Curriculum Vitae

Dr Simon Miles
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Employment and Appointed Roles

2015-	Reader in Computer Science, Department of Informatics, King's College London, UK
2014-	Director of the Centre for Urban Science and Progress London (CUSP London) at King's College London, UK
2013-2017	Head of the Agents and Intelligent Systems research group, King's College London, UK
2007-2015	Lecturer then Senior Lecturer, Department of Informatics, King's College London, UK
2004-2007	Research Associate, Provenance-Aware Service-Oriented Architectures, University of Southampton, UK
2001-2004	Research Associate, myGrid, University of Southampton, UK

Higher Education Qualifications

PGCAP		King's College London	2009
PhD	Computer Science	University of Warwick	2003
BSc (Hons.)	Computer Science	University of Warwick	1998

Leadership, service and administration

CUSP London

I am the founding Director of the Centre for Urban Science and Progress London (CUSP London), a multidisciplinary research and education centre in urban data science. Starting from 2014, my initial focus was on establishing the formal relationship between King's, our partner institution in CUSP London, University of Warwick, and the original CUSP in New York. While a few joint activities started from 2015, the Centre has been truly active at King's since 2018, when it gained a professional services Centre Manager, space of its own in Bush House in central London, and in September 2018, the MSc in Urban Informatics started. CUSP London. CUSP London is a multi-disciplinary centre with academic members from many departments: Informatics (computer science and engineering), Geography, Mathematics (statistics), Psychiatry, Environmental Research Group (air and other pollution), King's Policy Institute, and Digital Humanities. Activities that CUSP London has been involved in to date include the following.

- Five annual week-long hackathons in which teams of students apply data science and broader skills to investigating city-related questions through data, focusing on London. Topics have included air pollution, road safety, the night-time economy, and ambulance dispatch, and attendance of up to 50 students from four institutions (King's, Warwick, NYU, and UCL).
- Meetings setting up partnerships with the organisations such as the Greater London Authority, Westminster City Council (with whom we signed a formal Statement of Intent to collaborate), London Ambulance Service, Mayors Office for Policing and Crime, Bosch Urban Mobility Group, the College of Policing, Haringey Council, and transport-related large companies and start-ups.
- A multidisciplinary MSc in Urban Informatics with first intake in 2018/19 academic year, and very positive feedback from students.
- Workshops on topics including agent-based modelling for public health, cross-London agency data analytics project brainstorming, smart cities for Westminster, and using digital tools to understand policy making.
- Visits from international urban informatics initiatives from Sweden and Taiwan.
- Speakers on a variety of topics and from various backgrounds, including data journalists and those involved in using data visualisation to inform policy.

Agents and Intelligent Systems Research Group

I was Head of the Agents and Intelligent Systems research group, Department of Informatics, King's College London from 2013 to 2017. As part of this role, I performed activities including the following.

- Mentoring for postdocs and PhDs on topics varying across increasing their international research profile, lectureship interview practice, understanding the REF, and so on, plus specialist tutorials including normative systems, using version control, data provenance, etc.
- Guidance sessions for junior academics newly applying for grants, with two winning EPSRC First Grant awards, and for their applications for promotion.
- Reviewed and advised group members on the outputs they intend to submit to the REF 2021, and advising the Department on the status of the group as a whole.
- Group meetings for feeding back to the Department, and socials to help bond the group.
- Dissemination of research funding activities, relevant job openings, etc. and gathering feedback from the group on topics back to the Department.

City Data Analytics Programme

From 2018, I am a member of the board of the City Data Analytics Programme, a London-wide programme set up by the Greater London Authority (London Mayor's office) to drive the development of data science projects across the agencies (borough councils, emergency services, etc.) that comprise the London authority.

Interdisciplinary research support

From 2016, I was King's Together Champion on the topic of Sustainable Growth. This entails me leading collaborative activities across diverse disciplines at King's College London, bringing people with diverse skills together to submit proposals to tackle substantial social problems.

From 2014 to 2017, I was a member of the Big Data Steering Group, which found points of collaboration between the disparate disciplines and faculties at King's where there is interest in research using large and complex data sets.

Student experience

From 2015/2016 to 2017/2018, I was responsible for ensuring the quality of the student experience. This was prompted by a much larger than expected intake due to the increased popularity of the Department of Informatics. As part of this role, I introduced a house system (students are divided into Turing, Babbage and Lovelace houses) to help avoid the issue of students feeling isolated in such a large cohort, arranged events for students to meet each other and their teachers, led the organisation of an Easter Egg Hunt with educational puzzles leading to prizes for students and their houses, and so on. Alongside this, I was Deputy Senior Tutor for Undergraduates in my department, dealing with staff-student liaison issues, particularly for first year students.

Assessment procedures

Between the 2011/2012 and 2013/2014 academic years, I was the chair of the undergraduate assessment board for my department. This role included overseeing the process of exam paper preparation and marking within the Department, liaising with external examiners to ensure assessment preparation and marking quality, chairing programme boards to agree student marks, progression and graduation awards, ensuring external examiner comments are acted upon, preparing procedures to enact College regulations regarding assessment and graduation, representing the Department within the College with regard to graduation and progression decisions, and other connected activities. I developed both processes and software that were more widely adopted within the university and continue beyond the end of my tenure in this role.

Marketing and promotion of Department of Informatics

In the 2009/10 and 2010/11 academic years, I was Chair of the Information Strategy Group, a committee for promoting the Department of Informatics at King's College London. I was a member of the committee in 2008/9. In this role, I have undertaken the following activities for the Department.
- Established procedures for publishing news about research and teaching in the department on the web pages, and for regular update of the website with authoritative information
- Researched avenues for publicising the department's research and MSc courses on the web
- Compiled a handbook for academic staff members new to the department or who take on a new administrative role
- Helped to set up and promote a publicly accessible repository for publications.

Technology-enhanced learning

From 2010, I have been a member of the King's College London Technology Enhanced Learning Forum, developing and reviewing policy at the College level with regards to use of technology in support of learning.

Research

Project funding

Justified Assessment of Service Provider Reputation (JASPR), 2015-2018, £288k at KCL of £522k total, funded by the Engineering and Physical Sciences Research Council (EPSRC).

Engineering Emergence in Large-Scale Simulations (EELS), 2015-2018, $536k, funded by the US Air Force Office for Scientific Research (AFOSR).

Dynamic nutrItion bEhaviour awareness sysTem FOR the Elders (DIET4Elders), 2013-2016, £272k at KCL of €2.2m total, funded by the Ambient Assisted Living joint programme.

Electronic Health Records for Clinical Research (EHR4CR), 2011-2016, £374k at KCL of €13m total, funded by the Innovative Medicine Initiative.

Norm and Organisation Based Practical Reasoning, 2009-2011, £249k, funded by the SEAS Defence Technology Centre.

CONTRACT, 2007-2009, £284k at KCL of €1.85m total, funded by the EU FP6 programme.

Other research funding

LSHTM-King's Research Collaboration award, 2017, for preliminary interdisciplinary research with Department of Social and Environmental Health Research at LSHTM and Department of Geography at King's. Modelling Normative Change in Active Travel, £9k.

King's Together research award, 2017, for preliminary interdisciplinary research with Department of Nursing and Midwifery. Improving hospital patient flow through performance modelling and agent-based simulation, £12k.

EPSRC Impact Accelerator award, 2016, for activities improving opportunities for impact of the JASPR project outcomes, £7k

Sir Richard Trainor PhD scholarship award, 2015-2018, for an interdisciplinary project joint with Department of Geography on tracing food supply and demand in the global food system, £15k

Current PhD Students

Sara Boutamina, on the topic of detecting bottlenecks in global food distribution
Niall Creech, on the topic of agent-based coordination for micro-service systems
Andrew Henning, on the topic of argument mining
Andrew Lane, on the topic of interacting social and natural drivers of ecological disturbance regimes
Javin Singh, on the topic of adaptive AI for educational games
Tomas Vitek, on the topic of identification of stereotypes of behaviour
Tsvetan Zhivkov, on the topic of technology support for emergency services

Graduated PhD Students

Paraskevi Zerva, "A Specification and Analysis Framework for Provenance Awareness of Service Compositions", 2018
Christopher Haynes, "Keeping organisational norms congruent to goals", 2016
Valeriia Haberland, "Strategies for the Execution of Long-Term Continuous and Simultaneous Tasks in Grids", 2015
Benjamin Herd, "Statistical Runtime Verification of Agent-Based Simulations", 2015
Matthew Shaw, "Topological Constrained Self-Organisation", 2014
Lina Barakat, "Efficient Adaptive Multi-Granularity Service Composition", 2013

PhD Examining

I have been external examiner for 6 PhD candidates for the following universities.
- University of Southampton, UK
- University of Kent, UK
- Universitat Politecnica de Catalunya, Spain
- University of Warwick, UK

Professional and Community Service

Organising Committees

Organising Committee member for:
- Local Co-Chair for Provenance Week 2018, London, UK, July 2018
- Programme Chair for the Eighth European Workshop on Multi-Agent Systems (EUMAS'10), Paris, France, December 2010
- Sponsorship Chair for Ninth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS'10), Toronto, Canada, May 2010
- Co-Chair for the Agent Technical Fora 2010, Paris, France, December 2010
- Publicity Chair for Eighth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS'09), Budapest, Hungary, May 2009
- Co-Chair for Second Provenance Challenge Workshop, held as part of High Performance Distributed Computing (HPDC'07), Monterey, California, USA, June 2007
- Co-Chair for First Provenance Challenge Workshop, held as part of the Open Grid Forum (OGF'06), Washington D.C., USA, September 2006
- Organising Committee Member for First International Workshop on Multi-Agent Systems in Medicine and Biology Workshop (MAS*BIOMED'05), Utrecht, Netherlands, July 2005

Standardisation

Invited expert founding member of:
- W3C Working Group on Provenance, which developed the PROV standards to aid modelling provenance data and its exchange on the web, published April 2013.
- W3C Provenance Incubator Group, providing expertise and helping to develop a roadmap in the area of provenance for semantic web technologies, leading to future standardisation.
- eSI Mini-Theme on Provenance and Linked Open Data, based at the National e-Science Institute in Edinburgh and developing guidance for determining provenance in the context of linked data.

Journal Editing

Editor for:
- ACM Transactions on Internet Technology, upcoming special issue on data provenance, for publication in 2017
- Applied Artificial Intelligence 26(4), special issue on the Eighth European Workshop on Multi-Agent Systems (EUMAS 2012), April 2012.

Research Proposal Reviewing

Proposal reviewer for:
- Engineering and Physical Sciences Research Council (EPSRC), UK
- Irish Research Council, Ireland
- Netherlands Organisation for Scientific Research (NWO), Netherlands

Programme Committees

Programme Committee member for:

- Twenty-seventh International Joint Conference on Artificial Intelligence and Twenty-third European Conference on Artificial Intelligence (IJCAI-ECAI-18) , Stockholm, Sweden, July 2018
- Twentieth International Trust Workshop (TRUST 2018), Stockholm, Sweden, July 2018
- Thirty-first AAAI Conference on Artificial Intelligence (AAAI-17), San Francisco, US, February 2017
- Thirtieth AAAI Conference on Artificial Intelligence (AAAI-16), Phoenix, US, February 2016
- Fourteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2015), Istanbul, Turkey, May 2015
- Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15), Austin, US, January 2015
- Seventh USENIX Workshop on the Theory and Practice of Provenance (TAPP 2015), Edinburgh, UK, July 2015
- Eighteenth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN@IJCAI 2015), Buenos Aires, Argentina, July 2015
- Seventeenth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN@AAMAS 2015), Istanbul, Turkey, May 2015
- Second International Workshop on Multiagent Foundations of Social Computing (MFSC 2015), Istanbul, Turkey, May 2015
- Fourth IEEE International Workshop on Methods for Establishing Trust with Open Data (METHOD 2015), Bethlehem, USA, October 2015
- Sixth International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2015), Berlin, Germany, September 2015
- Thirteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2014), Paris, France, May 2014
- Fifth International Provenance and Annotation Workshop (IPAW 2014), Cologne, Germany, June 2014
- Sixteenth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN 2014), Paris, France, May 2014
- Seventeenth International Workshop on Trust in Agent Societies (Trust 2014), Paris, France, May 2014
- Third IEEE International Workshop on Methods for Establishing Trust with Open Data (METHOD 2014), Trentino, Italy, October 2014
- Fifteenth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN 2013), Saint Paul, USA, May 2013
- Fourth International Provenance and Annotation Workshop (IPAW 2012), Santa Barbara, US, June 2012
- Eleventh International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2012), Valencia, Spain, June 2012
- Tenth European Workshop on Multi-Agent Systems (EUMAS 2012), Dublin, Ireland, December 2012
- Fourteenth International Workshop on Coordination, Organizations, Institutions, and Norms (COIN@AAMAS 2012), Valencia, Spain, June 2012
- Third International Workshop on Semantic Web and Provenance Management 2012 (SWPM'12), Heraklion, Greece, May 2012
- Twenty-second International Joint Conference on Artificial Intelligence (IJCAI-11), Barcelona, Spain, July 2011
- Tenth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2011), Taipei, Taiwan, May 2011
- Ninth European Workshop on Multi-Agent Systems (EUMAS 2011), Maastricht, Netherlands, December 2011
- Ninth German Conference on Multi-Agent System Technologies (MATES 2011), Berlin, Germany, October 2011
- Thirteenth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN@WI-IAT'11), Lyon, France, August 2011

- Twelfth International Workshop on Agent-Oriented Software Engineering (AOSE 2011), Taipei, Taiwan, May 2011
- International Workshop on Situation, Activity and Goal Awareness (SAGAware 2011), Beijing, China, September 2011
- Twelfth International Workshop on Coordination, Organizations, Institutions and Norms in Agent Systems (COIN@AAMAS'11), Taipei, Taiwan, May 2011
- Second International Colloquium on Data Provenance and Data Management for eScience (DPDM'11), Melbourne, Australia, March 2011
- Thirteenth International Conference on Principles and Practice of Multi-Agent Systems (PRIMA'10), Kolkata, India, November 2010
- Second International Workshop on Semantic Web and Provenance Management (SWPM'10), Shanghai, China, November 2010
- Third International Provenance and Annotation Workshop (IPAW'10), New York, USA, June 2010
- Eleventh International Workshop on Agent Oriented Software Engineering (AOSE'10), Toronto, Canada, May 2010
- Second International Conference on Agents and Artificial Intelligence (ICAART'10), Valencia, Spain, January 2010
- First International Workshop on Provenance in Linked Data (PROLiD'10), Harklion, Greece, May 2010
- Eighth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS'09), Budapest, Hungary, May 2009
- Sixth European Semantic Web Conference 2009 (EWSC'09), Crete, Greece, June 2009
- Tenth International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'09), Burgos, Spain, September 2009
- Tenth International Workshop on Agent Oriented Software Engineering (AOSE'09), Budapest, Hungary, May 2009
- Tenth International Workshop on Engineering Societies in the Agents World (ESAW'09), Utrecht, Netherlands, November 2009
- First International Workshop of Data and Process Provenance (WDPP'09), Brisbane, Australia, April 2009
- Seventh International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2008), Estoril, Portugal, May 2008
- Fifth European Semantic Web Conference (ESWC'08), Tenerife, Spain, June 2008
- Ninth International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'08), Daejeon, Korea, December 2008
- Second International Provenance and Annotation Workshop (IPAW 2008), Salt Lake City, USA, June 2008
- Ninth International Workshop on Agent Oriented Software Engineering (AOSE'08), Estoril, Portugal, May, 2008
- Ninth International Workshop on Engineering Societies in the Agents World (ESAW'08), Saint-Etienne, France, September 2008
- First Symposium on Behaviour Regulation in Multi-Agent Systems (BRMAS'08), Aberdeen, UK, April 2008
- Thirteenth International European Conference on Parallel and Distributed Computing (Euro-Par'07), Rennes, France, August, 2007
- Eighth International Workshop on Agent Oriented Software Engineering (AOSE'07), Honolulu, Hawai'i, May, 2007
- Eighth International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'07), Birmingham, UK, December 2007
- Agents, Web-Services, and Ontologies – Integrated Methodologies (AWESOME'07), Durham, UK, September 2007
- Autonomous Intelligent Systems: Agents and Data Mining (AIS-ADM-07), St. Petersburg, Russia, June 2007
- Fifth International Semantic Web Conference (ISWC'06), Atlanta, US, November 2006

- Second Multi-Agent Systems in Medicine and Biology Workshop (MAS*BIOMED'06), Hakodate, Japan, May 2006
- International Symposium on Parallel and Distributed Processing and Application (ISPA'06) Sorrento, Italy, December 2006
- Seventh International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'06) Burgos, Spain, September 2006
- Sixth International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'05), Brisbane, Australia, July 2005
- First International Workshop on Scientific Applications on Grid Computing 2004 (SAG'04), IEEE/WIC/ACM International Joint Conference on Web Intelligence (WI 2004) and Intelligent Agent Technology (IAT 2004), Beijing, China, September 2004

Challenges

I have developed and co-led the international Provenance Challenges:
- Exercises comparing and then integrating provenance technologies
- Over 20 teams from many international academic and industrial institutions
- Each challenge culminating in a workshop where results were discussed
- First challenge in 2005- 2006
- Second challenge in 2006-2007

Outreach
- Invited talk on 'Justified Reputation Assessment' for the Digital Catapult Centre, April 2016
- BBC World TV News interview on safety in artificial intelligence systems, January 2015

Teaching

Qualifications and Innovation

I studied for the Postgraduate Certificate in Academic Practice studied 2007-2009, awarded 2009. As part of the latter, I analysed and applied methods for demonstrated depth of understanding, approachability, and effective formative assessment within my taught modules.

I have experimented with teaching formats to determine which is most effective, and prefer to intersperse lectures with interactive sessions, whether exercise-driven or open discussion. This has led to good attentiveness, attendance and consistently positive feedback. I have made use of formative online quizzes.

Taught Courses

Distributed Systems, 2007/2008 onwards, King's College London
- 3rd year undergraduate and MSc students, around 200 per class
- 33 hours of classes mixing lectures and tutorials
- Exam preparation and marking

Web Infrastructure, 2007/2008 to 2013/2014, King's College London
- MSc students, around 50 per lecture
- 25 hours of lectures, 10 hours of tutorials
- Coursework and exam preparation and marking
- Inclusion of research material on Web Services, Semantic Web, Cloud Computing, Provenance

Internet Systems, 2008/2009 to 2013/2014, King's College London
- 3rd year undergraduates, around 100 per lecture
- 25 hours of lectures, 10 hours of tutorials
- Coursework and exam preparation and marking
- Have hosted guest industrial lectures as part of course

Introduction to Artificial Intelligence, 2010/2011 to 2011/2012, King's College London
- 1st year undergraduate students, around 150 per lecture
- 22 hours of lectures, 11 hours of problem classes
- Setting essay on philosophy of AI topic, plus exam preparation and marking

Advanced Topics on Web Services, Autumn 2005, University of Southampton
- MSc students, around 30 per lecture
- Occasional lecture support
- Chairing and grading student presentations

Programming for Computer Scientists, 1998/1999 - 2000/2001, University of Warwick
- 1st year undergraduate students, around 25 per seminar for 2 seminar groups per year
- 10 hours of seminar per group per year

Professional Skills, 1999/2000 - 2000/2001, University of Warwick
- 1st year undergraduate students, around 25 per seminar
- 10 hours of seminar per group per year

Project Supervision and Pastoral Care

I have supervised undergraduate and MSc final year project supervision each year at King's College London, and previously at University of Southampton. I have supervised students on extra-mural industrial placements at King's College London. I have acted as a personal tutor for undergraduate and MSc students.

Publications

Journal Articles

1. B. Herd, S. Miles. Detecting causal relationships in simulation models using intervention-based counterfactual analysis. *ACM Transactions on Intelligent Systems*, accepted 2019 (to appear).

2. I. Nunes, P. Taylor, L. Barakat, N. Griffiths, S. Miles. Explaining Reputation Assessments. *International Journal of Human-Computer Studies* 123, pp. 1-17, 2019.

3. P. Taylor, L. Barakat, S. Miles, N. Griffiths. Reputation: A Review and Unifying Abstraction. *Knowledge Engineering Review* 33, e6, 2018.

4. C. Haynes, M. Luck, P. McBurney, S. Mahmoud, T. Vitek, S. Miles. Engineering the Emergence of Norms: a Review, *Knowledge Engineering Review* 32, e18, 2018.

5. V. Haberland, S. Miles, M. Luck. Time-Sensitive Resource Re-allocation Strategy for Inter-Dependent Continuous Tasks, *Knowledge Engineering Review*, accepted 2018 (to appear).

6. B. Herd, S. Miles, P. McBurney, M. Luck. Quantitative analysis of multi-agent systems through statistical verification of simulation traces, *International Journal of Agent-Oriented Software Engineering* 6(2), pp. 156–186, 2018.

7. L. Barakat, P. Taylor, N. Griffiths, A. Taweel, M. Luck, S. Miles. Towards Personalised and Adaptive QoS Assessments via Context Awareness, *Computational Intelligence* 34 (2), pp. 468-494, 2018.

8. T. Cioara, I. Anghel, L. Barakat, D. Reidlinger, S. Miles, A. Taweel I. Salomie, T. Sanders. Expert System for Nutrition Care Process of Older Adults, *Future Generation Computer Systems* 80, pp. 368-383, 2018.

9. L. Barakat, S. Miles, M. Luck. Adaptive Composition in Dynamic Service Environments, *Future Generation Computer Systems* 80, pp. 215-228, 2018.

10. V. Haberland, S. Miles, M. Luck. Negotiation Strategy for Continuous Long-Term Tasks in a Grid Environment, *Journal of Autonomous Agents and Multi-Agent Systems* 31(1), pp. 130-150, 2017.

11. A. Taweel, L. Barakat, S. Miles, T. Cioara, I. Anghel, A-R. Tawil, I. Salomie. A Service-based System for Malnutrition Prevention and Self-Management, *Computer Standards & Interfaces* 48, pp. 225-233, 2016.

12. L. Moreau, P. Groth, J. Cheney, T. Lebo, S. Miles. The Rationale of PROV, *Journal of Web Semantics* 35(4), pp. 235-257, December 2015.

13. I. Nunes, S. Miles, M. Luck, C. Lucena. An Introduction to Reasoning over Qualitative Multi-attribute Preferences, *Knowledge Engineering Review* 30 (3), pp. 342-372, May 2015.

14. S. Modgil, N. Oren, N. Faci, F. Meneguzzi, S. Miles, M. Luck. Monitoring Compliance with E-Contracts and Norms, *Artificial Intelligence and Law*, 23 (2), pp. 161-196, June 2015.

15. I. Nunes, S. Miles, M. Luck, S. Barbosa, C. Lucena. Decision Making with Natural Language based Preferences and Psychology-inspired Heuristics, *Engineering Applications of Artificial Intelligence* 42, pp. 16-35, June 2015.

16. I. Nunes, S. D. J. Barbosa, D. Cowan, S. Miles, M. Luck and C. J.P. de Lucena. Natural Language based Representation of User Preferences, *Interacting with Computers* 27(2), pp. 133-158, 2015

17. E. Garcia, S. Miles, M. Luck, A. Giret. Evaluating how agent methodologies support the specification of the normative environment through the development process, *Journal of Autonomous Agents and Multi-Agent Systems* 29(6), pp. 1041-1060, 2015.

18. F. S. Liang, A. Taweel, S. Miles, Y. Kovalchuk, A. Spiridou, B. Barratt, U. Hoang, S. Crichton, B. Delaney, C. Wolfe. Semi Automated Transformation to OWL Formatted Files as an Approach to Data Integration. *Methods of Information in Medicine* 54(1), pp. 32-40, 2015.

19. V. Curcin, S. Miles, R. Danger, Y. Chen, R. Bache, A. Taweel. Implementing interoperable provenance in biomedical research, *Future Generation Computer Systems*, 34, pp. 1-16, 2014.

20. R. Bache, A. Taweel, S. Miles, B. Delaney. An Eligibility Criteria Query Language for Heterogeneous Data Warehouses, *Methods of Information in Medicine*, 54 (1), pp. 41-44, 2015.

21. L. Barakat, S. Miles, and M. Luck. Efficient Adaptive QoS-based Service Selection, *Service Oriented Computing and Applications* 20(8), 2014

22. R. Bache, S. Miles, B. Coker, A. Taweel. Informative Provenance for Repurposed Data – A Case Study using Clinical Research Data, *International Journal of Digital Curation* 8(2), pp. 27-46, 2013.

23. R. Bache, S. Miles, and A. Taweel. An Adaptable Architecture for Patient Cohort Identification from Diverse Data Sources, *Journal of the American Medical Informatics Association* 20(e2), pp. e327-e333, 2013.

24. B. Herd, S. Miles, P. McBurney, and M. Luck. Compositional transient reachability analysis for agent-based simulations, *Studia Informatica Universalis*, 10 (3), pp. 87-118, 2012.

25. C. Nguyen, A. Perini, P. Tonella, S. Miles, M. Luck, and M. Harman. Evolutionary Testing of Autonomous Software Agents, *Journal of Autonomous Agents and Multi-Agent Systems* 25(2), pp. 260-283, 2012.

26. M. Fagundes, S. Ossowski, M. Luck and S. Miles. Using Normative Markov Decision Processes for Evaluating Electronic Contracts: A Case Study in a Simulated Aerospace Aftermarket, *AI Communications* 25(1), pp. 1-17, 2012.

27. P. Groth, Y. Gil, J. Cheney, and S. Miles. Requirements for Provenance on the Web, *International Journal of Digital Curation* 7(1), 39-56, 2012.

28. S. Miles and P. Moraitis. Special Issue on the Eighth European Workshop on Multi-Agent Systems (EUMAS 2010), *Applied Artificial Intelligence* 26(4), pp. 303-305, April 2012.

29. M. Croitoru, N. Oren, S. Miles, and M. Luck. Graphical Norms via Conceptual Graphs, *Knowledge Based Systems* 29, pp. 31-43, May 2012.

30. S. Miles, P. Groth, S. Munroe and L. Moreau. PrIMe: A Methodology for Developing Provenance-Aware Applications, *ACM Transactions on Software Engineering and Methodology* 20 (3), pp. 1-42, 2011.

31. S. Miles. Mapping Attribution Metadata to the Open Provenance Model, *Future Generation Computer Systems* 27 (6), pp. 806–811, 2011.

32. L. Moreau, B. Clifford, J. Freire, J. Futrelle, Y. Gil, P. Groth, N. Kwasnikowska, S. Miles, P. Missier, J. Myers, Y. Simmhan, E. Stephan, and J. V. den Bussche. The Open Provenance Model Core Specification (v1.1), *Future Generation Computer Systems* 27 (6), pp. 743-756, 2011.

33. P. Groth, S. Miles, L. Moreau. A Model of Process Documentation to Determine Provenance in Mash-ups, *ACM Transactions on Internet Technology* 9(1), pp. 1-31, February 2009.

34. S. Miles, P. Groth, E. Deelman, K. Vahi, G. Mehta and L. Moreau. Provenance: The Bridge Between Experiments and Data, *Computing in Science and Engineering* 10(3), pp. 38-46, May/June 2008.

35. L. Moreau, P. Groth, S. Miles, J. Vazquez, J. Ibbotson, S. Jiang, S. Munroe, O. Rana, A. Schreiber, V. Tan and L. Varga. The Provenance of Electronic Data, *Communications of the ACM* 51(4), pp. 52-58, April 2008.

36. S. Miles, P. Groth, S. Munroe, S. Jiang, T. Assandri, and L. Moreau. Extracting Causal Graphs from an Open Provenance Data Model. *Concurrency and Computation: Practice and Experience* 20(5), pp. 577-586, April 2008.

37. L. Moreau and 49 other authors. The First Provenance Challenge. *Concurrency and Computation: Practice and Experience* 20(5), pp. 409-418, April 2008.

38. S. Miles, P. Groth, M. Branco and L. Moreau. The Requirements of Using Provenance in e-Science Experiments, *Journal of Grid Computing* 5(1), pp. 1-25, 2007.

39. S. Miles, S. Wong, W. Fang, P. Groth, K. Zauner and L. Moreau. Provenance-based Validation of E-Science Experiments, *Journal of Web Semantics* 5(1), pp. 28-38, 2007.

40. S. Miles, Agent-Oriented Data Curation in Bioinformatics, *International Transactions on Systems Science and Applications* 1(1), pp. 43-50, 2006.

41. T. Kifor, L. Z. Varga, J. Vázquez-Salceda, S. Álvarez, S. Willmott, S. Miles and L. Moreau. Provenance in Agent-mediated Healthcare Systems. *IEEE Intelligent Systems* 21(6), November, pp. 38-46, 2006.

42. C. Wroe, C. Goble, A. Goderis, P. Lord, S. Miles, J. Papay, P. Alper and L. Moreau. Recycling workflows and services through discovery and reuse, *Concurrency and Computation: Practice and Experience* 19(2), pp. 181-194, 2006.

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