Proc. 19th European Conf. on AI*, Lisbon, Portugal, 581-586.
113. I. Vetsikas and **N. R. Jennings** (2010) "Multi-unit auctions with asymmetric bidders" *Proc. ECAI Workshop on Intelligent Agents and Technologies for e-business*, Lisbon, Portugal, 1-6.
114. R. Stranders, F. M. D. Fave, A. Rogers and **N. R. Jennings** (2010) "A decentralised coordination algorithm for mobile sensors" *Proc. 24th Conf. on AI (AAAI)* Atlanta, USA, 874-880.
115. L. Tran-Thanh, A. Chapman, E. Munoz de Cote, A. Rogers and **N. R. Jennings** (2010) "Epsilon-first policies for budget-limited multi-armed bandits" *Proc. 24th Conf. on AI (AAAI)* Atlanta, USA, 1211-1216.
116. R. Meir, M. Polukarov, J. S. Rosenschein and **N. R. Jennings** (2010) "Convergence to equilibria in plurality voting" *Proc. 24th Conf. on AI (AAAI)* Atlanta, USA, 823-828.
117. A. C. Chapman, A. Farinelli, E. Munoz de Cote, A. Rogers and **N. R. Jennings** (2010) "A distributed algorithm for optimising over pure strategy Nash equilibria" *Proc. 24th Conf. on AI (AAAI)* Atlanta, USA, 749-755.
118. E. Munoz de Cote, A. Chapman, A. Sykulski and **N. R. Jennings** (2010) "Automated planning in repeated adversarial games" *Proc. 26th Conf. On Uncertainty in AI*, Catalina Island, USA.
119. R. Cavalcante, A. Rogers, I. Yamada and **N. R. Jennings** (2010) "Distributed multiagent learning with a broadcast adaptive sub-gradient method" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1039-1046.
120. E. Munoz de Cote and **N. R. Jennings** (2010) "Planning against fictitious players in repeated normal form games" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1073-1080.
121. Z. Rabinovich, L. Dufton, K. Larson and **N. R. Jennings** (2010) "Cultivating desired behaviour: Policy teaching via environment-dynamics tweaks" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1097-1104.
122. B. Shi, E. H. Gerding, P. Vytelingum and **N. R. Jennings** (2010) "A game-theoretic analysis of market selection strategies for competing double auction markets" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 857-864.
123. R. Stranders, A. Rogers and **N. R. Jennings** (2010) "A decentralised coordination algorithm for maximising sensor coverage in large sensor networks" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1165-1172.
124. T. Michalak, D. Marciniak, M. Szamotulski, T. Rahwan, M. Wooldridge, P. McBurney and **N. R. Jennings** (2010) "A logic-based representation for coalitional games with externalities" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada, 125-132.
125. T. Michalak, J. Sroka, T. Rahwan, M. Wooldridge, P. McBurney and **N. R. Jennings** (2010) "A distributed algorithm for anytime coalition structure generation" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1007-1014.

126. S. D. Ramchurn, M. Polukarov, A. Farinelli, C. Truong and **N. R. Jennings** (2010) "Coalition formation with spatial and temporal constraints" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 1181-1188.
127. E. H. Gerding, S. Stein, K. Larson, A. Rogers and **N. R. Jennings** (2010) "Scalable mechanism design for the procurement of services with uncertain durations" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 649-656.
128. P. Vytelingum, T. Voice, S. D. Ramchurn, A. Rogers and **N. R. Jennings** (2010) "Agent-based micro-storage management for the smart grid" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 39-46. [Winner best paper award, 685 submissions]
129. P. Vytelingum, S. D. Ramchurn, T. Voice, A. Rogers and **N. R. Jennings** (2010) "Trading agents for the smart electricity grid" *Proc. 9th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Toronto, Canada 897-904.
130. K. S. Macarthur, A. Farinelli, S. D. Ramchurn and **N. R. Jennings** (2010) "Efficient superstabilizing decentralised optimisation for dynamic task allocation environments" *Proc. 3rd Int. Workshop on Optimisation in Multi-Agent Systems*, Toronto, Canada, 25-32.
131. F. Delle Fave, Z. Xu, A. Rogers and **N. R. Jennings** (2010) "Decentralised coordination of unmanned aerial vehicles for target search using the max sum algorithm" *Proc. Int. Workshop on Agents in Real-time and Dynamic Environments*, Toronto, Canada, 35-44.
132. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2010) "Optimal agendas for multi-issue negotiation" *Proc. 12th Int. Workshop on Agent-Mediated Electronic Commerce*, Toronto, Canada, 155-168.
133. B. Shi, E. H. Gerding, P. Vytelingum and **N. R. Jennings** (2010) "Setting fees in competing double auction marketplaces: an equilibrium analysis" *Proc. 12th Int. Workshop on Agent-Mediated Electronic Commerce*, Toronto, Canada, 85-98.
134. V. Robu, I. Vetsikas, E. Gerding and **N. R. Jennings** (2010) "Flexibly priced options: A new mechanism for sequential auctions with complementary goods" *Proc. 12th Int. Workshop on Agent-Mediated Electronic Commerce*, Toronto, Canada, 29-42.
135. P. Vytelingum, A. Rogers, D. K. Macbeth, P. Dutta, A. Stranjak and **N. R. Jennings** (2009) "A market-based approach to multiple-factory scheduling" *Proc. 1st Int. Conf. on Auctions, Market Mechanisms and their Applications*, Boston, USA.
136. G. Chalkiadakis, E. Elkind, M. Polukarov and **N. R. Jennings** (2009) "The price of democracy in coalition formation" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary, 401-408.
137. S. Stein, E. Gerding, A. Rogers, K. Larson and **N. R. Jennings** (2009) "Flexible procurement of services with uncertain durations" *Proc. 2nd Int. Workshop on Optimisation in Multi-Agent Systems*, Budapest, Hungary, 16-22.
138. I. A. Vetsikas, A. Rogers and **N. R. Jennings** (2009) "Pick a bundle: A novel bundling strategy for selling multiple items within online auctions" *Proc. 2nd Int. Workshop on Optimisation in Multi-Agent Systems*, Budapest, Hungary, 31-38.
139. A. Papakonstantinou, A. Rogers, E. H. Gerding and **N. R. Jennings** (2009) "Mechanism design for eliciting probabilistic estimates from multiple suppliers with unknown costs and limited precision" *Proc. 11th Int. Workshop on Agent Mediated Electronic Commerce*, Budapest, Hungary, 111-124.
140. T. Michalak, T. Rahwan, J. Sroka, A. Dowell, M. Wooldridge, P. McBurney and **N. R. Jennings** (2009) "On representing coalitional games with externalities" *Proc. 10th ACM Conf. on Electronic Commerce (ACM EC)* Stanford, USA, 11-20.
141. T. Rahwan, T. Michalak, **N. R. Jennings**, M. Wooldridge and P. McBurney (2009) "Coalition structure generation in multi-agent systems with positive and negative externalities" *Proc. 21st Int. Joint Conf. on AI (IJCAI)*, Pasadena, USA, 257-263.
142. S. Stein, E. Gerding, A. Rogers, K. Larson and **N. R. Jennings** (2009) "Flexible procurement of services with uncertain durations using redundancy" *Proc. 21st Int. Joint Conf. on AI (IJCAI)*, Pasadena, USA, 292-298.

143. G. van Valkenhoef, S. D. Ramchurn, P. Vytelingum, **N. R. Jennings** and R. Verbrugge (2009) "Continuous double auctions with execution uncertainty" *Proc. IJCAI Workshop on Trading Agent Design and Analysis*, Pasadena, USA, 113-122.
144. H. S. Packer, N. M. Gibbins and **N. R. Jennings** (2009) "Ontology evolution through agent collaboration" *Proc. AISB Workshop on Matching and Meaning*, Edinburgh, Scotland.
145. R. Stranders, A. Farinelli, A. Rogers and **N. R. Jennings** (2009) "Decentralised coordination of continuously valued control parameters using the max-sum algorithm" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary 601-608.
146. A. C. Chapman, R. A. Micillo, R. Kota and **N. R. Jennings** (2009) "Decentralized task allocation: a practical game theoretic approach" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary, 915-922. [Honourable mention for best student paper award]
147. R. Kota, N. M. Gibbins and **N. R. Jennings** (2009) "Self-organising agent organisations" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary, 797-804.
148. S. Fatima, M. Wooldridge and **N. R. Jennings** (2009) "An analysis of feasible solutions for multi-issue negotiation involving non-linear utility functions" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary, 1041-1048.
149. S. A. Williamson, E. H. Gerding and **N. R. Jennings** (2009) "Reward shaping for valuing communications during multi-agent coordination" *Proc. 8th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Budapest, Hungary, 641-648.
150. J. Kho, L. Tran-Thanh, A. Rogers and **N. R. Jennings** (2009) "Decentralised control of adaptive sampling and routing in wireless visual sensor networks" *Proc. 3rd International Workshop on Agent Technology for Sensor Networks*, Budapest, Hungary, 63-70.
151. R. Stranders, A. Rogers and **N. R. Jennings** (2009) "Decentralised coordination of mobile sensors using the max-sum algorithm" *Proc. 3rd Int. Workshop on Agent Technology for Sensor Networks*, Budapest, Hungary, 57-62.
152. E. H. Gerding, K. Larson and **N. R. Jennings** (2009) "Eliciting expert advice in service-oriented computing" *Proc. 11th Int. Workshop on Agent Mediated Electronic Commerce*, Budapest, Hungary, 29-42
153. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2009) "An approximation method for power indices for voting games" *Proc. 2nd Int. Workshop on Agent-Based Complex Automated Negotiations*, Budapest, Hungary, 72-86.
154. G. Chalkiadakis, E. Elkind and **N. R. Jennings** (2009) "Simple coalitional games with beliefs" *Proc. 21st Int. Joint Conf. on AI (IJCAI)*, Pasadena, USA, 85-90.
155. R. Stranders, A. Farinelli, A. Rogers and **N. R. Jennings** (2009) "Decentralised coordination of mobile sensors using the max-sum algorithm" *Proc. 21st Int. Joint Conf. on AI (IJCAI)*, Pasadena, USA, 299-304.
156. Z. Rabinovich, E. Gerding, M. Polukarov and **N. R. Jennings** (2009) "Fictitious play for a continuum of anonymous players" *Proc. 21st Int. Joint Conf. on AI (IJCAI)*, Pasadena, USA, 245-250.
157. A. Farinelli, A. Rogers and **N. R. Jennings** (2009) "Bounded approximate decentralised coordination using the max-sum algorithm" *Proc. IJCAI Workshop on Distributed Constraint Reasoning*, Pasadena, USA, 46-59.
158. R. Kota, N. Gibbins and **N. R. Jennings** (2009) "A generic agent organisation framework for autonomic systems" *Proc. 1st Int. Workshop on Agent-Based Social Simulation and Autonomic Systems*, Limassol, Cyprus
159. A. Byde, M. Polukarov and **N. R. Jennings** (2009) "Games with congestion-averse utilities" *Proc. 2nd Int. Sym. on Algorithmic Game Theory*, Paphos, Cyprus, 220-232.
160. T. Voice, M. Polukarov, A. Byde and **N. R. Jennings** (2009) "On the impact of strategy and utility structures on congestion-averse games" *Proc. 5th Int. Workshop on Internet and Network Economics*, Rome, Italy, 600-607.
161. A. Rogers, M. A. Osborne, S. D. Ramchurn, S. J. Roberts and **N. R. Jennings** (2008) "Information agents for pervasive sensor networks" *Proc. 6th Annual IEEE Int. Conf. on Pervasive Computing and Communication (PerCom 2008)*, Hong Kong, China, 294-299.

162. M. A. Osborne, A. Rogers, S. D. Ramchurn, S. J. Roberts and **N. R. Jennings** (2008) "Towards real-time information processing of sensor network data using computationally efficient multi-output Gaussian Processes" *Proc. Int. Conf. on Information Processing in Sensor Networks (IPSN)*, St. Louis, USA, 109-120.
163. W. T. L. Teacy, G. Chalkiadakis, A. Rogers and **N. R. Jennings** (2008) "Sequential decision making with untrustworthy service providers" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 755-762.
164. E. H. Gerding, A. Bye, E. Elkind, Z. Rabinovich and **N. R. Jennings** (2008) "Approximating mixed Nash equilibrium using smooth fictitious play in simultaneous auctions" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 1577-1580.
165. A. Papakonstantinou, A. Rogers, E. H. Gerding and **N. R. Jennings** (2008) "A truthful two-stage mechanism for eliciting probabilistic estimates with unknown costs" *Proc. 18th European Conf. on AI (ECAI)*, Patras, Greece, 448-452.
166. S. Fatima, M. Wooldridge and **N. R. Jennings** (2008) "An anytime approximation method for the inverse Shapley value problem" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 935-942.
167. A. Farinelli, A. Rogers, A. Petcu and **N. R. Jennings** (2008) "Decentralised coordination of low-power embedded devices using the max-sum algorithm" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 639-646.
168. S. Stein, T. R. Payne and **N. R. Jennings** (2008) "Flexible service provisioning with advance agreements" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 249-256.
169. A. C. Chapman, A. C. Rogers and **N. R. Jennings** (2008) "Learn while you earn: Two approaches to learning auction parameters in take-it-or-leave-it auctions" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 1561-1564.
170. I. A. Vetsikas and **N. R. Jennings** (2008) "Towards agents participating in realistic multi-unit auctions" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 1621-1624.
171. T. Rahwan and **N. R. Jennings** (2008) "An improved dynamic programming algorithm for coalition structure generation" *Proc. 7th Int. Conf. on Autonomous Agents and Multi-Agent Systems*, Estoril, Portugal, 1417-1420.
172. A. C. Chapman, A. Rogers and **N. R. Jennings** (2008) "Benchmarking hybrid algorithms for distributed constraint optimisation games" *Proc. AAMAS Workshop on Optimisation in Multi-Agent Systems*, Estoril, Portugal 1-11.
173. A. C. Chapman, A. Rogers and **N. R. Jennings** (2008) "A parameterisation of algorithms for distributed constraint optimisation via potential games" *Proc. AAMAS Workshop on Distributed Constraint Reasoning*. Estoril, Portugal, 99-113.
174. S. A. Williamson, E. H. Gerding and **N. R. Jennings** (2008) "A principled information valuation for communications during multi-agent coordination" *Proc. AAMAS Workshop on Multi-Agent Sequential Decision Making in Uncertain Domains*, Estoril, Portugal, 137-151.
175. R. Stranders, A. Rogers and **N. R. Jennings** (2008) "A decentralized, on-line coordination mechanism for monitoring spatial phenomena with mobile sensors" *Proc. 2nd Int. Workshop on Agent Technology for Sensor Networks*, Estoril, Portugal, 9-15.
176. R. Kota, N. M. Gibbins and **N. R. Jennings** (2008) "Decentralised structural adaptation in agent organisations" *Proc. AAMAS Workshop on Organised Adaptation in Multi-Agent Systems*, Estoril, Portugal, 1-16.
177. A. Farinelli, A. Rogers and **N. R. Jennings** (2008) "Maximising sensor network efficiency through agent-based coordination of sleep/sense schedules" *Proc. Int. Workshop on Energy in Wireless Sensor Networks*, Santorini Island, Greece, Volume IV, 43-56.
178. T. Rahwan and **N. R. Jennings** (2008) "Coalition structure generation: dynamic programming meets anytime optimisation" *Proc. 23rd Conf. on AI (AAAI)*, Chicago, USA 156-161.
179. I. A. Vetsikas and **N. R. Jennings** (2008) "Bidding strategies for realistic multi-unit sealed-bid auctions" *Proc. 23rd Conf. on AI (AAAI)*, Chicago, USA, 182-189.
180. E. Elkind, G. Chalkiadakis and **N. R. Jennings** (2008) "Coalition structures in weighted voted games" *Proc. 18th European Conf. on AI (ECAI)*, Patras, Greece 393-397. [Honourable mention for best paper award]

181. P. Vytelingum, I. A. Vetsikas, B. Shi and **N. R. Jennings** (2008) "IAMwildCat: The winning strategy for the TAC market design competition" *Proc. 18th European Conf. on AI (ECAI)*, Patras, Greece, 428-432. [Honourable mention for best paper award]
182. G. Chalkiadakis, E. Elkind, E. Markakis and **N. R. Jennings** (2008) "Overlapping coalition formation" *Proc. 4th Int. Workshop on Internet and Network Economics*, Shanghai, China, 307-321.
183. E. H. Gerding, R. K. Dash, D. C. K. Yuen and **N. R. Jennings** (2007) "Bidding optimally in concurrent second-price auctions of perfectly substitutable goods" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 267-274. [Honourable mention for best paper award]
184. W. T. L. Teacy, T. D. Huynh, R. K. Dash, **N. R. Jennings**, J. Patel and M. Luck (2007) "The ART of IAM: The winning strategy for the 2006 competition" *Proc. AAMAS Workshop on Trust in Agent Societies*, Hawaii, USA, 102-111.
185. T. Rahwan, S. D. Ramchurn, A. Giovannucci, V. D. Dang and **N. R. Jennings** (2007) "Anytime optimal coalition structure generation" *Proc. 22nd Conf. on Artificial Intelligence (AAAI)*, Vancouver, Canada, 1184-1190.
186. I. Vetsikas, **N. R. Jennings** and B. Selman (2007) "Generating Bayes-Nash equilibria to design autonomous trading agents" *Proc. 20th Int. Joint Conf. on AI (IJCAI)*, Hyderabad, India, 1543-1550.
187. E. H. Gerding, A. Rogers, R. K. Dash and **N. R. Jennings** (2007) "Sellers competing for buyers in online markets: reserve prices, shill bids and auction fees" *Proc. 20th Int. Joint Conf. on AI (IJCAI)*, Hyderabad, India, 1287-1293.
188. P. S. Dutta, C. Goldman and **N. R. Jennings** (2007) "Communicating effectively in resource-constrained multi-agent systems" *Proc. 20th Int. Joint Conf. on AI (IJCAI)*, Hyderabad, India, 1269-1274.
189. T. Rahwan, S. D. Ramchurn, V. D. Dang and **N. R. Jennings** (2007) "Near-optimal anytime coalition structure generation" *Proc. 20th Int. Joint Conf. on AI (IJCAI)*, Hyderabad, India, 2365-2371.
190. S. Reece, A. Rogers, S. Roberts and **N. R. Jennings** (2007) "Rumours and reputation: evaluating multi-dimensional trust within a decentralised reputation system" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 1063-1070.
191. A. Rogers, E. David, T. R. Payne and **N. R. Jennings** (2007) "An advanced bidding agent for advertisement selection on public displays" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 251-258.
192. I. A. Vetsikas and **N. R. Jennings** (2007) "Outperforming the competition in multi-unit sealed bid auctions" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 702-709. [Honourable mention for best paper award]
193. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2007) "Approximate and online multi-issue negotiation" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 947-954.
194. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2007) "A randomised method for the Shapley value for the voting game" *Proc. 6th Int. J. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hawaii, USA, 955-962
195. J. Kho, A. Rogers and **N. R. Jennings** (2007) "Decentralised adaptive sampling of wireless sensor networks" *Proc. 1st Int. Workshop on Agent Technology for Sensor Networks*, Hawaii, USA, 55-62.
196. P. Vytelingum, D. Cliff and **N. R. Jennings** (2007) "Analysing buyers' and sellers' strategic interactions in marketplaces: an evolutionary game theoretic approach" *Proc. 9th Int. Workshop on Agent-Mediated Electronic Commerce*, Hawaii, USA, 141-154.
197. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2007) "Sequential auctions in uncertain information settings" *Proc. 9th Int. Workshop on Agent-Mediated Electronic Commerce*, Hawaii, USA, 15-28.
198. S. Stein, T. R. Payne and **N. R. Jennings** (2007) "An effective strategy for the flexible provisioning of service workflows" *Proc. Int. Workshop on Service-Oriented Computing: Agents, Semantics and Engineering*, Hawaii, USA, 16-30.
199. S. S. Stein, **N. R. Jennings** and T. R. Payne (2007) "Provisioning heterogeneous and unreliable providers for service workflows" *Proc. 22nd Conf. on Artificial Intelligence (AAAI)*, Vancouver, Canada, 1452-1458.

200. S. Reece, A. Rogers, S. Roberts and **N. R. Jennings** (2007) "A multi-dimensional trust model for heterogeneous contract observations" *Proc. 22nd Conf. on Artificial Intelligence (AAAI)*, Vancouver, Canada, 128-135.
201. P. Vytelingum, R. K. Dash, I. Vetsikas and **N. R. Jennings** (2007) "WhiteDolphin: A TAC travel agent" *Proc. AAAI Workshop on Trading Agent Design and Analysis*, Vancouver, Canada, 36-44.
202. I. Ponka and **N. R. Jennings** (2007) "Changing circumstances and levelled commitment: A compensatory approach to contracting" *Proc. IEEE J. Conf. on E-Commerce Technology and Enterprise Computing, E-Commerce and E-Services*, Tokyo, Japan, 141-148. [Best paper award]
203. M. He, X. Luo, **N. R. Jennings** and M. Wooldridge (2007) "Forming fuzzy coalitions in cooperative superadditive games" *Proc. IEEE International Conf. on e-Business Engineering*, Hong Kong, China, 221-228.
204. N. Karunatillake, **N. R. Jennings**, I. Rahwan and S. D. Ramchurn (2006) "Managing social influences through argumentation-based negotiation" *Proc. 3rd Int. Workshop on Argumentation in Multi-Agent Systems*, Hakodate, Japan, 35-52. [Also appearing as: *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 426-428. (poster)]
205. E. H. Gerding, R. K. Dash, D. C. K. Yuen and **N. R. Jennings** (2006) "Optimal bidding strategies for simultaneous Vickrey auctions with perfect substitutes" *Proc. 8th Int. Workshop on Game Theoretic and Decision Theoretic Agents*, Hakodate, Japan, 10-17.
206. A. Rogers, R. K. Dash, **N. R. Jennings**, S. Reece and S. Roberts (2006) "Computational mechanism design for information fusion within sensor networks" *Proc. 9th Int. Conf. on Information Fusion*, Florence, Italy.
207. D. Kalofonos, N. Karunatillake, **N. R. Jennings**, T. J. Norman, C. Reed and S. Wells (2006) "Building agents that plan and argue in a social context" *Proc. 1st Int. Conf. on Computational Models of Argument*, Liverpool, UK, 15-26.
208. M. He, A. Rogers, X. Luo and **N. R. Jennings** (2006) "Designing a successful trading agent for supply chain management" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1159-1166.
209. S. D. Ramchurn, C. Sierra, L. Godo and **N. R. Jennings** (2006) "Negotiating using promises" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 400-407.
210. T. D. Huynh and **N. R. Jennings** and N. R. Shadbolt (2006) "Certified reputation — how an agent can trust a stranger" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1217-1224.
211. E. Manisterski, E. David, S. Kraus and **N. R. Jennings** (2006) "Forming efficient agent groups for completing complex tasks" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 834-841.
212. P. Padhy, R. K. Dash, K. Martinez and **N. R. Jennings** (2006) "A utility-based sensing and communication model for a glacial sensor network" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1353-1360.
213. P. S. Dutta, **N. R. Jennings** and L. Moreau (2006) "Adaptive distributed resource allocation and diagnostics using cooperative information-sharing strategies" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 826-833.
214. E. H. Gerding, A. Rogers, R. K. Dash and **N. R. Jennings** (2006) "Competing sellers in online markets: reserve prices, shill bidding and auction fees" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1208-1210. (poster)
215. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2006) "On efficient procedures for multi-issue negotiation" *Proc. 8th Int. Workshop on Agent-Mediated Electronic Commerce*, Hakodate, Japan 71-84.
216. P. Vytelingum, D. Cliff and **N. R. Jennings** (2006) "Evolutionary stability of behavioural types in the continuous double auction" *Proc. 8th Int. Workshop on Agent-Mediated Electronic Commerce*, Hakodate, Japan 153-166.
217. V. D. Dang, R. K. Dash, A. Rogers and **N. R. Jennings** (2006) "Overlapping coalition formation for efficient data fusion in multi-sensor networks" *Proc. 21st National Conf. on AI (AAAI)*, Boston, USA, 635-640.
218. V. D. Dang and **N. R. Jennings** (2006) "Coalition structure generation in task-based settings" *Proc. 17th European Conf. on AI (ECAI)*, Trento, Italy, 210-214.

219. S. Stein, **N. R. Jennings** and T. R. Payne (2006) "Flexible provisioning of service workflows" *Proc. 17th European Conf. on AI (ECAI)*, Trento, Italy, 295-299.
220. T. R. Payne, E. David, M. Sharifi and **N. R. Jennings** (2006) "Auction mechanisms for efficient advertisement selection on public displays" *Proc. 17th European Conf. on AI (ECAI)*, Trento, Italy, 285-289.
221. D. Yuen, A. Byde and **N. R. Jennings** (2006) "Heuristic bidding strategies for multiple heterogeneous auctions" *Proc. 17th European Conf. on AI (ECAI)*, Trento, Italy, 300-304.
222. V. Narayanan and **N. R. Jennings** (2006) "Learning to negotiate optimally in non-stationary environments" *Proc. 10th Int. Workshop on Cooperative Information Agents*, Edinburgh, UK, 288-300. [Best paper award]
223. B. Blankenburg, M. He, M. Klusch and **N. R. Jennings** (2006) "Risk-bounded formation of fuzzy coalitions among service agents" *Proc. 10th Int. Workshop on Cooperative Information Agents*, Edinburgh, UK, 332-346.
224. E. David, A. Rogers, J. Schiff, **N. R. Jennings** and S. Kraus (2005) "Optimal design for English auctions with discrete bid levels" *Proc. 6th ACM Conf. on Electronic Commerce*, Vancouver, Canada, 98-107.
225. R. Dash, A. Rogers, S. Reece, S. Roberts and **N. R. Jennings** (2005) "Bandwidth allocation in multi-sensor data fusion: a mechanism design approach" *Proc. 8th Int. Conf. on Information Fusion*, Philadelphia, USA.
226. I. Rezek, S. J. Roberts, A. Rogers, R. K. Dash and **N. R. Jennings** (2005) "Unifying learning in games and graphical models" *Proc. 8th Int. Conf. on Information Fusion*, Philadelphia, USA.
227. B. Blankenburg, R. K. Dash, S. D. Ramchurn, M. Klusch and **N. R. Jennings** (2005) "Trusted kernel-based coalition formation" *Proc. 4th Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Utrecht, Netherlands, 989-996.
228. R. Ashri, S. D. Ramchurn, J. Sabater, M. Luck and **N. R. Jennings** (2005) "Trust evaluation through relationship analysis" *Proc. 4th Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Utrecht, Netherlands, 1005-1011.
229. J. Patel, W. T. L. Teacy, **N. R. Jennings**, M. Luck, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian and S. Thompson (2005) "CONOISE-G: Agent-based virtual organisations for the Grid" *Proc. 1st Int. Workshop on Smart Grid Technologies*, Utrecht, Netherlands, 1-15.
230. N. C. Karunatilake, **N. R. Jennings**, I. Rahwan and T. J. Norman (2005) "Argument-based negotiation within a social context" *Proc. 2nd Int. Workshop on Argumentation in Multi-Agent Systems*, Utrecht, Netherlands, 74- 88.
231. A. Rogers, E. David, J. Schiff, **N. R. Jennings** and S. Kraus (2005) "Learning environmental parameters for the design of optimal English auctions with discrete bid levels" *Proc. 7th Int. Workshop on Agent-Mediated Electronic Commerce*, Utrecht, The Netherlands, 81-94.
232. N. C. Karunatilake, **N. R. Jennings**, I. Rahwan and T. J. Norman (2005) "Arguing and negotiating using social influences" *Proc. 4th Int. Central and Eastern European Conf. on Multi-Agent Systems (LNAI 3690)*, Budapest, Hungary, 223-235.
233. W. T. L. Teacy, J. Patel, **N. R. Jennings**, M. Luck, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian, S. Thompson (2005) "Monitoring, policing and trust for grid-based virtual organisations" *Proc. 4th UK e-Science Meeting*, Nottingham, England.
234. J. Patel, W. T. L. Teacy, **N. R. Jennings** and M. Luck (2005) "A probabilistic trust model for handling inaccurate reputation sources" *Proc. 3rd Int. Conf. on Trust Management*, Roquencourt, France, 193-209.
235. T. Rahwan and **N. R. Jennings** (2005) "Distributing coalitional value calculations among cooperating agents" *Proc. 25th National Conf. on AI (AAAI)*, Pittsburgh, USA, 152-157.
236. V. Narayanan and **N. R. Jennings** (2005) "An adaptive bilateral negotiation model for e-commerce settings" *Proc. 7th Int. IEEE Conf. on E-Commerce Technology*, Munich, Germany, 34-39.
237. S. Paurobally, J. Cunningham and **N. R. Jennings** (2005) "A formal framework for the semantics of agent interactions" *Proc. 4th Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Utrecht, Netherlands, 91-98.
238. W. T. L. Teacy, J. Patel, **N. R. Jennings** and M. Luck (2005) "Coping with inaccurate reputation sources: Experimental analysis of a probabilistic trust model" *Proc. 4th Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Utrecht, Netherlands, 997-1004.

239. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "Sequential auctions for objects with common and private values" *Proc. 4th Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Utrecht, Netherlands, 635-642.
240. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "An analysis of sequential auctions for common and private value objects" *Proc. 7th Int. Workshop on Agent-Mediated Electronic Commerce*, Utrecht, The Netherlands, 25- 38.
241. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "An analysis of the Shapley value and its uncertainty for the voting game" *Proc. 7th Int. Workshop on Agent-Mediated Electronic Commerce*, Utrecht, The Netherlands, 39- 52.
242. T. D. Huynh, **N. R. Jennings** and N. Shadbolt (2005) "On handling inaccurate witness reports" *Proc. 8th Int. Workshop on Trust in Agent Societies*, Utrecht, The Netherlands, 63-77.
243. M. He, A. Rogers, E. David and **N. R. Jennings** (2005) "Designing and evaluating an adaptive trading agent for supply chain management applications" *Proc. IJCAI Workshop on Trading Agent Design and Analysis*, Edinburgh, Scotland, 35-42.
244. P. Vytelingum, R. K. Dash, M. He and **N. R. Jennings** (2005) "A framework for designing strategies for trading agents" *Proc. IJCAI Workshop on Trading Agent Design and Analysis*, Edinburgh, Scotland, 7-13.
245. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2005) "Optimal agendas for sequential auctions for common and private value objects" *Proc. 7th Int. Workshop on Game Theory and Decision Theory*, Edinburgh, Scotland, 159-171.
246. S. Paurobally and **N. R. Jennings** (2005) "Developing agent web service agreements" *Proc. IEEE/WIC/ACM Int. Conf. on Web Intelligence*, Compiègne, France, 464-470.
247. Y. K. Peña and **N. R. Jennings** (2005) "Combinatorial markets for efficient electricity management" *Proc. IEEE/WIC/ACM Int. Conf. on Intelligent Agent Technology*, Compiègne, France, 626-632.
248. N. Haque, **N. R. Jennings** and L. Moreau (2005) "Scalability and robustness of a market-based network resource allocation system" *Proc. 1st Int. Workshop on Incentive Based Computing*, Compiègne, France, 30-39.
249. Y. K. Peña, **N. R. Jennings**, G. Neumann (2005) "An optimal distributed constraint optimization algorithm for efficient energy management" *Proc. Int. Conf. on Intelligent Agents, Web Technology and Internet Commerce*, Vienna, Austria, 177-182.
250. R. K. Dash, S. D. Ramchurn and **N. R. Jennings** (2004) "Trust-based mechanism design" *Proc. 3rd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, New York, USA, 748-755.
251. T. D. Nguyen and **N. R. Jennings** (2004) "Coordinating multiple concurrent negotiations" *Proc. 3rd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, New York, USA, 1064-1071.
252. V. D. Dang and **N. R. Jennings** (2004) "Generating coalition structures with finite bound from the optimal guarantees" *Proc. 3rd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, New York, USA, 564-571.
253. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2004) "Optimal negotiation of multiple issues in incomplete information settings" *Proc. 3rd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, New York, USA, 1080-1087.
254. I. Foster, **N. R. Jennings** and C. Kesselman (2004) "Brain meets brawn: Why Grid and agents need each other" *Proc. 3rd Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, New York, USA, 8-15.
255. N. C. Karunatilake and **N. R. Jennings** (2004) "Is it worth arguing?" *Proc. 1st Int. Workshop on Argumentation in Multi-Agent Systems*, New York, USA, 62-77.
256. T. D. Huynh, **N. R. Jennings** and N. R. Shadbolt (2004) "Developing an integrated trust and reputation model for open multi-agent systems" *Proc. 7th Int. Workshop on Trust in Agent Societies*, New York, USA, 65-74.
257. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2004) "Market-based recommender systems: learning users' interests by quality classification" *Proc. 6th Int. Workshop on Agent-Oriented Information Systems*, New York, USA, 119-133.
258. R. Dash, A. Rogers and **N. R. Jennings** (2004) "A mechanism for multiple goods and interdependent valuations" *Proc. 6th Int. Workshop on Agent Mediated E-Commerce*, New York, USA, 197-210.

259. M. He, **N. R. Jennings** and A. Prügel-Bennett (2004) "An adaptive bidding agent for multiple English auctions: A neuro-fuzzy approach" *Proc. IEEE Conf. on Fuzzy Systems*, Budapest, Hungary, 1519-1524.
260. P. Anthony and **N. R. Jennings** (2004) "Applying genetic algorithms in online auctions" *Proc. 2nd Int. Conf. on AI in Engineering and Technology*, Kota Kinabalu, Malaysia, 466-472.
261. P. Vytelingum, R. K. Dash, E. David and **N. R. Jennings** (2004) "A risk-based bidding strategy for continuous double auctions" *Proc. 16th European Conf. on AI (ECAI)*, Valencia Spain, 79-83. [Honourable mention for best paper award]
262. T. D. Huynh, **N. R. Jennings** and N. R. Shadbolt (2004) "FIRE: An integrated trust and reputation model for open multi-agent systems" *Proc. 16th European Conf. on AI (ECAI)*, Valencia Spain, 18-22.
263. S. Paurobally, J. Cunningham and **N. R. Jennings** (2004) "Verifying the contract net protocol: A case study in interaction protocol and agent communication language semantics" *Proc. 2nd Int. Workshop on Logic and Communication in Multi-Agent Systems*, Nancy, France, 98-117.
264. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2004) "Learning Users' Interests in a market-based recommender system" *Proc. 5th Int. Conf. on Intelligent Data Engineering and Automated Learning*, Exeter, UK, 833-840.
265. R. M. Coehoorn and **N. R. Jennings** (2004) "Learning an opponent's preferences to make effective multi-issue negotiation preferences" *Proc. 6th Int. Conf. on E-Commerce*, Delft, The Netherlands, 59-68.
266. T. D. Nguyen and **N. R. Jennings** (2004) "Reasoning about commitments in multiple concurrent negotiations" *Proc. 6th Int. Conf. on E-Commerce*, Delft, The Netherlands, 77-84. [Best paper award]
267. N. Haque, **N. R. Jennings** and L. Moreau (2004) "Resource allocation in communication networks using market-based agents" *Proc. 24th Int. Conf. on Innovative Techniques and Applications of AI*, Cambridge, UK, 187-200. [Received SGAI Recognition award].
268. I. Roy, **N. R. Jennings**, V. Narayanan and S. Paurobally (2004) "A game theoretic approach to concurrent multi-attribute negotiation" *Proc. 5th Int. Conf. on Knowledge Based Computer Systems*, Hyderabad, India, 131-141.
269. P. S. Dutta, S. Dasmahapatra, S. R. Gunn, **N. R. Jennings** and L. Moreau (2004) "Cooperative information sharing strategies to augment distributed learning" *Proc. AAMAS Workshop on Learning and Evolution in Agent-Based Systems*, New York, USA, 18-23.
270. S. D. Ramchurn, B. Deitch, M. K. Thompson, D. C. de Roure, **N. R. Jennings** and M. Luck (2004) "Minimising intrusiveness in pervasive computing environments using multi-agent negotiation" *Proc. 1st Int. Conf. on Mobile and Ubiquitous Systems*, Boston, USA, 364-372.
271. J. Shao, W. A. Gray, N. J. Fiddian, V. Deora, G. Shercliff, P. J. Stockreisser, T. J. Norman, A. Preece, P. M. D. Gray, S. Chalmers, N. Oren, **N. R. Jennings**, M. Luck, V. D. Dang, T. D. Nguyen, J. Patel and W. T. L. Teacy (2004) "Supporting Formation and Operation of Virtual Organisations in a Grid Environment" *Proc. UK OST e-Science All Hands Meeting*, Nottingham, UK, 376-383.
272. T. J. Norman, A. Preece, S. Chalmers, **N. R. Jennings**, M. Luck, V. D. Dang, T. D. Nguyen, V. Deora, J. Shao, A. Gray and N. Fiddian (2003) "CONOISE: Agent-based formation of virtual organisations" *Proc. 23rd SGAI Int. Conf. on Innovative Techniques and Applications of AI*, Cambridge, UK, 353-366. [Received SGAI Recognition Award].
273. S. Fatima, M. Wooldridge and **N. R. Jennings** (2003) "Optimal agendas for multi-issue negotiation" *Proc. 2nd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Melbourne, Australia, 129-136.
274. S. Paurobally, J. Cunningham and **N. R. Jennings** (2003) "Ensuring consistency in the joint beliefs of interacting agents" *Proc. 2nd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Melbourne, Australia, 662-669.
275. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2003) "Recommender systems: A market-based design" *Proc. 2nd Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Melbourne, Australia, 600-607.
276. Y. Z. Wei, L. Moreau and **N. R. Jennings** (2003) "Market-based recommendations: Design, simulation and evaluation" *Proc. 5th Int. Workshop on Agent-Oriented Information Systems*, Melbourne, Australia, 22-29.
277. S. Paurobally, R. Cunningham and **N. R. Jennings** (2003) "Developing agent interaction protocols graphically and logically" *Proc. 1st Int. Workshop on Programming Multi-Agent Systems*, Melbourne, Australia, 45-54.

278. S. D. Ramchurn, C. Sierra, L. Godo and **N. R. Jennings** (2003) "A computational trust model for multi-agent interactions based on confidence and reputation" *Proc. 6th Int. Workshop on Deception, Fraud on Trust in Agent Societies*, Melbourne, Australia, 69-75.
279. X. Luo, **N. R. Jennings** and N. Shadbolt (2003) "Acquiring trade-off preferences for automated negotiations: A case study" *Proc. 5th Int. Workshop on Agent Mediated E-Commerce*, Melbourne, Australia, 41-48.
280. S. Fatima, M. Wooldridge and **N. R. Jennings** (2003) "Comparing equilibria for game-theoretic and evolutionary bargaining models" *Proc. 5th Int. Workshop on Agent Mediated E-Commerce*, Melbourne, Australia, 70-77.
281. S. Paurobally, P. J. Turner and **N. R. Jennings** (2003) "Towards automating negotiation for m-services" *Proc. 5th Int. Workshop on Agent Mediated E-Commerce*, Melbourne, Australia, 124-131.
282. T. Paulussen, **N. R. Jennings**, K. S. Decker and A. Heinzl (2003) "Distributed patient scheduling in hospitals" *Proc. 18th Int. Joint Conf. on AI (IJCAI)*, Acapulco, Mexico, 1224-1229.
283. T. D. Nguyen and **N. R. Jennings** (2003) "A heuristic model of concurrent bilateral negotiations in incomplete information settings" *Proc. 18th Int. Joint Conf. on AI (IJCAI)*, Acapulco, Mexico, 1467-1469.
284. S. D. Ramchurn, **N. R. Jennings** and C. Sierra (2003) "Persuasive negotiation for autonomous agents: A rhetorical approach" *Proc. IJCAI Workshop on Computational Models of Natural Argument*, Acapulco, Mexico, 9-17.
285. P. S. Dutta, L. Moreau and **N. R. Jennings** (2003) "Finding interaction partners using cognition based decision strategies" *Proc. IJCAI Workshop on Cognitive Modelling of Agents and Multi-Agent Interactions*, Acapulco, Mexico, 46-55.
286. T. D. Nguyen and **N. R. Jennings** (2003) "Concurrent bi-lateral negotiation in agent systems" *Proc. 4th Int. Workshop on Negotiations in e-markets*, Prague, Czech Republic, 844-849.
287. C. B. Excelente-Toledo and **N. R. Jennings** (2003) "Learning when to coordinate" *Proc. 4th Mexican Int. Conf. on Computer Science*, Tlaxcala, Mexico, 230-237.
288. P. Anthony and **N. R. Jennings** (2003) "A heuristic bidding strategy for multiple heterogeneous auctions" *Proc. 5th Int. Conf. on Electronic Commerce*, Pittsburgh, USA, 9-16.
289. V. D. Dang and **N. R. Jennings** (2003) "Optimal clearing algorithms for multi-unit single-item and multi-unit combinatorial auctions with demand/supply function bidding" *Proc. 5th Int. Conf. on Electronic Commerce*, Pittsburgh, USA, 25-30.
290. X. Luo, **N. R. Jennings** and N. Shadbolt (2003) "Knowledge-based acquisition of trade-off preferences for negotiating agents" *Proc. 5th Int. Conf. on Electronic Commerce*, Pittsburgh, USA, 138-144.
291. L. Moreau, N. Zaini, J. Zhou, **N. R. Jennings**, Y. Z. Wei, W. Hall, D de Roure, I. Gilchrist, M. O'Dell, S. Reich, T. Berka and C. di Napoli (2002) "A market-based recommender system" *Proc. 4th Int. Workshop on Agent-Oriented Information Systems*, Bologna, Italy, 50-67.
292. P. Panzarasa, S. D. Ramchurn and **N. R. Jennings** (2002) "Intrusiveness, trust and argumentation: Using automated negotiation to inhibit the transmission of disruptive information" *Proc. of Int. Conf. on Computational and Mathematical Organization Theory*, Carnegie Mellon University, Pittsburgh, PA.
293. P. Anthony and **N. R. Jennings** (2002) "Agents in auctions: the state of the art" *Proc. 1st Int. Conf. on Artificial Intelligence in Engineering and Technology*, Sabah, Malaysia, 725-731.
294. S. Kalenka and **N. R. Jennings** (2002) "Distinguishing social agent behaviour: a formal framework" *Robotics, Automation, Manufacturing and Control* (eds. M. Jamshidi, J. Feddema, F. Procter, B. Shafai and J. S. Jamshidi) TSI Press, 13-20.
295. A. Byde, C. Priest and **N. R. Jennings** (2002) "Decision procedures for multiple auctions" *Proc. 1st Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Bologna, Italy, 613-620.
296. S. S. Fatima, M. J. Wooldridge and **N. R. Jennings** (2002) "Multi-issue negotiation under time constraints" *Proc. 1st Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Bologna, Italy, 143-150.
297. C. B. Excelente-Toledo and **N. R. Jennings** (2002) "Learning to select a coordination mechanism" *Proc. 1st Int. Joint Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Bologna, Italy, 1106-1113.
298. S. S. Fatima, M. J. Wooldridge and **N. R. Jennings** (2002) "The influence of information on negotiation equilibrium" *Proc. 4th Int. Workshop on Agent-Mediated Electronic Commerce*, Bologna, Italy. [Also

- appearing in Agent-Mediated Electronic Commerce IV (eds. J. Padget, O. Shehory, D. Parkes, N. Sadeh and W. E. Walsh) (2002) LNAI 2531, 180-193, Springer Verlag].
299. S. Bussmann, **N. R. Jennings** and M. Wooldridge (2002) "Re-use of interaction protocols for decision-oriented applications" *Proc. 3rd Int. Workshop on Agent-Oriented Software Engineering*, Bologna, Italy, 51-62.
 300. C. Bartolini, C. Preist and **N. R. Jennings** (2002) "Architecting for reuse: A software framework for automated negotiation" *Proc. 3rd Int. Workshop on Agent-Oriented Software Engineering*, Bologna, Italy, 87- 98.
 301. M. He and **N. R. Jennings** (2002) "SouthamptonTAC: Designing a successful trading agent" *Proc. 15th European Conf. on AI (ECAI)*, Lyon, France, 8-12.
 302. V. D. Dang and **N. R. Jennings** (2002) "Polynomial algorithms for clearing multi-unit single item and multi-unit combinatorial reverse auctions" *Proc. 15th European Conf. on AI (ECAI)*, Lyon, France, 23-27. [Honourable mention for best paper award]
 303. P. Anthony and **N. R. Jennings** (2002) "Evolving bidding strategies for multiple auctions" *Proc. 15th European Conf. on AI (ECAI)*, Lyon, France, 178-182.
 304. P. Panzarasa, S. D. Ramchurn and N. R. Jennings (2002) "Intrusiveness, Trust and Argumentation: Using automated negotiation to inhibit the transmission of disruptive information" *Proc. of the Computational and Mathematical Organization Theory Conf.*, Pittsburgh, USA.
 305. P. Panzarasa and **N. R. Jennings** (2001) "The organisation of sociality: a manifesto for a new science of multi-agent systems" *Proc. 10th European Workshop on Multi-Agent Systems (MAAMAW)*, Annecy, France.
 306. C. B. Excelente-Toledo, R. A. Bourne and **N. R. Jennings** (2001) "Reasoning about commitments and penalties for coordination between autonomous agents" *Proc. 5th Int. Conf. on Autonomous Agents*, Montreal, Canada, 131-138.
 307. P. Panzarasa and **N. R. Jennings** (2001) "Social influence and the generation of joint mental attitudes in multi-agent systems" *Proc. 4th Int. Eurosim Congress on Simulating Organisational Processes*, Delft, The Netherlands.
 308. P. Anthony, W. Hall, V. D. Dang and **N. R. Jennings** (2001) "Autonomous agents for participating in multiple on-line auctions" *Proc. IJCAI Workshop on E-Business and the Intelligent Web*, Seattle, WA, 54-64.
 309. S. S. Fatima, M. Wooldridge and **N. R. Jennings** (2001) "Optimal negotiation strategies for agents with incomplete information" *Proc. 8th Int. Workshop on Agent Theories, Architectures and Languages (ATAL)*, Seattle, USA, Springer Verlag, 377-392.
 310. R. A. Bourne, K. Shoop and **N. R. Jennings** (2001) "Dynamic evaluation of coordination mechanisms for autonomous agents" *Proc. 10th Portuguese Conf. on AI*, Porto, Portugal, LNAI 2258, 155-168.
 311. **N. R. Jennings**, S. Parsons, C. Sierra and P. Faratin (2000) "Automated negotiation" *Proc. 5th Int. Conf. on Practical Application of Intelligent Agents and Multi-Agent Systems*, Manchester, UK. 23-30 (Invited paper)
 312. P. Faratin, **N. R. Jennings**, P. Buckle and C. Sierra (2000) "Automated negotiation for provisioning virtual private networks using FIPA-compliant agents" *Proc. 5th Int. Conf. on Practical Application of Intelligent Agents and Multi-Agent Systems*, Manchester, UK, 185-202.
 313. P. J. Turner and **N. R. Jennings** (2000) "Improving the scalability of multi-agent systems" *Proc. 1st Int. Workshop on Infrastructure for Scalable Multi-Agent Systems*, Barcelona, Spain. [Reprinted in: *Infrastructure for Agents, Multi-Agent Systems and Saleable Multi-Agent Systems* (Eds T. Wagner and O. Rana) 246-262, Springer Verlag].
 314. F. Zambonelli, **N. R. Jennings** and M. Wooldridge (2000) "Organisational abstractions for the analysis and design of multi-agent systems" *Proc. 1st Int. Workshop on Agent-Oriented Software Engineering*, Limerick, Ireland, 127-141.
 315. P. Faratin, C. Sierra and **N. R. Jennings** (2000) "Using similarity criteria to make negotiation trade-offs" *Proc. 4th Int. Conf. on Multi-Agent Systems (ICMAS)*, Boston, USA, 119-126. [Selected for "Best of ICMAS-00" journal special issue]
 316. J. Foss, K Garcha, P. Turner and **N. R. Jennings** (2000) "Brokerage in an information economy" *Proc. INET-2000: 10th Annual Internet Society Conf.*, Yokohama, Japan [http://www.isoc.org/inet2000/cdproceedings/7a/7a_1.htm].

317. R. A. Bourne, C. B. Excelente-Toledo and **N. R. Jennings** (2000) "Run-time selection of coordination mechanisms in multi-agent systems" *Proc. 14th European Conf. on Artificial Intelligence (ECAI)*, Berlin, Germany, 348-352.
318. M. Wooldridge, **N. R. Jennings** and D. Kinny (1999) "A methodology for agent-oriented analysis and design" *Proc. 3rd Int. Conf. on Autonomous Agents*, Seattle, USA, 69-76.
319. L. M. Hogg and **N. R. Jennings** (1999) "Variable sociability in agent-based decision making" *Proc. 6th Int. Workshop on Agent Theories Architectures and Languages (ATAL)*, Orlando, USA, 305-318.
320. J. Sabater, C. Sierra, S. Parsons and **N. R. Jennings** (1999) "Using multi-context systems to engineer executable agents" *Proc. 6th Int. Workshop on Agent Theories Architectures and Languages (ATAL)*, Orlando, USA, 260-276. [Abridged version in *Proc. Second Catalan Conf. on AI* (in Catalan!)]
321. P. Faratin, C. Sierra, **N. R. Jennings** and P. Buckle (1999) "Designing responsive and deliberative automated negotiators" *Proc. AAAI Workshop on Negotiation: Settling Conflicts and Identifying Opportunities*, Orlando, USA, 12-18.
322. E. Oliveira, J. M. Fonseca, **N. R. Jennings** (1999) "Learning to be competitive in the market" *Proc. AAAI Workshop on Negotiation: Settling Conflicts and Identifying Opportunities*. Orlando, USA, 30-37.
323. **N. R. Jennings** (1999) "Agent-based computing: promise and perils" *Proc. 16th Int. Joint Conf. on Artificial Intelligence (IJCAI)*, Stockholm, Sweden, 1429-1436. [Computers and Thought Award paper].
324. C. Sierra, P. Faratin and **N. R. Jennings** (1999) "Deliberative automated negotiators using fuzzy similarities" *Proc. EUSFLAT-ESTYLF Joint Conf. on Fuzzy Logic*, Palma de Mallorca, Spain, 155-158.
325. P. Panzarasa, T. J. Norman and **N. R. Jennings** (1999) "Modelling sociality in a BDI framework" *Proc. 1st Asia-Pacific Conf. on Intelligent Agent Technology*, Hong Kong, 202-206.
326. **N. R. Jennings** (1999) "Agent-oriented software engineering" *Proc. 12th Int. Conf. on Industrial and Engineering Applications of AI*, Cairo, Egypt, 4-10. (Invited paper) [Also appearing in *Proc. 9th European Workshop on Modelling Autonomous Agents in a Multi-Agent World (MAAMAW)*, Valencia, Spain 1-7 (Invited paper)]
327. M. J. Gibney, **N. R. Jennings**, N. J. Vriend and J. M. Griffiths (1999) "Market-based call routing in telecommunications networks using adaptive pricing and real bidding" *Proc. 3rd Int. Workshop on Multi-Agent Systems and Telecommunications*, Stockholm, Sweden, 46-61. [Also appearing in: *Agent Technology for Communication Infrastructures* (eds. A. L. G. Hayzelden and R. A. Bourne) Wiley (2000), 234-248]
328. S. Parsons and **N. R. Jennings** (1998) "Argumentation and multi-agent decision making" *Proc. AAAI Spring Sym. on Interactive and Mixed-Initiative Decision Making*, Stanford, USA, 89-91.
329. M. J. Wooldridge and **N. R. Jennings** (1998) "Pitfalls of agent-oriented development" *Proc. 2nd Int. Conf. on Autonomous Agents*, Minneapolis, USA, 385-391.
330. N. Matos, C. Sierra and **N. R. Jennings** (1998) "Determining successful negotiation strategies: an evolutionary approach" *Proc. 3rd Int. Conf. on Multi-Agent Systems (ICMAS)*, Paris, France, 182-189.
331. T. J. Norman, C. Sierra and **N. R. Jennings** (1998) "Rights and commitments in multi-agent agreements" *Proc. 3rd Int. Conf. on Multi-Agent Systems (ICMAS)*, Paris, France, 222-229.
332. M. A. Gibney and **N. R. Jennings** (1998) "Dynamic resource allocation by market-based routing in telecommunications networks" *Proc. 2nd Int. Workshop on Multi-Agent Systems and Telecommunications*, Paris, France, 102-117.
333. N. Vulkan and **N. R. Jennings** (1998) "Efficient mechanisms for the supply of services in multi-agent environments" *Proc. of 1st Int. Conf. on Information and Computation Economies*, Charlestown, South Carolina. 1-10.
334. T. J. Norman, **N. R. Jennings**, P. R. Baxendale, J. E. Mellor, F. Chevalier and D. Harle (1998) "Realising a virtual telecommunications laboratory with agent technology" *Proc. 15th UK Teletraffic Sym. on Performance Engineering in Information Systems*, Durham, UK.
335. R. J. Gallimore, **N. R. Jennings**, H. S. Lamba, C. L. Mason and B. J. Orenstein (1998) "3D scientific data interpretation using cooperating agents" *Proc. 3rd Int. Conf. on the Practical Applications of Agents and Multi-Agent Systems*, London, UK, 47-65.

336. M. A. Gibney and **N. R. Jennings** (1997) "Market-based multi-agent systems for ATM network management" *Proc. 4th Communications Networks Symp.*, Manchester, UK, 62-65.
337. L. M. Hogg and **N. R. Jennings** (1997) "Social rational agents— preliminary thoughts" *Proc. 2nd Workshop on Practical Reasoning and Rationality*, Manchester, UK, 160-162.
338. L. M. Hogg and **N. R. Jennings** (1997) "Socially rational agents" *Proc. AAAI Fall Sym. on Socially Intelligent Agents*, Boston, USA, 61-63.
339. T. J. Norman, **N. R. Jennings**, P. Faratin and E. H. Mamdani (1997) "Designing and implementing a multi-agent architecture for business process management" *Proc. 3rd Int. Workshop on Agent Theories, Architectures and Languages (ATAL) Budapest, Hungary*, Springer Verlag, 261-275.
340. T. J. Norman and **N. R. Jennings** (1997) "Generating states of joint commitment between autonomous agents" *Proc. 3rd Australian Workshop on Distributed Artificial Intelligence*, Perth, Australia, 109-119.
341. C. Sierra, P. Faratin and **N. R. Jennings** (1997) "A service-oriented negotiation model between autonomous agents" *Proc. 8th European Workshop on Modelling Autonomous Agents in a Multi-Agent World (MAAMAW)*, Ronneby, Sweden, 17-35. [Selected for "Best of MAAMAW-97" journal special issue] [Reprinted in: *Collaboration between Human and Artificial Societies* (ed. J. A. Padget), Springer Verlag (1999) 201-219]
342. C. Sierra, **N. R. Jennings**, P. Noriega and S. Parsons (1997) "A framework for argumentation-based negotiation" *Proc. 4th Int. Workshop on Agent Theories, Architectures and Languages (ATAL)*, Rode Island, USA 177-192, Springer Verlag.
343. T. J. Norman, P. Faratin and **N. R. Jennings** (1997) "Commercial applications of agent technology" *Proc. DA-DSM DistribuTECH Europe 1997 Workshop*, Amsterdam, The Netherlands.
344. P. J. Turner and **N. R. Jennings** (1997) "On scalability of information management agents" *Proc. European IT Conf.*, Brussels, Belgium, 64-65.
345. **N. R. Jennings**, P. Faratin, M. J. Johnson, P. O'Brien and M. E. Wiegand (1996) "Using intelligent agents to manage business processes" *Proc. 1st Int. Conf. on The Practical Application of Intelligent Agents and Multi-Agent Technology*, London, UK 345-360.
346. **N. R. Jennings**, P. Faratin, T. J. Norman, P. O'Brien, M. E. Wiegand, C. Voudouris, J. L. Alty, T. Miah and E. H. Mamdani (1996) "ADEPT: managing business processes using intelligent agents" *Proc. BCS Expert Systems 96 Conf. (Intelligent Systems Integration Programme Track)* 5-23. [Also appearing in: *Proc. of the UK Intelligent Agents Workshop*, Oxford, UK, 53-78]
347. S. Parsons and **N. R. Jennings** (1996) "Negotiation through argumentation—a preliminary report" *Proc. 2nd Int. Conf. on Multi-Agent Systems (ICMAS)*, Kyoto, Japan, 267-274.
348. M. M. Huntbach, **N. R. Jennings** and G. A. Ringwood (1995) "How agents do it in stream logic" *Proc. 1st Int. Conf. on Multi-Agent Systems (ICMAS)*, San Francisco, USA, 177-184.
349. **N. R. Jennings**, J. Corera, I. Laresgoiti (1995) "Developing industrial multi-agent systems" *Proc. 1st Int. Conf. on Multi-Agent Systems (ICMAS)*, San Francisco, USA, 423-430.
350. J. Huang, **N. R. Jennings** and J. Fox (1995) "An agent architecture for distributed medical care" in *Intelligent Agents* (eds. M. J. Wooldridge and N. R. Jennings), Springer Verlag, 219-232.
351. S. Kalenka and **N. R. Jennings** (1995) "On social attitudes: a preliminary report" *Proc. 1st Int. Workshop on Decentralised Intelligent Multi-Agent Systems*, Krakov, Poland, 233-240.
352. F. M. T. Brazier, B. M. Dunin-Keplicz, **N. R. Jennings** and J. Treur (1995) "Formal specification of multi- agent systems" *Proc. 1st Int. Conf. on Multi-Agent Systems (ICMAS)*, San Francisco, USA, 25-32.
353. J. L. Alty, D. Griffiths, **N. R. Jennings**, E. H. Mamdani, A. Struthers and M. E. Wiegand (1994) "ADEPT— Advanced Decision Environment for Process Tasks: overview and architecture" *Proc. BCS Expert Systems 94 Conf. (Applications Track)*, Cambridge, UK, 359-371.
354. J. Huang, **N. R. Jennings** and J. Fox, (1994) "Cooperation in distributed medical care" *Proc. 2nd Int. Conf. on Cooperative Information Systems*, Toronto, Canada, 255-263.
355. M. J. Wooldridge and **N. R. Jennings** (1994) "Towards a theory of cooperative problem solving" *Proc. 6th European Workshop on Modelling Autonomous Agents in a Multi-Agent World (MAAMAW)*, Odense, Denmark, LNAI 1069, Springer Verlag, 40-53.

356. M. J. Wooldridge and **N. R. Jennings** (1994) "Formalising the cooperative problem solving process" *Proc. 13th Int. Distributed Artificial Intelligence Workshop*, Seattle, USA 403-417. [Reprinted in: *Contemporary Action Theory Volume II* (eds. G. Holmstrom-Hintikka and R. Tuomela) Kluwer (1997) 143-161; *Readings in Agents* (eds. M. N. Huhns and M. P. Singh) Morgan Kaufmann (1997) 430-440].
357. B. Malheiro, **N. R. Jennings** and E. Oliveira, (1994) "Belief revision in multi-agent systems" *Proc. 11th European Conf. on Artificial Intelligence (ECAI)*, Amsterdam, Holland, 294-298.
358. **N. R. Jennings** (1994) "The ARCHON system and its applications" *Proc. 2nd Int. Conf. on Cooperating Knowledge Based Systems*, Keele, UK, 13-29 (Invited paper).
359. M. J. Wooldridge and **N. R. Jennings** (1994) "Agent theories, architectures and languages: a survey" *Proc. 1st Int. Workshop on Agent Theories Architectures and Languages (ATAL)*, Amsterdam, The Netherlands, 1-32. [Updated version in *Intelligent Agents* (eds. M. J. Wooldridge and N. R. Jennings), Springer Verlag, 1-39].
360. **N. R. Jennings** and J. A. Pople (1993) "Design and implementation of ARCHON's coordination module" *Proc. Workshop on Cooperating Knowledge Based Systems*, Keele, UK, 61-82.
361. **N. R. Jennings** (1992) "A knowledge level approach to collaborative problem solving" *Proc. AAAI Workshop on Cooperation among Heterogeneous Intelligent Agents*, San Jose, USA, 55-64.
362. **N. R. Jennings** (1992) "Towards a cooperation knowledge level for collaborative problem solving" *Proc. 10th European Conf. on Artificial Intelligence (ECAI)*, Vienna, Austria, 224-228.
363. **N. R. Jennings** (1992) "Using joint intentions in electricity transport management" *Proc. ECAI Workshop on Application Aspects of Distributed AI*, Vienna, Austria.
364. **N. R. Jennings** (1992) "Using GRATE to build cooperating agents for industrial control" *Proc. IFAC/IFIP/IMACS Int. Sym. on Artificial Intelligence in Real Time Control*, Delft, The Netherlands, 691-696.
365. D. Cockburn, L. Z. Varga and **N. R. Jennings** (1992) "Cooperating intelligent systems for electricity distribution" *Proc. BCS Expert Systems 92 Conf. (Applications Track)*, Cambridge, UK.
366. **N. R. Jennings** and E. H. Mamdani (1992) "Using joint responsibility to coordinate collaborative problem solving in dynamic environments" *Proc. 10th National Conf. on Artificial Intelligence (AAAI)*, San Jose, USA, 269-275. [Also appearing in: *Cooperative Knowledge Processing for Engineering Design* (Eds A. B. Baskin, G. Kovacs, G. Jacucci) (1999) 325-339].
367. **N. R. Jennings** (1991) "Cooperation in industrial systems" *Proc. ESPRIT Conf.*, Brussels, Belgium, 253-263.
368. C. Roda, **N. R. Jennings** and E. H. Mamdani (1991) "ARCHON: a cooperation framework for industrial process control" *Proc. Cooperating Knowledge Based Systems*, Keele, UK, 95-112.
369. C. Roda, **N. R. Jennings** and E. H. Mamdani (1991) "The impact of heterogeneity on cooperating agents" *Proc. AAAI Workshop on Cooperation among Heterogeneous Intelligent Systems*, Anaheim, USA.
370. **N. R. Jennings** (1991) "On being responsible" *Proc. 3rd European Workshop on Modelling Autonomous Agents in a Multi-Agent World (MAAMAW)*, Kaiserslautern, Germany, 93-102.

BOOK CONTRIBUTIONS

1. E. Elkind, **N. R. Jennings** and T. Rahwan (2013) "Computational coalition formation" in *Multi-Agent Systems* (ed. G. Weiss) MIT Press 329-380.
2. A. Farinelli, **N. R. Jennings** and A. Rogers (2013) "Distributed constraint handling and optimization" in *Multi-Agent Systems* (ed. G. Weiss) MIT Press 547-583.
3. D. Nicholson, S. Reece, A. Rogers, S. Roberts and **N. R. Jennings** (2013) "Distributed data fusion" in *Distributed Data Fusion for Network-Centric Operations* (eds. D. L. Hall, C. Chong, J. Llinas and M. Liggins) CRC Press 17-64.
4. M. A. Osborne, A. Rogers, S. J. Roberts, S. D. Ramchurn and **N. R. Jennings** (2011) "Bayesian Gaussian process models for multi-sensor time-series prediction" in *Bayesian Time Series Models* (eds. D. Barber, A. Talyan Cemgil and S. Chiappa) CUP 341-362.
5. M. Allen-Williams and **N. R. Jennings** (2009) "Bayesian learning for cooperation in multi-agent systems" in *Studies in Computational Intelligence: collaboration, fusion and emergence* (eds. C. L. Mumford and L. C. Jain) Springer 321-360.

6. M. Allen-Williams and **N. R. Jennings** (2009) "Bayesian agent adaptation in complex dynamic systems" in *Handbook of Research on Complex Dynamic Process Management* (eds. M. M. Wang and Z. Sun) IGI Global, 172-208.
7. E. H. Gerding, K. Larson, A. Rogers and **N. R. Jennings** (2009) "Mechanism design for task procurement with flexible quality of service" *Proc. SOCASE'09: Service-Oriented Computing: Agents, Semantics and Engineering*, LNCS 5907, Springer 12-23.
8. R. K. Dash, E. H. Gerding and **N. R. Jennings** (2008) "Optimal financially constrained bidding in multiple simultaneous auctions" in *Negotiation, Auctions and Market Engineering* (eds. H. Gimpel, N. R. Jennings, G. E. Kersten, A. Okenfels and C. Weinhardt) Springer 190-199.
9. H. Gimpel, **N. R. Jennings**, G. E. Kersten, A. Okenfels and C. Weinhardt (eds.) (2008) "Market engineering: a research agenda" in *Negotiation, Auctions and Market Engineering* (eds. H. Gimpel, N. R. Jennings, G. E. Kersten, A. Okenfels and C. Weinhardt) Springer, 1-15.
10. E. H. Gerding, A. Rogers, R. K. Dash and **N. R. Jennings** (2008) "Sellers competing for buyers in online markets" in *Negotiation, Auctions and Market Engineering* (eds. H. Gimpel, N. R. Jennings, G. E. Kersten, A. Okenfels and C. Weinhardt) Springer 164-170.
11. A. Rogers, R. K. Dash, S. D. Ramchurn, P. Vytelingum and **N. R. Jennings** (2007) "Error-correcting codes for team coordination within a noisy iterated prisoner's dilemma tournament" in *The Iterated Prisoners' Dilemma: 20 Years On* (eds. G. Kendall, X. Yao and S. Y. Chong) World Scientific, 205-229.
12. F. Espinoza, D. De Roure, O. Hamfors, L. Hinz, J. Holmberg, C. G. Jansson, **N. R. Jennings**, M. Luck, P. Lonnqvist, G. Ramchurn, A. Sandin, M. K. Thompson and M. Bylund (2007) "Intrusiveness management for focused, efficient and enjoyable activities" in *The Disappearing Computer* (eds. N. A. Streitz, A. Kameas and I. Mavrommati) Springer, 143-157.
13. **N. R. Jennings**, A. G. Cohn, M. Fox, D. Long, M. Luck, D. T. Michaelides, S. Munroe and M. J. Weal (2006) "Interaction, planning and motivation" in *Cognitive systems: Information processing meets brain science* (eds R. Morris, L. Taressenko and M. Kenward) Elsevier, 163-188.
14. P. Panzarasa and **N. R. Jennings** (2006) "Collective cognition and emergence in multi-agent systems" in *Cognition and multi-agent interaction: From cognitive modelling to social simulation* (ed. R. Sun) Cambridge University Press, 401-408.
15. C. Bartolini, C. Preist and **N. R. Jennings** (2005) "A software framework for automated negotiation" in *Software Engineering for Multi-Agent Systems III: Research Issues and Practical Applications* (eds. R. Choren, A. Garcia, C. Lucena and A. Ramonovsky) Springer Verlag, 213-235.
16. S. D. Ramchurn and **N. R. Jennings** (2005) "Trust in agent-based software" in *Trust and Crime in Information Societies* (eds. R. Mansell and B. S. Collins) Elgar Publishing, 165-204.
17. F. Zambonelli, **N. R. Jennings** and M. Wooldridge (2005) "Multiagent systems as computational organisations: the Gaia methodology" in *Agent-Oriented Methodologies* (eds. B. Henderson-Sellers and P. Giorgini) Idea Group Inc., 136-171.
18. D. de Roure, **N. R. Jennings** and N. Shadbolt (2003) "The Semantic Grid: A future e-Science infrastructure" in *Grid Computing: Making the Global Infrastructure a Reality* (eds. F. Berman, G. Fox and A. J. G. Hey) Wiley 437-470.
19. D. de Roure, M. Baker, **N. R. Jennings** and N. Shadbolt (2003) "The evolution of the Grid" in *Grid Computing: Making the Global Infrastructure a Reality* (eds. F. Berman, G. Fox and A. J. G. Hey) Wiley, 65- 100.
20. S. Parsons, **N. R. Jennings**, J. Sabater and C. Sierra (2002) "Agent specification using multi-context systems" in *Foundations and Applications of Multi-Agent Systems: UKMAS Workshop 1996-2000 Selected Papers* (eds. M d'Inverno, M. Luck, M. Fisher and C. Preist) Springer Verlag, 205-226.
21. F. Zambonelli, **N. R. Jennings**, A. Omicini and M. Wooldridge (2001) "Agent-oriented software engineering for internet applications" in *Coordination of Internet Agents* (eds. A. Omicini, F. Zambonelli, M. Klusch and R. Tolksdorf) Springer Verlag, 326-346.
22. A. Lomuscio, M. Wooldridge and **N. R. Jennings** (2001) "A classification scheme for negotiation in electronic commerce" in *Agent-Mediated Electronic Commerce: A European Perspective* (eds. F. Dignum and C. Sierra), Springer Verlag, 19-33.

23. S. Bussmann, **N. R. Jennings** and M. J. Wooldridge (2001) "On the identification of agents in the design of production control systems" in *Agent-Oriented Software Engineering* (eds. P. Ciancarini and M. Wooldridge) Springer Verlag, 141-162.
24. S. Kalenka and **N. R. Jennings** (1999) "Socially responsible decision making by autonomous agents" in *Cognition, Agency and Rationality* (Eds K. Korta, E. Sosa, X. Arrazola) Kluwer 135-149.
25. **N. R. Jennings** and M. J. Wooldridge (1998) "Applications of intelligent agents" in *Agent Technology: Foundations, Applications and Markets* (eds. N. R. Jennings and M. Wooldridge) 3-28.
26. F. M. T. Brazier, B. M. Dunin-Keplicz, **N. R. Jennings** and J. Treur (1996) "Modelling distributed industrial processes in a multi-agent framework" in *Cooperative Knowledge Processing* (eds. S. Kirn and G. M. P. O'Hare) Springer Verlag, 212-229.
27. D. Cockburn and **N. R. Jennings** (1996) "ARCHON: a distributed artificial intelligence system for industrial applications" in *Foundations of Distributed Artificial Intelligence* (eds. G. M. P. O'Hare and N. R. Jennings) Wiley, 319-344.
28. **N. R. Jennings** (1996) "Coordination techniques for distributed artificial intelligence" in *Foundations of Distributed Artificial Intelligence* (eds. G. M. P. O'Hare and N. R. Jennings) Wiley, 187-210.
29. **N. R. Jennings** and T. Wittig (1992) "ARCHON: theory and practice" in *Distributed Artificial Intelligence: Theory and Praxis* (eds. N. M. Avouris and L. Gasser), Kluwer, 179-195.
30. **N. R. Jennings et al.** (1992) "The DAI functionality of the architecture" in *ARCHON: An Architecture for Multi-Agent Systems* (ed. T. Wittig), Ellis Horwood 25-51.
31. **N. R. Jennings et al.** (1992) "The information modelling within the architecture" in *ARCHON: An Architecture for Multi-Agent Systems* (ed. T. Wittig), Ellis Horwood 59-76.

OTHERS

1. J. McInerney, A. Rogers and **N. R. Jennings** (2013) "Bus, bike and random journeys: Crowdsourcing aid distribution in Ivory Coast" *Significance*, The Royal Statistical Society **10** (4) 4-9.
2. **N. R. Jennings**, A. Rogers, S. Case, R. Johnston and D. Philpot (2010) "Decentralised data and information systems: theory and practice" *The Computer Journal* **53** (9) 1341-1343.
3. G. Chalkiadakis, E. Elkind, E. Markakis, M. Polukarov and **N. R. Jennings** (2009) "Stability of overlapping coalitions" *ACM SIGecom Exchanges* **8** (1) 1-5.
4. **N. R. Jennings** and A. Rogers (2009) "Computational service economies: design and applications" in *Intelligent Distributed Computing III* (eds. G. A. Papadopoulos and C. Badica) 1-7, Springer.
5. A. Rogers, J. Kho, R. K. Dash and **N. R. Jennings** (2007) "Gaussian Process Information Measures for Wireless Sensor Networks" *Proc. 1st Int. Workshop on Agent Technology for Sensor Networks*, Hawaii, USA, 1-2. (short paper)
6. **N. R. Jennings** (2007) "Decentralised control of complex systems" *AISB Quarterly* **125**, 3-6.
7. **N. R. Jennings** (2006) "On computational service economies" *The Computer Journal* **49** (4) 394 [Discussion on Robin Milner's First Computer Journal Lecture: Ubiquitous computing: Shall we understand it?]
8. J. Patel, W. T. L. Teacy, **N. R. Jennings**, M. Luck, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian, S. Thompson (2006) "CONOISE-G: Agent-based virtual organisations" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1459-1460. (refereed demo paper)
9. A. Rogers, R. K. Dash, **N. R. Jennings**, S. Reece and S. Roberts (2006) "Computational mechanism design for multi-sensor information fusion" *Proc. 5th Int. Conf. on Autonomous Agents and Multi-Agent Systems (AAMAS)*, Hakodate, Japan, 1463-1464. (refereed demo paper)
10. **N. R. Jennings**, S. D. Ramchurn, M. Allen-Williams, R. K. Dash, P. S. Dutta, A. Rogers and I. Vetsikas (2006) "The ALADDIN project: Agents to the rescue" *Proc. 1st Int. Workshop on Agent Technology for Disaster Management*, Hakodate, Japan, 157-158.
11. J. Patel, W. T. L. Teacy, **N. R. Jennings**, M. Luck, S. Chalmers, N. Oren, T. J. Norman, A. Preece, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian, S. Thompson (2006) "CONOISE-G: Agent-based virtual organisations" *Proc. 17th European Conf. on AI (ECAI)*, Trento, Italy. (refereed demo paper)

12. S. Stein, T. R. Payne and **N. R. Jennings** (2006) "Flexible provisioning of Semantic Web service workflows using a QoS ontology" *Proc. 5th Int. Semantic Web Conf.*, Athens, USA.
13. **N. R. Jennings**, R. Johnston and W. A. Wright (2005) "Network-enabled capability: Decentralised coordination of autonomous agents to achieve operational goals" *Proc. NATO workshop on Information Fusion for Command Support*, The Hague, Holland.
14. A. Rogers and **N. R. Jennings** (2005) "Collusion in agent-based systems" *AgentLink Newsletter* **17** 6-8.
15. A. Preece, S. Chalmers, N. Oren, T. J. Norman, P. M. D. Gray, G. Shercliff, P. J. Stockreisser, J. Shao, W. A. Gray, N. J. Fiddian, J. Patel, L. Teacy, **N. R. Jennings**, M. Luck and S. Thompson (2005) "Managing virtual organisations on the Grid using agent technology" *AgentLink Newsletter* **17** 14-17.
16. **N. R. Jennings** and A. G. Cohn (eds.) (2003) "Interaction, Planning and Motivation" *Office of Science and Technology Report for Foresight Cognitive Systems Programme*.
17. S. D. Ramchurn and **N. R. Jennings** (2003) "Trust in agent systems" *Office of Science and Technology Report for Foresight Cybertrust Programme*.
18. D. de Roure, **N. R. Jennings** and N. Shadbolt (2001) "Research agenda for the semantic grid: a future e-science infrastructure" *UK e-Science Technical Report Series (UKeS-2002-02)*
19. **N. R. Jennings**, K. Woghiren and S. Osborn (2000) "Interacting agents—the way forward for agent-mediated electronic commerce" *Lostwax White Paper* [<http://www.lostwax.com/>]
20. **N. R. Jennings** (1999) "Agent-based systems: tomorrow's software" *Transformation* **18** 38-44.
21. M. Beer, M. d'Inverno, M. Luck, **N. R. Jennings**, C. Preist and M. Schroeder (1999) "Negotiations in multi-agent systems" *The Knowledge Engineering Review* **14** (3) 285-289.
22. R. Aylett, F. Brazier, **N. R. Jennings**, M. Luck, H. Nwana and C. Priest (1998) "Agent systems and applications" *The Knowledge Engineering Review* **13** (3) 303-308.
23. **N. R. Jennings**, S. Parsons, P. Noriega and C. Sierra (1998) "On argumentation-based negotiation" *Proc. Int. Workshop on Multi-Agent Systems*, Boston, USA.
24. J. E. Doran, S. Franklin, **N. R. Jennings** and T. J. Norman (1997) "On cooperation in multi-agent systems" *The Knowledge Engineering Review* **12** (3) 309-314.
25. **N. R. Jennings** and M. J. Wooldridge (1996) "Software agents" *IEE Review*, January, 17-20.
26. **N. R. Jennings** (1995) "Agent software" *Proc. UNICOM Seminar on Agent Software*, London, UK, 12-27.
27. **N. R. Jennings** (1993) "Coordination through joint intentions in industrial multi-agent systems" *AI Magazine* **14** (4) 79-80.
28. **N. R. Jennings** (1993) "Controlling cooperative problem solving using joint intentions" *AI Communications* **6** (3&4) 247-248.

EDITED JOURNAL SPECIAL ISSUES

1. **N. R. Jennings** (2010) "Decentralised data and information systems: theory and practice" *The Computer Journal* **53** (9).
2. D. Viet, T. Eymann, **N. R. Jennings** and J. P. Müller (2005) "Smart grid technologies and market models" *Int. J. Multiagent and Grid Systems* **1** (4).
3. P. Faratin and **N. R. Jennings** (2003) "Automated negotiation" *Int. J. of Group Decision and Negotiation* **12** (5).
4. A. Greenwald, **N. R. Jennings** and P. Stone (2003) "Agents and markets" *IEEE Intelligent Systems* **18** (6).
5. Y. Demazeau, E. H. Durfee and **N. R. Jennings** (2000) "Best of ICMAS 98" *Journal of Autonomous Agents and Multi-Agent Systems* **3** (1) and **3** (2).
6. **N. R. Jennings**, M. J. Wooldridge and F. Giunchiglia (1998) "Computational and logical aspects of multi-agent systems" *Journal of Logic and Computation* **8** (3).
7. **N. R. Jennings** (1997) "Developing agent based systems" *IEE Proc. on Software* **144** (1) [inaugural issue of the journal].

8. **N. R. Jennings** and B. Crabtree (1997) "The practical application of intelligent agents and multi-agent technology" *Int. J. of Applied Artificial Intelligence* **11** (5) & **11** (6).
9. **N. R. Jennings** (1996) "Tackling complex applications using multi-agent systems" *Int. J. of Cooperative Information Systems* **5** (2&3).
10. M. J. Wooldridge and **N. R. Jennings** (1995/6) "Intelligent agents and multi-agent systems" *Int. J. of Applied Artificial Intelligence* **9** (4) & **10** (1).

EDITED CONFERENCE PROCEEDINGS

1. S. D. Ramchurn, A. Rogers, J. A. Rodriguez, A. Farinelli and **N. R. Jennings** (2009) *Proc. 2nd Int. Workshop on Optimisation in Multi-Agent Systems*, Budapest, Hungary.
2. S. D. Ramchurn, A. Rogers, A. Petcu and **N. R. Jennings** (2008) *Proc. 1st Int. Workshop on Optimisation in Multi-Agent Systems*, Estoril, Portugal.
3. **N. R. Jennings**, M. Tambe, T. Ishida and S. D. Ramchurn (2006) *Proc. 1st Int. Workshop on Agent Technology for Disaster Management*, Hakodate, Japan.
4. **N. R. Jennings**, G. Kersten, A. Ockenfels, C. Weinhardt (2006) *Proc. Dagstuhl Seminar 06461 on Negotiation and Market Engineering*, Wadern, Germany. (<http://drops.dagstuhl.de/portals/06461/>)
5. D. J. Viet, T. Eymann, J. P. Müller and **N. R. Jennings** (2005) *Proc. 1st Int. Workshop on Smart Grid Technologies*, Utrecht, The Netherlands.
6. S. Thompson, R. Ghanea-Hercock, M. Greaves, A. Meyer and **N. R. Jennings** (2005) *Proc. 1st Int. Workshop on Defence Applications of Multi-Agent Systems*, Utrecht, The Netherlands.
7. **N. R. Jennings**, C. Sierra, L. Sonenberg and M. Tambe (2004) *Proc. 3rd Int. Joint Conf. on Autonomous Agents and Multiagent Systems (AAMAS)*, IEEE Press.
8. M. B. Blake, C. Bussler, G. Cabri, D. Fensel, J. K. Lee, O. Shehory, T. Payne, **N. R. Jennings** and M. Shaw (2003) *Proc. Int. Workshop on Electronic Commerce, Agents and Semantic Web Services*, Pittsburgh, USA.
9. W. E. Walsh, R. Das, **N. R. Jennings** and M. Kearns (2003) *Proc. IJCAI Workshop on AI and Autonomic Computing*, Acapulco, Mexico.
10. J. Debenham, B. Henderson-Sellers, **N. R. Jennings** and J. Odell (2002) *Proc. of OOPSLA Workshop on Agent-Oriented Methodologies*, Seattle, USA.
11. G. Brewka, **N. R. Jennings** and G. Vreeswijk (2000) *Proc. 3rd Int. Workshop on Computational Dialectics*, Berlin, Germany.
12. **N. R. Jennings** and Y. Lesperance (1999) *Proc. 6th Int. Workshop on Agent Theories Architectures and Languages (ATAL)*, Orlando, USA.
13. E. Oliveira and **N. R. Jennings** (1997) *Proc. of Int. Workshop on Multi-Agent Systems: Theory and Applications*, Coimbra, Portugal.
14. J. P. Müller, M. Wooldridge and **N. R. Jennings**, (1996) *Proc. 3rd Int. Workshop on Agent Theories, Architectures and Languages (ATAL)*, Budapest, Hungary.
15. M. Wooldridge, K. Fischer, P. Gmytrasiewicz, **N. R. Jennings**, J. P. Müller and M. Tambe (1995) *Proc. 2nd Int. Workshop on Agent Theories, Architectures and Languages (ATAL)*, Montreal, Canada.
16. M. J. Wooldridge and **N. R. Jennings** (1994) *Proc. 1st Int. Workshop on Agent Theories Architectures and Languages (ATAL)*, Amsterdam, The Netherlands.