

DALAL SAAD ALRAJEH

Curriculum Vitae

PERSONAL INFORMATION

Email dalal.alrajeh@ic.ac.uk

Website www.doc.ic.ac.uk/~da04/

ACADEMIC EMPLOYMENT

- 9/2017–*present* Lecturer (USA equiv. Assistant Professor), Department of Computing, Imperial College London.
- 09/2013–08/2017 Imperial College Research Fellow, Department of Computing, Imperial College London.
Project: Automated Diagnosis and Repair for Declarative Specifications.
- 02/2010–08/2013 Research Associate, Department of Computing, Imperial College London.
Project: *ERC Partial Behaviour Modelling: A Foundation for Incremental and Iterative Model-Based Software Engineering.*
- 07/2003–08/2004 Teaching Assistant, Information Technology Department, King Saud University.

EDUCATION

- 2005–2010 PhD in Distributed Software Engineering, Imperial College London.
Thesis: *Requirements Elaboration using Model Checking and Inductive Learning.*
Supervisors: Dr Alessandra Russo and Dr Sebastian Uchitel.
- 2004–2005 MSc in Computing (Distinction), Imperial College London.
Thesis: *Extracting Requirements from Scenarios using Inductive Logic Programming.*
- 1998–2003 B.Sc. (Hons.) in Information Technology (First Class), King Saud University.

PUBLICATIONS: JOURNALS

(Papers submitted to REF 2014 are marked with the symbol *.)

- [1] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. Automated Support for Diagnosis and Repair. *Communications of the ACM*, 58(2): 65–72, ACM, 2015.
SJR: 1.91 Q1.
- [2] S. Uchitel, **D. Alrajeh**, S. Ben-David, V. Braberman, M. Chechik, G. De Caso, N. D’Ippolito, D. Fischbein, D. Garbervetsky, J. Kramer, A. Russo and G. Sibay. Supporting Incremental Behaviour Model Elaboration. *Computer Science—Research and Development*, 28(4): 279–293, Springer, 2013.
- [3*] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. Requirements Elaboration using Model Checking and Inductive Learning. *IEEE Transactions on Software Engineering*, 39(3): 361–383, IEEE Press, 2013.

SJR ranking: 1.543 Q1.

- [4] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. Deriving Non-zeno Behaviour Models from Goal Models using ILP. *Formal Aspects of Computing*: 22(34): 217–241, 2010.
- [5] **D. Alrajeh**, O. Ray, A. Russo and S. Uchitel. Using Abduction and Induction for Operational Requirements Elaboration. *Journal of Applied Logic*, 7(3): 275–288, 2009.

PUBLICATIONS: REFEREED CONFERENCES

- [6] D. Cavezza, **D. Alrajeh** and A. Gyorgy. *A Weakness Measure for GR(1) Formulae*. To appear in proceedings of 22nd International Symposium on Formal Methods (FM18), 2018.
CORE rank: A.
- [7] L. Pasquale, **D. Alrajeh**, C. Peersman, T.T. Thun, A. Rashid and B. Nuseibeh. *Towards Forensic-Ready Software Systems*. To appear in proceedings of 40th ICSE New Ideas and Emerging Results (ICSE NIER18), ACM, 2018.
- [8] **D. Alrajeh**, H. Chockler and J. Halpern. *Combining Experts' Causal Judgments*. To appear in proceedings of 32nd Association for the Advancement of Artificial Intelligence Conference on Artificial Intelligence (AAAI18), 2018.
Acceptance rate: 25% CORE rank: A*.
- [9] **D. Alrajeh**, L. Pasquale and B. Nuseibeh. *On Evidence Preservation Specifications for Forensic-ready Systems*. Proceedings of 11th European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE17): 559–569, ACM, 2017.
CORE rank: A.
- [10] D. Cavezza and **D. Alrajeh**. *Interpolation-Based GR(1) Assumptions Refinement*. Proceedings of 23rd International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS17): 281–297, Springer, 2017.
CORE rank: A.
- [11] R. Degiovanni, N. Ricci, **D. Alrajeh**, P.F. Castro and N. Aguirre. *Goal-Conflicts Detection based on Temporal Satisfiability Checking*. Proceedings of 30th International Conference on Automated Software Engineering (ASE16): 507–518, ACM, 2016.
Acceptance rate: 19% CORE rank: A.
- [12] **D. Alrajeh**, A. van Lamsweerde, J. Kramer, A. Russo and S. Uchitel. *Risk-Driven Revision of Requirements Models*. Proceedings of 38th IEEE/ACM International Conference on Software Engineering (ICSE16): 855–865, ACM, 2016.
Acceptance rate: 19% CORE rank: A*.
- [13] **D. Alrajeh** and P. Gill. *A Logic-based Approach to Understanding Lone-actor Terrorism*. Proceedings of the Technical Communications of the 31st International Conference on Logic Programming (ICLP15): 2015.
CORE rank: A.
- [14] D. Athakravi, **D. Alrajeh**, A. Russo and K. Broda. *Learning through Constraint-driven Bias*. Proceedings of 24th International Conference on Inductive Logic

- Programming (ILP14): 16–32, Springer, 2015.
CORE rank: B.
- [15] **D. Alrajeh** and R. Craven. *Automated Error-detection and Repair for Compositional Software Specifications*. Proceedings of 12th International Conference on Software Engineering and Formal Methods (SEFM14): 111–127, Springer, 2014.
Acceptance rate: 27% CORE rank: B.
- [16] R. Degiovanni, **D. Alrajeh**, N. Aguirre and S. Uchitel. *Automated Goal Operationalisation Based on Interpolation and SAT Solving*. Proceedings of 36th IEEE/ACM International Conference on Software Engineering (ICSE14): 129–139, IEEE Press, 2014.
Acceptance rate: 20% CORE rank: A*.
- [17] **D. Alrajeh**, R. Miller, A. Russo and S. Uchitel. *Reasoning about Triggered Scenarios in Logic Programming*. Proceedings of the Technical Communications of the International Conference on Logic Programming (ICLP13): TPLP 13(4-5), Cambridge University Press, 2013.
CORE rank: A.
- [18] **D. Alrajeh**, A. Russo, J. Lockerbie, N. Maiden, A. Mavin and M. Novak. *Computational Alignment of Goals and Scenarios for Complex Systems*. Proceedings of 35th IEEE/ACM International Conference on Software Engineering, New Ideas and Emerging Results Track (ICSE NIER13): 1249–1252, IEEE press, 2013.
Acceptance rate: 22% CORE rank: A*.
- [19*] **D. Alrajeh**, J. Kramer, A. van Lamsweerde, A. Russo and S. Uchitel. *Generating Obstacle Conditions for Requirements Completeness*. Proceedings of 34th IEEE/ACM International Conference on Software Engineering (ICSE12): 705–715, IEEE Press, 2012.
Acceptance rate: 21% CORE rank: A*
Shortlisted for best paper award.
- [20] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. *Learning from Vacuously Satisfiable Scenario-based Specifications*. Proceedings of 15th International Conference on Fundamental Approaches to Software Engineering (FASE12): 377–393, Springer, 2012.
Acceptance rate: 24.6% CORE rank: B.
Shortlisted for best paper award.
- [21] **D. Alrajeh**, A. Russo, S. Uchitel and J. Kramer. *Integrating Model Checking and Inductive Logic Programming*. Proceedings of 21st International Conference on Inductive Logic Programming (ILP11): 45–60, Springer, 2011.
CORE rank: B.
- [22] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. *An Inductive Approach for Modal Transition Systems Refinement*. Proceedings of the Technical Communications of the 27th International Conference on Logic Programming (ICLP11): 106–116, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2011.
CORE rank: A.
- [23*] **D. Alrajeh**, J. Kramer, A. Russo and S. Uchitel. *Learning Operational Requirements from Goal Models*. Proceedings of 31st IEEE/ACM International Conference on Software Engineering (ICSE09): 265–275, IEEE Computer So-

ciety, 2009.

Acceptance rate: 12% CORE rank: A*.

- [24] **D. Alrajeh**, A. Russo and S. Uchitel. *Deriving Non-zeno Behaviour Models from Goal Models using ILP*. Proceedings of 11th International Conference on Fundamental Approaches to Software Engineering (FASE08): 1–15, Springer, 2008.

Acceptance rate: 26% CORE rank: B.

- [25] **D. Alrajeh**, O. Ray, A. Russo and S. Uchitel. *Extracting Requirements from Scenarios with ILP*. Proceedings of 16th International Conference on Inductive Logic Programming (ILP06): 62–77, Springer, 2006.

CORE rank: B.

PUBLICATIONS: REFEREED WORKSHOP

- [26] P. Gomoluch, **D. Alrajeh**, A. Russo and A. Bucchiarone. *Towards learning domain-independent planning heuristics*. In Proceedings of 1st International Workshop on Architectures for Generality & Autonomy, co-located with International Joint Conference on Artificial Intelligence (IJCAI AGA17).

- [27] **D. Alrajeh**, S. Jha and S. Seshia. *A Non-monotonic Theory of Oracle-guided Inductive Synthesis*. Proceedings of the First Workshop on Learning in Verification (ETAPS LiVe17): 2017.

- [28] **D. Alrajeh**, O. Ray, A. Russo and S. Uchitel. *Using Abduction and Induction for Operational Requirements Elaboration*. Proceedings of 5th International Workshop on International Workshop on the Integration of Abduction and Induction in AI and Bioinformatics (AIAI07): 1–9, 2007.

- [29] **D. Alrajeh**, A. Russo and S. Uchitel. *Inferring Operational Requirements from Goal Models and Scenarios using Inductive Systems*. Proceedings of 5th International Workshop on Scenarios and State Machines (ICSE SCESM06): 29–36, 2006.

PUBLICATIONS: REFEREED BOOK CHAPTERS

- [30] **D. Alrajeh** and A. Russo. Logic-based Machine Learning in Software Engineering. In A. Bennaceur, R. Hähnle and K. Meinke, editors, *Machine Learning for Dynamic Software Analysis: Potentials and Limits*, Springer, 2018.

PUBLICATIONS: EXTENDED ABSTRACTS

- [31] **D. Alrajeh**, A. Russo, S. Uchitel, J. Kramer. *Logic-based learning in software engineering*. Proceedings of the 38th International Conference on Software Engineering Companion Volume (ICSE16): 892–893, ACM, 2016.

- [32] **D. Alrajeh** and N. Bouhana. *The Logic of Radicalization: A Guided Approach to Modelling and Analysis*. 71st Annual Meeting of American Society of Criminology (ASC15), Washington DC, 2015.

- [33] O. Cocarascu, **D. Alrajeh** and P. Gill. *Identifying Key Factors for Explaining Lone-actor Terrorists Target Choices*. 71st Annual Meeting of American Society of Criminology (ASC15), Washington DC, 2015.

- [34] **D. Alrajeh**, P. Gill and D. Athakrivi. *Learning Characteristics and Antecedent Behaviours of Lone-actor Terrorists*. International Conference on In-

ductive Logic Programming (ILP14): 2014.

- [35] **D. Alrajeh** and P. Gill. *An Inductive Learning Approach for Understanding Lone-actor Terrorist Target Choice*. 70th Annual Meeting of American Society of Criminology (ASC14), San Francisco, 2014.

PUBLICATIONS: POSTERS

- [36] **D. Alrajeh**, N. Bouhana and R. Morgan. *Causal Inference Framework for Crime Science*. International Crime and Policing Conference, Home Office, London, 2015.
- [37] **D. Alrajeh** and P. Gill. *Reasoning about Characteristics and Behaviour of Lone-actor Terrorists: A Logic-based Approach*. The Academic Centres of Excellence in Cyber Security Research (ACE-CSRs) Conference, Birmingham, 2014.

FUNDING: AWARDED

- 10/2017–03/2018 **Self-managing Drone Swarms for Precision Agriculture**.
Type: EPSRC Global Challenge Research Fund Community Building Support.
Role: Co-investigator.
Other holders: A. Filieri (PI), N. D’Ippolito (Co-PI), and J. Kramer (Co-I).
Value: ~£13,720.
Source: EPSRC, UK.
- 09/2016–08/2019 **The Social Ecology of Radicalization: A Foundation for the Design of CVE Initiatives**.
Type: Research Grant.
Role: Co-investigator, Imperial lead.
Other holders: N. Bouhana, UCL (PI), P. Gill, UCL (Co-I), J. Morrison, UEL (Co-I), L. Lindekilde, Aarhus University, the Netherlands (Co-I).
Value: ~£646,700.
Source: Minerva Initiative, Department of Defense, USA.
- 09/2013–08/2017 **Automated Diagnosis and Repair for Declarative Specifications**.
Type: Junior Research Fellowship award.
Value: £199,151.
Source: Imperial College London, UK.
- 05/2015–28/2016 **Building an Intelligent Crime Linkage System**.
Type: Impact Acceleration Grant.
Role: Principal investigator.
Value: £6,187.
Source: ESRC, UK.
- 12/2012–01/2013 **Reasoning about Boolean Networks using Model Checking**.
Type: Travel Grant.
Role: Joint principal investigator
Other holder: Prof. K. Inoue, National Institute of Informatics, Japan (joint PI).
Duration: 1 month.
Value: £2,500.
Source: MOU, National Institute of Informatics, Japan.

COLLABORATION AGREEMENTS

- 11/2013–10/2018 **Generating Theories about Serial and Serious Crimes.**
Role: Principal investigator.
Collaborators: National Crime Agency, UK.

INVITED TALKS AND BRIEFINGS

- 09/2017 *A Non-monotonic Perspective on Oracle-guided Synthesis.*
Dagstuhl Seminar on “Machine Learning and Formal Methods”, Schloss Dachstuhl, Germany.
- 02/2017 *Learning to Adapt: A Contextual Guide to Goal Survivability.*
IFIP 2.9. Working Group—Software Requirements Engineering, StellenBosch, South Africa.
- 10/2016 *Using Computer Science Techniques to Enhance Practitioner Decision-making.*
British Academy Conference on Using Behavioural Science to Target Prolific Criminals, London, UK.
- 10/2016 *Integrating Machine Learning and Automation into the Comparative Case Analysis Process.*
British Academy Conference on Using Behavioural Science to Target Prolific Criminals, London, UK.
- 07/2016 *Verification-driven Learning for Declarative Requirements Specifications.*
University of California Berkeley, Berkeley CA, USA.
- 05/2016 *Logic-based Learning in Software Engineering*
Technical Briefing at International Conference on Software Engineering, Austin, Texas, USA.
- 05/2016 *Designing Behaviourly Forensic-Ready Systems: Current Developments and Directions.*
National Crime Agency, Sunningdale Park, UK.
- 03/2016 *Repairing Software Requirements Models: A Declarative Learning-based Approach.*
The Laboratory for Foundations of Computer Science Seminar Series, University of Edinburgh, UK.
- 04/2016 *Verification-driven Learning for Declarative Software Specifications.*
Dagstuhl Seminar on “Machine Learning for Dynamic Software Analysis: Potential and Limits”, Schloss Dachstuhl, Germany.
- 12/2015 *A Logical Approach to Crime Linkage.*
British Psychological Society Seminar Series on Linking Acquisitive Crime, University of Derby, UK.
- 06/2015 *Improving our Understanding of Terrorists Target Selection.*
Fourth Workshop on Formal Methods And Tools for Security, Microsoft Research, Cambridge, UK.
- 12/2014 *Horizon scanning: Supporting Analysts through Computational Intelligence.*
Futures Scanning Group, City of London Police HQ, UK.
- 12/2014 *From Goals to Operational Specifications: Getting it right!*
Best of RESG Research 2014 Workshop, London, UK.

- 10/2014 *Automated Error-Detection and Repair for Compositional Software Specifications.*
Department of Computer Science, University of Middlesex, London, UK.
- 03/2014 *Handling Flaws in Declarative Specifications.*
The Irish Software Engineering Research Centre (Lero), Limerick, Ireland.
- 04/2013 *Automated Analysis and Generation of Hypothesis in Major Crimes.*
Association of Chief Police Officers (ACPO) Working Group, London, UK.
- 02/2013 *Supporting Crime Analysis and Hypothesis Generation using Machine Intelligence.*
UCL Centre for Security & Crime Science, University College London, UK.
- 02/2013 *Requirements Elaboration: An Inductive Search Problem.*
25th CREST Open Workshop on Requirements and Test Optimization, London, UK.
- 12/2012 *Handling Flaws in Declarative Specifications.*
Principles of Informatics Research Division, National Institute of Informatics, Tokyo, Japan.
- 06/2012 *Automated Approach for Diagnosing and Repairing Software Specifications.*
CREST Centre, University College London, UK.
- 12/2011 *AIMS: Automated Inference for Major Enquiry Systems.*
National Policing Improvement Agency, London, UK.
- 09/2011 *Model Checking and Inductive Learning: A Synergistic Partnership.*
ERC Workshop on Software Quality, Venice, Italy.
- 04/2011 *Requirements Discovery using Machine Learning.*
BCS East Anglia: Where Do Software Requirements Come From? Cambridge, UK.

CONTRIBUTED TALKS

- 2017 ESEC/FSE, International Workshop on Learning in Verification (LiVe@ETAPS), International Workshop on Software Engineering for Digital Forensics (SERF@ESEC/FSE).
- 2016 ICSE, International Workshop on Requirements Engineering for Investigating and Countering Crime (iRENIC@RE).
- 2015 ICLP, ASC.
- 2014 SEFM, ILP, ASC.
- 2013 ICSE, ICLP.
- 2012 ICSE, FASE.
- 2011 ICLP, ILP.
- 2009 ICSE.
- 2008 FASE.
- 2007 AIAI.
- 2006 ILP, SCESM@ICSE.

ACADEMIC VISITS

- 09/2013–12/2016 Visiting lecturer, Department of Security and Crime Science, UCL, UK.
- 06/2016 Visiting researcher, University of California, Berkeley, CA, USA.
- 02/2016 Visiting researcher, Vrije Universiteit Brussel, Belgium.
- 11/2015 Visiting researcher, MIT, Cambridge, MA, USA.
- 11/2015 Visiting researcher, University of Louvain, Belgium.
- 03/2014 Visiting researcher, The Irish Software Engineering Research Centre (Lero), Ireland.
- 12/2012 Visiting researcher, National Institute of Informatics, Tokyo, Japan.

TEACHING

- Spring 2017/18 **Lecturer, Department of Computing (DoC), Imperial College London (IC).**
Prolog for second year Computing and Joint Maths and Computing (JMC).
Delivering lectures, supervising lab sessions and marking coursework.
10 lectures and 4 lab sessions, number of students: 166.
- Autumn 2014/15 **Lecturer, Department of Computing (DoC), Imperial College London (IC).**
Concurrency for second year Computing and Joint Maths and Computing (JMC).
Delivering lectures, supervising lab sessions, writing course material and setting and marking exam.
4 lectures and 2 tutorials, number of students: 139.
- Autumn 2013/14 **Lecturer, DoC, IC.**
Concurrency for second year Computing and JMC.
Delivering lectures, supervising lab sessions, writing course material and setting and marking exam.
8 lectures and 4 tutorials, number of students: 135.
- Autumn 2012/13 **Lecturer, DoC, IC.**
Concurrency for second year Computing and JMC.
Delivering lectures, supervising lab sessions, writing course material and setting and marking exam.
9 lectures and 7 tutorials, number of students: 143.
- Spring 2011/2012 **Lecturer, DoC, IC.**
Concurrency for second year Computing and JMC.
Delivering lectures, supervising lab sessions, writing course material and setting and marking exam.
7 lectures and 3 tutorials, number of students: 133.
- Spring 2010/2011 **Lecturer and course leader, DoC, IC.**
Software Engineering for MSc in Computing.
Delivering lectures and supervising lab sessions.
4 lectures and 3 tutorials, number of students: 30.
- Spring 2009 **Invited lecturer, DoC, IC.**
Software Engineering for MSc in Computing.
Delivering lectures and supervising lab sessions.

1 lecture and 3 tutorials, number of students: 35.

TEACHING: TUTORIAL SUPPORT

- 2017–2018 PMT, Second year undergraduates in Computing, DoC, IC.
- 2011–2012 Prolog, Second year undergraduates in Computing, DoC, IC.
- 2011–2012 Prolog, MSc in Advanced Computing, DoC, IC.
- 2010–2011 (Course leader), Concurrency, Second year undergraduates in Computing and JMC, DoC, IC.
- 2009–2011 Logic, First year undergraduates in Computing, DoC, IC.
- 2009–2010 Concurrency, Second year undergraduates in Computing and JMC, DoC, IC.
- 2003–2004 Networking and Data Communication, Advanced C programming, C++, Visual Basic, Department of Information Technology, King Saud University.

SUPERVISION: PHD

- 10/2016–09/2019 Davide Cavezza, HiPEDS CDT Scholarship,
Title: *Generalized Reactivity (1) Assumption Refinement*.
- 01/2016–12/2019 Pawel Gomoluch, Joint FBK and Departmental Scholarship,
Title: *Learning Domain-independent Planning Heuristics*.

SUPERVISION: STUDENT PROJECTS

- 03/2016–09/2016 Davide Cavezza (MRes individual project),
Title: *Interpolation-based GR(1) Assumption Refinement*.
- 06/2016–08/2016 Dimitar Markovski, King's College London, UK (UROP),
Title: *Causal Reasoning Through SAT solving*,
Co-supervisor: Dr Hana Chockler, King's College London, UK.
- 01/2016–05/2016 Faisal Aleissa (MSc ISO),
Title: *Machine Learning for Context-driven Digital Investigations*.
- 01/2016–05/2016 Piyawat Lertvittayakumjorn, (MSc ISO),
Title: *Machine Learning Advances in Automatic Software Repair*.
- 01/2016–05/2016 Junning Deng (MSc ISO),
Title: *Machine Learning for Digital Evidence Collection*.
- 11/2015–06/2016 Cherie Pun (MEng individual project),
Title: *Can I Trust You?*
- 07/2015–09/2015 Junyuan Zhang, Tsinghua University, China (UROP),
Title: *Building an Automated Software Repair System*.
- 06/2015–09/2015 Xiaoquan Ge (MSc individual project),
Title: *Crime Scripting: Composition, Analysis and Verification*.
- 10/2014–06/2015 Oana Cocarascu (MEng individual project),
Title: *A Machine Learning Approach to Offenders' Behaviour Analysis*.
- 10/2014–06/2015 Jan Povala (MEng individual project),
Title: *Learning Emergent Patterns in High Volume Crimes*.

- 10/2014–06/2015 Jean Cassademont (MEng individual project),
Title: *Building a Smart Eco-system for Data Centres*,
Co-supervisor: Dr Luke Dickens.
- 10/2014–06/2015 James Cumming (MEng individual project),
Title: *Boom Trader: A Currency Trading Platform*,
Co-supervisor: Dr Luke Dickens.
- 10/2013–06/2014 Michael Krestas (MEng individual project),
Title: *Automatic Classification Of High-Volume Crime-Related News Articles*,
Collaborator: College of Policing.
- 10/2013–06/2014 Kavindu L. Anthony Hettige Diyes (MEng individual project),
Title: *Automatic Detection of Conflicts in Requirement Specifications*.
- 01/2012–03/2012 Tanuj Srivastava, Shailesh, Ghimire Kavindu Diyes, Chandra Parajuli and
Nayan Chudasama (MEng third year group project),
Title: *ACE: An Intelligent Aggregation System for Policing*,
Collaborator: College of Policing.
- 10/2011–06/2012 Anthony Amiri (MEng individual project),
Title: *Discrete Data Synchronisation*,
Co-supervisor: Prof. Alex Wolf.
- 06/2011–09/2011 Calin-Rares Turliuc (MSc individual project),
Title: *ProbPoly—A Probabilistic Inductive Logic Programming Framework
with Application in Model Checking*,
Co-supervisor: Prof. Alessandra Russo.
- 10/2009–06/2010 Diana Ramchandani (MEng individual project),
Title: *Refining Labelled Transition Systems Using Scenario-Based Specifications*,
Co-supervisor: Prof. Alessandra Russo.

JOURNAL EDITORIAL BOARD & GUEST EDITORSHIP

- 2017–present **Review Board**, IEEE Transactions on Software Engineering.
- 2014–present **Deputy Editor-in-Chief**, IET Software.
- 2014–present **Review Editorial Board**, Frontiers in Computational Intelligence.

PROGRAMME COMMITTEE MEMBERSHIP

- 2019 ICSE main track, IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER) Industry track, FM, ILP, International Requirements Engineering Conference (RE) RE@Next! track.
- 2018 ICSE main track, ICSE NIER track, International Conference on Formal Methods in Software Engineering (Formalise), RE@Next! track.
- 2017 ICSE main track, SEFM, RE RE@Next! track, ILP, International Symposium on Software Engineering for Adaptive and Self-Managing System (SEAMS@ICSE), International Workshop on Engineering Collective Adaptive Systems (ECAS@SASO).
- 2016 ICSE poster track, SEFM, ILP, International Conference on Principles of Knowledge Representation and Reasoning (KR), International Conference on Mobile Multimedia Communications (Mobimedia).

- 2015 SEFM, International Conference on Formal Aspects of Component Software (FACS), International Workshop on Learning and NonMonotonic Reasoning (LNMR@LPNMR), International Workshop on User-Oriented Logic Programming (IULP@ICLP).
- 2014 SEFM, RE.
- 2013 LNMR@LPNMR.
- 2012 ILP.
- 2011 Festschrift of Marek Sergot.
- 2010 Second International Workshop on Requirements Analysis (IWRA).

REVIEWER

- 2018 FASE, ACM Transactions on Software Engineering and Methodology (TOSEM).
- 2017 IEEE TSE, IET Software Journal.
- 2016 ICLP.
- 2015 IEEE TSE, Journal of Machine Learning and Cybernetics.
- 2014 IEEE TSE , FASE, Frontiers in Bioengineering and Biotechnology.
- 2013 IEEE TSE.
- 2012 IET Software Journal, IEEE TSE, ICSE.
- 2009 ICSE.

WORKSHOP, PANEL AND SEMINAR ORGANIZATION

- 01/2018 Organizer, PhD Improvisation Workshop, DoC, IC.
- 2017 Co-organizer, 1st International Workshop on *Software Engineering and Digital Forensics*, Co-located with the 11th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, Paderborn, Germany.
- 2016 Co-organizer, 1st International Workshop on *Requirements Engineering for Investigating and Countering Crime*, Co-located with the 24th IEEE International Requirements Engineering Conference, Beijing, China.
- 2015 Organizer, Thematic panel *From Radicalization to Terrorism: The Role of Individuals, Contexts and Causal Mechanisms*, 71st Annual Meeting of ASC.
- 2014 Organizer, Thematic panel *Linking Data and Theories in Criminology: Inference Problems, Methods and Challenges*, 70th Annual Meeting of ASC.
- 2014 Co-organizer, Workshop on *Formal Methods for Security and Crime Prevention*, DoC, IC.
- 2011 Co-organizer and program chair, *1st International Workshop on Machine Learning Technologies in Software Engineering*, co-located with 26th IEEE/ACM International Conference on Automated Software Engineering, Lawrence, Kansas, USA.
- 2011 Organizer, British Computing Society (BCS) Requirements Engineering Specialist Group (RESG) Workshop for Early Researchers in Requirements Engineering.

- 2011–2013 Organizer, Distributed Software Engineering (DSE) seminar series SEMAL, DoC, IC.
- 2009–2010 Co-organizer, RESG workshop for PhD students.
- 2008–2011 Organizer, RESG annual group meeting.
- 2008–2009 Organizer, DSE group seminars for PhD students and RAs.

PHD EXAMINATION

- 04/2015 Second opponent of thesis *Timed Temporal Logic Model Checking of Real-Time Systems: A Rewriting-Logic-Based Approach*, Daniela Lepri, University of Oslo, Norway.

ADMINISTRATION AND OTHER SERVICES

- 04/2018 Speaker, Career Course “After Your PhD - An Eye to the Future”, HiPEDS, IC.
- 2018–present Member, World Economic Forum Expert Network.
- 2017–present Expert reviewer, Marie Skłodowska-Curie COFUND Fellowship Committee (ALECS, Lero).
- 09/2017 Speaker, Industrial Board Committee Meeting, DoC, IC.
- 12/2016 Speaker, Springboard Women’s Development Programme, IC.
- 2015 School outreach organizer and volunteer, DoC Outreach Programme, IC.
- 2014 Panelist, PhD careers event, DoC, IC.
- 2014 Judging panelist, Google Poster Competition, DoC, IC.
- 2013–present ATHENA select committee, DoC, IC.
- 2013 Speaker, Springboard Women’s Development Programme, IC.
- 2011–present Interview panelist, Postdoctoral Development Centre, IC.
- 2011–2014 Qualified emergency first aid contact, IC.
- 2011–2013 RA representative, DoC, IC.
- 2011 Buddy volunteer, IntoUniversity Outreach Programme, IC.
- 2009–2017 Post-doctoral officer, BCS RESG.
- 2007–2009 PhD student liaison, BCS RESG.
- 2008 Steering committee, IDEA League ICT Summer School “Next Generation ICT for the Next Generation”.

REFEREES

Available upon request.