

## Main Achievements

### Scholarship, Research, Creative Activity

- Attracted funding: over AUD 10 million, of which over AUD 1,600,000 as the lead investigator (an ARC LP, and ARC DECRA, two DIPS, and a gift from Facebook).
- Current grants: leading an ARC LP, involved in two ARC DPs on algorithmic aspects in optimisation and cybersecurity, in an ARC ITTC and in a PRIF RCP on ore resource modelling and optimisation in the mining industry. Also, pursued the commercialisation of research outcomes as a former CSIRO ON Prime participant.
- Publications: 150+ articles with 200+ colleagues, including 10x A\*-ranked papers and 55 A-ranked papers. First author 21 times, last author 78 times.
- Citations: h-index 31, over 2800 citations (Google Scholar), with the number of citations per year steadily increasing.
- Prestigious invitation-only seminars: 5x Dagstuhl, 2x NII Shonan, 2x Lorentz. Leading organiser of a NII Shonan meeting.
- Opening keynote speaker at the 2<sup>nd</sup> Workshop on System Integration of Renewable Energy (WSIRE) 2014, at the Symposium on Evolutionary Computation 2017, and invited speaker at the Evolutionary Computation in Practice (GECCO 2019).
- Promotion to the current level of Associate Professor after 7 years of completing the PhD.
- Recipient of the University Doctoral Research Medal 2013, which has been the first medal for his School.
- Awards: three best paper awards, a best poster award, and a best presentation award. Across three optimisation competitions, he has reached 3<sup>rd</sup>, 2<sup>nd</sup>, and 1<sup>st</sup> places.

### Teaching, Including Supervision

- Courses: taught 16 different subjects since 2005 and led a group to develop half of a massive open online course. Also, developed a 4<sup>th</sup>-year course on Search-Based Software Engineering (and used it in Australia, China, and Portugal).
- Outstanding perception by students: in "Markus Wagner is an effective university teacher" he scored 2x 100% broad agreement in 2013, 3x in 2014, 4x in 2015, 3x in 2016, 1x in 2017, 1x in 2018, 4x in 2020, 6x in 2021, and 2x in 2022.
- Above University-average SELT scores and fantastic comments, and course improvements as manifested in improved scores and reduced failure rates for "Introduction to Programming".
- Higher degree research student supervision: 7 HDRs graduated, 9 PhD students now, 15 Masters or Honours students.
- Projects with coursework students resulted in the publication of eight refereed articles (seven A-ranked).
- Team leadership: since 2016, 8 computer science students worked on topics related to the ARC DECRA, and 12 computer science students on topics related to his collaboration with the School of Mechanical Engineering around wave energy. This has set the solid foundations for past and current grant proposals.

### Professional Activity, including Service to the Community

- Organisation: SIGEVO Executive Board + SIGEVO Sustainability officer (2019-2025), Workshop Chair GECCO 2016 & 2017 (main conference in the field of Evolutionary Computation), Program Chair ACALCI 2017, Competition Chair GECCO 2018-2021, General Chair ACALCI 2018, General Chair GECCO 2022, Local Chair GECCO 2024.
- Editorial work: Associate Editor of IEEE Transaction of Emerging Topics in CI, Associate Editor of Frontiers in Applied Mathematics and Statistics, Associate Editor of Genetic Programming and Evolvable Machines, Managing Guest-Editor of a special issue with over 130 submissions (ERA A ranked journal).
- Chairing of education-related committees: IEEE CIS University Curricula 2016/17 and Educational Repository 2014/15.

### Administration, Service, and Leadership in the University

- Acting Head of School, School of Computer Science (01-07/2022): hiring of three staff to date, eight more to come; update of procurement approach and security review; infrastructure development; work leading towards School mergers.
- Postgraduate Coordinator 2020/21: managing a growing cohort of over 100 HDRs; provision of pastoral care; supervision of the competitive Google Student Grant applications (leading to successes in both years).
- Reference Group Membership in the university's Learning Management System Review 2015/16 and in the ECMS Faculty Future Support Project "Professional Services Reform" 2015, Research & Innovation Reference Group 2018/19.
- Outreach Team (2015): Ingenuity 2015 co-organiser (responsible for the School's 35 projects, 4,500 attendees). Ingenuity Challenge 2020/21 developer and supervisor.
- IT Coordinator (2014/15): renewal of teaching suites, negotiated after-hours support, initiated tender process for the University's preferred hardware supplier, LMS upgrade from Blackboard/Moodle to Canvas.

## Personal Details

Nationality: German  
Visa Status: Australian Permanent Resident  
Language Skills: German (native), English (fluent), French (basic)  
Memberships: Lifetime Member ACM (Association for Computing Machinery)  
ACS Alumni (Australian Computer Science Society)  
AIESEC Alumni (International Economic and Commercial Sciences Students Association: Business Development and University Relations Officer)  
AUBC Alumni (Adelaide University Badminton Club: Team Captain C Grade Team)  
AUGC Alumni (Adelaide University German Club: General Committee Member)  
DAAD Alumni (German Academic Exchange Service)  
GI (Gesellschaft für Informatik)  
IEEE (Institute of Electrical and Electronics Engineers)

## Work Experience

02/2022-07/2022 **The School of Computer Science, The University of Adelaide, Australia**  
**Acting Head of School**

From 01/2021 on **The School of Computer Science, The University of Adelaide, Australia**  
**Associate Professor (Level D, continuing)**

Honours and Awards: **Unsung Hero Award (Faculty ECMS) 2021**  
Invitation-only event: Lorentz Center Workshop "Optimization Meets Machine Learning" 2022  
Invitation-only event: Dagstuhl Seminar "Challenges in Benchmarking Optimization Heuristics" 2021  
Tutorial Presenter at GECCO 2021: Genetic Improvement of Software

### 2022 Teaching (Semester 2):

Software Engineering & Project (Undergraduate/Postgraduate): course coordinator

### 2022 Teaching (Semester 1):

Topics in Computer Science (Undergraduate): lecturer 15%, course coordinator

Advanced Topics in Computer Science (Undergraduate): lecturer 15%, course coordinator

### 2021 Teaching (Semester 2):

Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator

Advanced Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator

Evolutionary Computation (Undergraduate/Postgraduate): lecturer 50%, course coordinator

Software Engineering & Project (Undergraduate/Postgraduate): lecturer 30%, course coordinator

### 2021 Teaching (Semester 1):

Search-Based Software Engineering (Honours/Masters): lecturer 100%, course coordinator

Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator

Advanced Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator

07/2020–12/2024 **Harbin Institute of Technology, China**

Visiting Professor (delivery of courses)

01/2017-12/2020 **The School of Computer Science, The University of Adelaide, Australia**  
**Senior Lecturer (Level C, continuing)**

Honours and Awards: **Invited Talk at the 62<sup>nd</sup> CREST Open Workshop "Automated Program Repair and Genetic Improvement", London, UK, 2020**

Invited Lecturer at the COST Action CA15140 ImAPPNIO Training School in Coimbra, Portugal 2019

Invited Speaker at the Evolutionary Computation in Practice (ECiP), which is part of GECCO 2018

Invited Lecturer at the Data61 5<sup>th</sup> International Optimisation Summer School, Kioloa, Australia 2017

Invitation-only event: Lorentz Center Workshop "Benchmarked: Optimization Meets Machine Learning" 2020

Invitation-only event: Dagstuhl Seminar "Theory of Randomized Algorithms" 2019

Invitation-only event: Dagstuhl Seminar "Genetic Improvement of Software" 2018

Tutorial Presenter at ASE 2020: Genetic Improvement of Software

Tutorial Presenter at GECCO 2020: Genetic Improvement of Software (Advanced Tutorial)

Tutorial Presenter at IEEE CEC 2019: Genetic Improvement of Software

Opening Keynote Speaker – Symposium on Evolutionary Computation, Hefei, China 2017

Many-Objective Optimisation Competition at IEEE CEC 2017: 3<sup>rd</sup> place (7 competitors)

Best paper award in the RWA Track at GECCO 2020 (best of 47 submissions)

Best paper award in the RWA Track at GECCO 2019 (best of 87 submissions)

**Commercialisation:** CSIRO ON Prime participant, team lead (performance bonus: AUD 3,200)

**Course development:**

edX Big Data MicroMasters: Computational Thinking and Big Data 2017  
COMP SCI 4409/4809/7409 Search-Based Software Engineering

**Administration:** Focus group participant “Researcher Profiles” 2017, ITDS Research & Innovation reference group 2017-2019

**2020 Teaching (Semester 2):**

Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator  
Advanced Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator  
Software Engineering & Project (Undergraduate/Postgraduate): lecturer 30%, course coordinator

**2020 Teaching (Semester 1):**

Search-Based Software Engineering (Honours/Masters): lecturer 100%, course coordinator  
Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator  
Advanced Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator  
Master of Computer Science Project: project supervisor

**2019 Teaching (Semester 2):**

Evolutionary Computation: lecturer 100%, course coordinator (at the Harbin Institute of Technology, China)  
Master of Computer Science Project: project supervisor

**2019 Teaching (Semester 1):**

Search-Based Software Engineering (Honours/Masters): lecturer 100%, course coordinator  
Topics in Computer Science (Undergraduate): lecturer 100%, course coordinator  
Master of Computing and Innovation Project (Masters): project supervisor  
Master of Computer Science Project: project supervisor

**2018 Teaching (Semester 2):**

Search-Based Software Engineering (Honours/Masters): lecturer 100%, course coordinator  
Master of Computing and Innovation Project (Masters): project supervisor  
Master of Computer Science Project: project supervisor

**2017 Teaching (Semester 2):**

Search-Based Software Engineering (Honours/Masters): lecturer 100%, course coordinator  
Master of Computer Science Project: project supervisor  
Master of Software Engineering Project: project supervisor  
Honours Research Project: project supervisor

**2017 Teaching (Semester 1):**

Master of Computer Science Project: project supervisor  
Master of Software Engineering Project: project supervisor  
Honours Research Project: project supervisor

01/2016–12/2018

**ARC DECRA Fellow (DE160100850)**

The School of Computer Science, The University of Adelaide, Australia  
Dynamic adaptive software configuration

Honours and Awards:

Best Presentation Award at the Genetic Improvement Workshop (GECCO 2016) best of 12  
MaxSAT 2016 Competition: my SC2016 achieved 1x 1<sup>st</sup> place, 3x 2<sup>nd</sup> place, 4x 3<sup>rd</sup> place (17 competitors)  
Invitation-only event: Dagstuhl Seminar “Automated Algorithm Selection and Configuration” 2016

03/2013–12/2016

**The School of Computer Science, The University of Adelaide, Australia  
Lecturer (Level B)**

Honours and Awards:

Opening Keynote Speaker – 2nd Workshop on System Integration of Renewable Energy (WSIRE), Oldenburg, Germany 2014  
Invitation-only event: NII Shonan Meeting “Computational Intelligence for Software Engineering” 2014  
Invitation-only event: Dagstuhl Seminar “Computer Science in High Performance Sport” 2013  
Wind Farm Layout Optimisation Competition at GECCO 2014: 2<sup>nd</sup> place

**2016 Teaching (Semester 2):**

Mining Big Data (Honours/Masters): lecturer 50%, course coordinator

**2016 Teaching (Semester 1):**

Advanced Topics in Computer Science (Level 3): project supervisor  
Object Oriented Programming – Small Group Discovery Experience (Level 1): lecturer 25%

**2015 Teaching (Semester 2):**

Evolutionary Computation (Honours/Masters): lecturer 50%, course coordinator

Software Engineering Research Project (Honours): lecturer 33%  
Problem Solving and Software Development (Level 2): lecturer 60%

**2015 Teaching (Semester 1):**

Mining Big Data (Honours/Masters): lecturer 50%  
Software Engineering Research Project (Honours): lecturer 33%  
Topics in Computer Science (Level 2): project supervisor  
Introduction to Programming for Engineers (Level 1): lecturer 33%

**2014 Teaching:**

Master of Computing and Innovation Project (Masters): project supervisor  
Evolutionary Computation (Honours/Masters): lecturer 100%, course coordinator  
Topics in Computer Science (Level 2): project supervisor  
Object Oriented Programming (Level 1): lecturer 40%  
Introduction to Programming (Level 1): lecturer 40%, course coordinator  
Introduction to Programming (Level 1): lecturer 50%

**2013 Teaching:**

Specialised Programming (Masters): lecturer 75%, course coordinator  
Software Engineering and Project (Level 3): project supervisor  
Introduction to Software Engineering (Level 2): lecturer 50%  
Introduction to Programming (Level 1): 50% lecturer, course coordinator

**Administration:**

IT Coordinator: development, implementation, and improvement of teaching-related services and infrastructure; organised after-hour support; initiated new tender process for hardware suppliers; renewed a computer aided teaching suite with 45 computers and redeveloped two teaching spaces; contributed to learning management system review at University level (since 2014); contributed to restructuring of the professional services at a Faculty level (2015); Ingenuity 2015 co-organiser (responsible for coordinating the 35 projects of the School, 4,500 attendees)

**Commercialisation:** Australian eChallenge participant

02/2011–05/2013

**The University of Adelaide, Australia**

**2012 Tutor:**

Evolutionary Computation (Honours/Masters)  
Algorithm and Data Structure Analysis (Level 2)

**2011 Tutor:**

Evolutionary Computation (Honours/Masters)  
Data Structures and Algorithms (Level 2)

**Regional Business Development Officer AIESEC Adelaide, Australia (03/2012 –02/2014)**

Establishing collaborations with companies in the greater Adelaide area, with the goal to promote personal growth of young professionals and to foster cultural exchange

11/2004–09/2009

**Working Group Artificial Intelligence, University of Koblenz-Landau, Germany**

**Student research assistant:** Formal verification of (concurrent) C code using Isabelle/HOL and Microsoft Verifying C Compiler

**2008 Tutor:** Logic for Computer Scientists (Level 2)

**2005 Tutor:** Experimental Physics – Optics (Levels 3–5)

10/1999 –07/2006

**Webdesign and Retail Wagner**

My own business enterprise: IT consulting, trading, web-design

**Education**

02/2011–05/2013

**PhD studies at the School of Computer Science**

The University of Adelaide, Australia

Thesis title: "Theory and Applications of Bio-Inspired Algorithms" (Complexity analysis of bio-inspired algorithms, application of bio-inspired algorithms to scenarios in the area of renewable energy sources)

Honours and Awards:

University Doctoral Research Medal 2013 (The University of Adelaide)

Dean's Commendation for Doctoral Thesis Excellence 2013 (The University of Adelaide)

Representative of the University of Adelaide at the China Nine / Group of Eight HDR Forum "Clean Energy and Sustainable Future", Beijing, China 2011

School of Computer Science HDR Day Best Poster Award "People's Choice" 2011 (The University of Adelaide), best out of 23 posters

- Metaheuristics International Conference 2011 Best Paper Award, best out of 120 accepted papers
- 2012 **Future Research Leaders Program**  
Group of Eight & The University of Adelaide, Australia  
Content: best practice training in financial management, grant administration, business planning, commercialisation and technology transfer, corporate governance, financial reporting, acquittal and audit requirements
- 04/2010–01/2011 **PhD studies at the Max Planck Research School for Computer Science**  
Max Planck Institute for Informatics, Saarbrücken, Germany  
Department 1 – “Algorithms and Complexity”  
Transferred to the University of Adelaide together with my supervisor
- 04/2003–11/2009 **Master’s degree (Diplom) of Computer Science**  
University of Koblenz-Landau, Germany: “High Distinction (HD)”  
Diploma Thesis “Testing a Verification Environment”  
Hardware Project “Remote-Controlled Car with Video Transmission”
- 08/2006–05/2007 **Master’s degree program of Artificial Intelligence**  
University of Georgia, USA: “High Distinction (HD)”

### Honours and HDR Student Supervision

- Since 2022 Adriano Rodrigues Figueiredo Torres, PhD candidate (principal supervisor)  
“Surprisal in Software Engineering”
- Since 2022 Oscar Manglaras, MPhil candidate (principal supervisor)  
“Analysis of Microservices”
- Since 2021 James Caddy, PhD candidate (principal supervisor)  
“Surprising Software Engineering Activities”
- 2021-2022 The Vinh Ly, PhD candidate (co-supervisor)  
“Genetic Programming and Probabilistic Trees”
- Since 2021 Yogesh Pipada Sunil Kumar, PhD candidate (co-supervisor)  
“Day-Ahead Planning for the Energy market”
- Since 2021 Wen Siang Tan, MPhil candidate (principal supervisor)  
“Inconsistencies in Software Documentation”
- 2021-2022 Zach Wang, MPhil candidate (principal supervisor)  
“Security of Smartphone Applications”
- 2021 Tak Yin (Alex) Pang (principal supervisor)  
“Reinforcement Controller for a submerged Wave Energy Converter”
- 2021 Hemanth Gowda Lingaraje Gowda, Master’s project (principal supervisor)  
“Multi-objective optimisation of WEC generators”
- 2021 Paulo Andre Andrade Martins, PhD candidate (co-supervisor)  
“Horizontal Supply-Chain Optimisation in Mining”
- 2020-2021 Rohan Bharadwaj, Masters student (principal supervisor)  
“A Reinforcement Learning Controller for Carnegie’s Wave Energy Converter”
- 2020-2021 Rishi Kumaran, Masters student (joint supervision)  
“Effectively Measuring the Performance of Cryptographic Algorithms”
- Since 2020 Brittany Reid, PhD candidate (principal supervisor)  
“Natural Language Processing for Code Generation”
- Since 2020 Joel Kuepper, PhD candidate (principal supervisor)  
“Optimising Implementations of Elliptic Curves”
- 2020 Terence Wong, PhD candidate (principal supervisor)  
“Self-Adaptive Software Configurations”
- 2019-2021 Supun Dissanayake, MPhil candidate (principal supervisor)  
“Fuzzing of Software Libraries”
- 2019/2020 Wencuan Poh, Masters student (principal supervisor)  
“Rewriting Software Documentation”
- 2019 Brittany Reid, Honours student (secondary supervisor)  
“Natural language task descriptions to working code”
- 2018-2022 Madura Shelton Anushanga, PhD candidate (principal supervisor)  
“Decreasing Power-Based Information Leakage”
- 2018-2022 Hiran Assimi, PhD candidate (secondary supervisor)  
“Stockpile modelling and optimisation”
- 2018 Lujun Weng, Masters student (principal supervisor)  
“Hardware/Software Framework for Energy Consumption Measurements for Smartphones”

2018	Kevin Dang, Honours student (principal supervisor) "Machine learning surrogates for wave farm optimisation"
2017-2021	Mahfouth Al-Ghamdi, PhD candidate (principal supervisor) "Mining Software Repositories"
2017-2019	Jirayus Jiarpakdee (co-supervisor) Explainable Software Engineering
2017	Constantina Pyromallis, Honours student (principal supervisor) Surrogate models for the optimisation of submerged wave energy converters
2017	Oliver Jackson, Honours student (principal supervisor) Converting constraints in optimisation problems to additional objectives
2017	Vidi Valianto Shaweddy, Master's candidate (equal co-supervisor) Masatoshi Takada, Master's candidate (equal co-supervisor) "Sensor-fusion and location tracking on Android 6 smartphones"
2017	Chenwei Feng, Master's candidate Mengyu Li, Master's candidate Yuanzhong Xia, Master's candidate "Surrogate Models for the optimisation of wave energy converters"
2016-2020	Mehdi Neshat, PhD candidate (principal supervisor) "Optimisation of Wave Energy Converter Farms"
2016-2020	Mahmoud Bokhari, PhD candidate (principal supervisor) "Optimisation of Non-Functional Properties of Software"
2016	Chenglong Cui, Master's candidate (principal supervisor) "Software-based Energy Consumption Measurement on Mobile Phones"
2015/2016	Slava Shekh, Master's candidate (principal supervisor) "Optimisation of Submerged Buoy Arrays for Improved Ocean Wave Energy Production"
2014/2015	Jingwei Liu, Master's candidate (principal supervisor) "Heuristic methods for water distribution system optimisation"
2014/2015	Mahmoud Bokhari, Master's candidate (principal supervisor) "Software Testing a Verification System"
2013-2017	Mojgan Pourhassan, PhD candidate (co-supervisor) "Multi-Objective Optimisation by Means of Evolutionary Algorithms"
2013-2016	Wanru Gao, PhD candidate (co-supervisor) "Design and Analysis of Evolutionary Multi-Objective Algorithms"

**External PhD Thesis Examiner**

2022	Nasrin Sultana, RMIT University, Australia
2021/2022	Joerg Stork, Vrije Universiteit Amsterdam, The Netherlands
2018	Mohamed El Yafrani, Mohammed V University, Morocco (Panel member at the defence in Rabat, Morocco)
2018	Asad Mohammadi, RMIT University, Australia

**Grants and Scholarships**

- Defence Innovation Partnership: AI for Decision Making Initiative 2022 (Round Two)
  - "Abstract Game Prototype for Cyber Attack/Defence" (AUD 30,000; Mingyu Guo, Hung Nguyen, Aneta Neumann, Frank Neumann and Markus Wagner)
  - "Tackling the TTCP CAGE challenge using Monte-Carlo planning for large-scale POMDPs" (AUD 30,000; Mingyu Guo, Hung Nguyen, Aneta Neumann, Frank Neumann and Markus Wagner)
  - "Applying machine learning techniques to games on graphs for the detection and concealment of spatially defined communication networks" (AUD 30,000; Aneta Neumann, Mingyu Guo, Hung Nguyen, Frank Neumann, and Markus Wagner)
- Pawsey Supercomputing Centre (Australia) 2022  
"Intelligent Wave Power: Reinforcement control of a wave energy converter"  
2.5 million core hours (lead: Ben Cazzolato, in total 5 Cis)
- Facebook "Agent-based User Interaction Simulation to Find and Fix Integrity and Privacy Issues RFP" 2021  
"Socialz - Multi-Objective Automated Social Fuzz Testing"  
USD 92,784 (Markus Wagner, Christoph Treude)
- Defence Innovation Partnership: AI for Decision Making Initiative 2021 (Round One, Phase Two), sponsor: Office of National Intelligence  
"Contextually Situated Anomaly Detection"  
AUD 100,000 (Markus Wagner, Chetan Arora, Menasha Thilakaratne, Christoph Treude, Wei Zhang)

5. Linkage Project LP200200881 (Australian Research Council) 2021-2024  
"Collaborative Sensing and Learning for Maritime Situational Awareness"  
AUD 643,565 (ARC) + AUD 301,171 (SEDA, cash) (Markus Wagner, Tat-Jun Chin, Ian Reid, Surabhi Gupta, Christophe Guettier)
6. Google Research Scholar Award 2021  
"Automatic Post-Quantum Cryptographic Code Generation and Optimization"  
USD 60,000 (Chitchanok Chuengsatiansup, Markus Wagner)
7. Discovery Project DP210102670 (Australian Research Council) 2021-2023  
"Intelligent Technologies for Smart Cryptography"  
AUD 480,000 (Yuval Yarom, Markus Wagner, Minhui Xue, Chitchanok Chuengsatiansup, Lejla Batina)
8. Defence Innovation Partnership: AI for Decision Making Initiative 2020 (Round One, Phase One)  
"Deceitful/Persuasive Writing Detection"  
AUD 20,000 (Markus Wagner)
9. Faculty ECMS Seed Funding 2020  
"Intelligence Technologies for Smart Cryptography"  
AUD 10,000 (Yuval Yarom, Chitchanok Chuengsatiansup, Markus Wagner, Minhui Xue)
10. Google Faculty Award 2020  
"Rewriting software documentation for non-native speakers"  
USD 39,722 (AUD 60,032) (Dr Christoph Treude, Sebastian Baltés, Markus Wagner)
11. Discovery Project DP200102364 (Australian Research Council) 2020-2022  
"Multiobjective Memetic Algorithms for Multi-task Symbolic Regression"  
AUD 518,000 (Pablo Moscato; Dr Markus Wagner, Stanislav Djorgovski, Carlos Cotta, Massimo Cafaro)
12. Blavatnik Interdisciplinary Cyber Research Center, Research Project, 2019  
"Leakage-free Cryptography: Eliminating Side Channel Leakage Using Compiler Optimization"  
AUD 18,145 / AUD 88,000 (Dr Chitchanok Chuengsatiansup, Markus Wagner, Minhui Xue, Yuval Yarom)
13. Hasso Plattner Institute: Future SOC Lab (Service-Oriented Computing) 2019-21  
"Designing practical algorithms through overfitting"  
access to 1000-core cluster, October 2019 – September 2021
14. Training Centre IC190100017 (Australian Research Council)  
Integrated Operations for Complex Resources 2019-2024  
AUD 3,703,664 (lead CI Peter Dowd, in total 20 CIs and 17 PIs), AUD 12,500,000 total
15. Hasso Plattner Institute: Future SOC Lab (Service-Oriented Computing) 2019  
"Overfitting on purpose to design new algorithms"  
access to 1000-core cluster for 6 months, April-September 2019
16. Special Studies Program (The University of Adelaide) 2019  
AUD 4,800 (Markus Wagner)
17. Analysis of Evolutionary Algorithms: Beyond Expected Optimization Times 2018 (Gaspard Monge Program for Optimization, operations research, and their interactions with data science (PGMO))  
EUR 21,500 (lead: Carola Doerr, in total 10 partners)
18. Pawsey Supercomputing Centre (Australia) 2018  
"Intelligent Wave Power: Advance control of Carnegie's multi-moored wave energy converter"  
1.3 million core hours (lead: Ben Cazzolato, in total 5 CIs)
19. EPIC Expert Visit, Earl Barr from University College London (funded by European Union's Horizon 2020 research and innovation programme (ICT) under grant agreement No 687794) 2018  
EUR 2,000 (Markus Wagner, Christoph Treude, Marcel Böhme)
20. Overseas Conference Leave Scheme Travel Award 2018 (The University of Adelaide)  
AUD 2,000 (Markus Wagner)
21. Premier's Research and Industry Fund: Research Consortia Program 2018-2021 (Department of State Development)  
"Unlocking Complex Resources through Lean Processing"  
AUD 4,000,000 (lead CI Stephen Grano, in total 22 CIs), total project AUD 14.6 million
22. Australia-China Young Scientists Exchange Program 2017 (Australian Academy of Technology and Engineering and China Science and Technology Exchange Center, YSEP)  
Two-week networking program in China (all expenses paid)
23. ARC Linkage Project Proposal Support (The University of Adelaide)  
AUD 4,100 (Ben Cazzolato, Maziar Arjomandi, Markus Wagner, Luke Bennetts, Boyin Ding)
24. CSIRO ON Prime Pre-Accelerator Program (CSIRO) 2017  
"Portable Hardware Energy Optimisation"  
AUD 3,200 (Brad Alexander, Francois Duvenage, Markus Wagner (lead applicant))
25. Overseas Conference Leave Scheme Travel Award 2017 (The University of Adelaide)  
AUD 3,065 (Markus Wagner)
26. Faculty ECMS Interdisciplinary Research Grant 2016 (The University of Adelaide)  
"Nonlinear modelling of fully submerged wave energy converters for high fidelity yet computationally efficient numerical analysis and prototype design"

- AUD 18,025 (Boyin Ding, Javad Farrokhi Derakhshandeh, Markus Wagner, Luke Bennetts, Benjamin Cazzolato, Maziar Arjomandi, Frank Neumann, Gus Nathan)
27. Faculty ECMS Professional Development Grant 2016 (The University of Adelaide)  
AUD 4,700 (Markus Wagner)
  28. Priority Partner Grant 2016 Nottingham (The University of Adelaide)  
AUD 5,000 (Markus Wagner (lead applicant), Frank Neumann)
  29. Discovery Early Career Researcher Award 2016 DE160100850 (Australian Research Council)  
“Dynamic Adaptive Software Configurations”  
AUD 330,000 (Markus Wagner)  
The project was also granted AUD 20,000 from the University’s DVC-Research.
  30. Priority Partner Grant 2015 Strasbourg/Freiburg (The University of Adelaide)  
AUD 5,000 (Markus Wagner (lead applicant), Frank Neumann)
  31. Interdisciplinary Research Fund 2015 (The University of Adelaide)  
“Modelling and optimisation of submerged buoys for improved ocean wave energy production”  
AUD 27,000 (Markus Wagner (lead applicant), Boyin Ding, Frank Neumann, Benjamin Cazzolato, Maziar Arjomandi)
  32. Overseas Conference Leave Scheme Travel Award 2015 (The University of Adelaide)  
AUD 2,000 (Markus Wagner)
  33. Faculty Research Internal Grant 2014 (The University of Adelaide)  
AUD 8,500 for software licenses and specialised coprocessor cards (Bradley Alexander, Frank Neumann, Markus Wagner)
  34. Overseas Conference Leave Scheme Travel Award 2014 (The University of Adelaide)  
AUD 2,000 (Markus Wagner)
  35. School of Computer Science Research Internal Grant 2013 (The University of Adelaide)  
AUD 30,000 for a computing cluster and software licenses (Bradley Alexander, Cruz Izu, Frank Neumann, Markus Wagner)
  36. Google PhD Travel Prize 2012 (Google Australia Pty Ltd.)  
AUD 2,500
  37. Bupa Postgraduate Travel Grant 2012 (Bupa Australia Pty Ltd.)  
AUD 2,500
  38. Google PhD Top Up Grant 2011 for “meritorious academic record and high standard of research capability” (Google Australia Pty Ltd.)  
AUD 5,000
  39. School of Computer Science Postgraduate Scholarship 2011/2012 (The University of Adelaide)  
AUD 24,000 p.a. (approx)
  40. Max Planck Research School Postgraduate Scholarship 2010 (Max Planck Institute for Informatics)  
EUR 16,000 p.a. (approx)
  41. Internationale Studien- und Ausbildungspartnerschaften ISAP (German Academic Exchange Service, DAAD), full scholarship for my MSc studies at the University of Athens, USA, 2006/2007  
EUR 15,000 (approx)
  42. Travel awards to attend the following events (granted by the respective organising committees): Genetic and Evolutionary Computation Conference (GECCO) 2013, International Joint Conference on Artificial Intelligence (IJCAI) 2011, Interdisciplinary College (IC) 2010, Künstliche Intelligenz (KI) 2009, Congress on Evolutionary Computation (CEC) 2009, Genetic and Evolutionary Methods (GEM) 2008, EvoWorkshops 2008
  43. Jugend forscht (regional youth research competition)  
3<sup>rd</sup> place in the field of Mathematics/Computer Science 2002  
3<sup>rd</sup> place in the field of Technology 2000

## Referees

Will be provided upon request.

## Publications

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### Edited Volumes

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1. **Markus Wagner**, Xiaodong Li, Tim Hendtlass (2017). Third Australasian Conference on Artificial Life and Computational Intelligence. Springer LNAI 10142.
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### Book Chapters

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2. Mohammad Reza Bonyadi, Zbigniew Michalewicz, Frank Neumann, and **Markus Wagner** (2019). Evolutionary computation for multi-component problems: Opportunities and future. In Optimization in Industry - Present Practices and Future Scopes, p. 13-30, Springer.
  3. **Markus Wagner**, Jareth Day, Dora Jordan, Trent Kroeger, and Frank Neumann (2013). Evolving Pacing Strategies for Team Pursuit Track Cycling. Advances in Metaheuristics, p. 61-76. Springer.
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4. Frank Neumann, Una-May O'Reilly, and **Markus Wagner** (2011). Computational Complexity Analysis of Genetic Programming. Genetic Programming Theory and Practice (GPTP). Springer.

Refereed Journal Articles	ERA/CORE/ Q ranking, imp. factor
5. Xiang He, Zhiying Tu, <b>Markus Wagner</b> , Xiaofei Xu, and Zhongjie Wang (2022). Online Deployment Algorithms for Microservice Systems with Complex Dependencies. IEEE Transactions on Cloud Computing, accepted in March 2022).	Q1 5.938
6. Jonatas Chagas and <b>Markus Wagner</b> (2022). A weighted-sum method for solving the bi-objective traveling thief problem. Computers and Operations Research, Vol. 138.	Q1 4.008
7. Jerry Swan, Steven Adraensen, Alexander E. I. Brownlee, Colin G. Johnson, Ahmed Kheiri, Faustyna Krawiec, J. J. Merelo, Leandro L. Minku, Ender Özcan, Gisele L. Pappa, Pablo García-Sánchez, Kenneth Sörensen, Stefan Voß, <b>Markus Wagner</b> , David R. White (2022). Metaheuristics 'In the Large'. European Journal of Operational Research, Vol. 297, Issue 2, 393-406.	A 5.334
8. Terence Wong, <b>Markus Wagner</b> , and Christoph Treude (2022). Self-Adaptive Systems: A Systematic Literature Review Across Categories and Domains. Information and Software Technology (accepted in April 2022).	Q2/A 2.370
9. Jonatas B. C. Chagas and <b>Markus Wagner</b> (2021). Efficiently solving the thief orienteering problem with a max-min ant colony optimization approach. Optimization Letters.	Q1 1.888
10. Mehdi Neshat, Meysam Majidi Nezhad, Ehsan Abbasnejad, Seyedali Mirjalili, Daniele Groppi, Azim Heydari, Lina Bertling Tjernberg, Davide Astiaso Garcia, Bradley Alexander, Qinfeng Shi, <b>Markus Wagner</b> (2021). Wind turbine power output prediction using a new hybrid neuro-evolutionary method. Energy, Vol. 229.	Q1 6.082
11. Mehdi Neshat, Meysam Majidi Nezhad, Ehsan Abbasnejad, Seyedali Mirjalili, Lina Bertling Tjernberg, Davide Astiaso Garcia, Bradley Alexander, <b>Markus Wagner</b> (2021). A deep learning-based evolutionary model for short-term wind speed forecasting: A case study of the Lillgrund offshore wind farm. Energy Conversion and Management, Vol. 236.	Q1 8.208
12. Domagoj Jakobovic, Stjepan Picsek, Marcella S. R. Martins, and <b>Markus Wagner</b> (2021). Toward more efficient heuristic construction of Boolean functions. Applied Soft Computing, Vol. 107.	Q1 5.472
13. Marcella Scoczynski, Myriam Delgado, Ricardo Luders, Diego Oliva, <b>Markus Wagner</b> , Inkyung Sung, and Mohamed El Yafrani (2021). Saving Computational Budget in Bayesian Network-based Evolutionary Algorithms. Natural Computing, Vol. 20, 775-790.	Q2 1.690
14. Martin Schlueter, Mehdi Neshat, Mohamed Wahib, Masaharu Munetomo, and <b>Markus Wagner</b> (2021). GTOPX Space Mission Benchmarks. SoftwareX, Vol. 14.	Q2 1.959
15. Tobias Friedrich, Andreas Göbel, Francesco Quinzan, <b>Markus Wagner</b> (2021). Evolutionary Algorithms and Submodular Functions: Benefits of Heavy-Tailed Mutations. Natural Computing, Issue 3/2021.	Q2 1.690
16. Mehdi Neshat, Nataliia Y. Sergiienko, Erfan Amini, Meysam Majidi Nezhad, Davide Astiaso Garcia, Bradley Alexander and <b>Markus Wagner</b> (2020). A New Bi-Level Optimisation Framework for Optimising a Multi-Mode Wave Energy Converter Design: A Case Study for the Marettimo Island, Mediterranean Sea. Energies 13(20).	Q2 2.702
17. Jonatas B. C. Chagas, Julian Blank, <b>Markus Wagner</b> , Marcone J. F. Souza, and Kalyanmoy Deb (2020). A non-dominated sorting based customized random-key genetic algorithm for the bi-objective traveling thief problem. Journal of Heuristic, Vol. 27, 267-301.	A 1.788
18. Jonatas B.C. Chagas and <b>Markus Wagner</b> (2020). Ants can orienteer a thief in their robbery. Operations Research Letters, Vol 48, Issue 6.	Q1 0.757
19. Thomas Weise, <b>Markus Wagner</b> , Bin Li, Xingyi Zhang, and Jörg Lässig (2020). Special Issue on Benchmarking of Computational Intelligence Algorithms in the Applied Soft Computing Journal. Applied Soft Computing, Vol. 93.	Q1 5.472
20. Mehdi Neshat, Bradley Alexander, Nataliia Sergiienko, and <b>Markus Wagner</b> (2020). New insights into the Position Optimization of Wave Energy Converters by a Hybrid Local Search. Swarm and Evolutionary Computation, Vol. 59.	Q1 6.912
21. Mehdi Neshat, Bradley Alexander, and <b>Markus Wagner</b> (2020). A Hybrid Cooperative Co-evolution Algorithm Framework for Optimising Power Take Off and Placements of Wave Energy Converters. Information Sciences, Vol 534.	A 5.524
22. Amritanshu Agrawal, Tim Menzies, Leandro L. Minku, <b>Markus Wagner</b> , and Zhe Yu (2020). Better Software Analytics via "DUO": Data Mining Algorithms Using/Used-by Optimizers. Empirical Software Engineering. Vol 25, Issue 3, May, 2099-2136.	A 4.457
23. Shelvin Chand, Quang Nhat Huynh, Hemant Kumar Singh, Tapabrata Ray, and <b>Markus Wagner</b> (2018). On the Use of Genetic Programming to Evolve Priority Rules for Resource Constrained Project Scheduling Problems. Information Sciences. Vol 432, March, 146-163.	A 5.524
24. Mohamed El Yafrani, Marcella Martins, <b>Markus Wagner</b> , Belaïd Ahiod, Myriam Delgado, and Ricardo Lüders (2017). A Hyperheuristic Approach based on Low-Level Heuristics for the Travelling Thief Problem. Genetic Programming and Evolvable Machines. Vol. 19, 121-150.	- 1.458
25. <b>Markus Wagner</b> , Marius Lindauer, Mustafa Misir, Samadhi Nallaperuma, and Frank Hutter (2018). A case study of algorithm selection for the traveling thief problem. Journal of Heuristics. Vol. 24, Issue 3, 295-320.	A 1.788

26. Mohammad Ali Moridi, Youhei Kawamura, Mostafa Sharifzadeh, Emmanuel Knox Chanda, <b>Markus Wagner</b> , Hirokazu Okawa (2017). Performance Analysis of ZigBee Network Topologies for Underground Space Monitoring and Communication Systems. <i>Tunnelling and Underground Space Technology</i> . Vol 71, 201-209.	A 4.356
27. <b>Markus Wagner</b> (2016). Nested multi- and many-objective optimisation for team pursuit track cycling. <i>Frontiers in Applied Mathematics and Statistics, Section Optimization</i> , Vol. 2, 17 pages.	
28. Shahriar Mahboub, <b>Markus Wagner</b> , and Luigi Crema (2016). Incorporating Domain Knowledge into the Optimization of Energy Systems. <i>Applied Soft Computing</i> . Vol. 47, p. 483-493.	Q1 5.472
29. Shelvin Chand and <b>Markus Wagner</b> (2016). Evolutionary Many-Objective Optimization: A Quick-Start Guide. <i>Surveys in Operations Research and Management Science</i> , Vo. 20, Issue 2, p. 35-42.	Q1 3.433
30. Paul Kaufmann, Frank Neumann, Oliver Kramer, and <b>Markus Wagner</b> (2016). Optimization Methods in Renewable Energy Systems Design (Special Issue), <i>Renewable Energy Journal</i> , Vol. 87, Part 2, p. 835-1030.	A 5.439
31. <b>Markus Wagner</b> , Frank Neumann, and Tommaso Urli (2015). On the Performance of Different Genetic Programming Approaches for the SORTING Problem. <i>Evolutionary Computation Journal</i> , Vol. 23, No. 4, p. 583-609.	A 3.469
32. Mohammad Ali Moridi, Youhei Kawamura, Mostafa Sharifzadeh, Emmanuel Knox Chanda, <b>Markus Wagner</b> , Hyongdoo Jang, and Hirokazu Okawa (2015). Development of Underground Mine Monitoring and Communication System integrated ZigBee and GIS. <i>International Journal of Mining Science and Technology</i> , Vol. 25, Issue 5, p. 811-818.	Q1 1.410
33. <b>Markus Wagner</b> , Karl Bringmann, Tobias Friedrich, and Frank Neumann (2015). Efficient Optimization of Many Objectives by Approximation-Guided Evolution. <i>European Journal of Operational Research</i> , Vol. 243, No. 2, p. 465-479.	A 4.283
34. Tobias Friedrich and <b>Markus Wagner</b> (2015). Seeding the Initial Population of Multi-Objective Evolutionary Algorithms: A Computational Study. <i>Applied Soft Computing</i> , Vol. 33, p. 223-230.	Q1 5.472
35. Samadhi Nallaperuma, <b>Markus Wagner</b> , and Frank Neumann (2015). Analyzing Problem Hardness Features and Algorithm Parameters for Ant Colony Optimization and the Traveling Salesperson Problem. <i>Frontiers in Robotics and AI, Section Computational Intelligence</i> , Vol. 2, No. 18.	
36. Youhei Kawamura, <b>Markus Wagner</b> , Hyongdoo Jang, Hajime Nobuhara, Takeshi Shibuya, Itaru Kitahara, Ashraf Dewan, and Bert Veenendaal (2015). A multimedia data visualization based on ad-hoc communication networks and its application to disaster management. <i>International Journal of Geo-Information</i> , Vol. 4, Issue 4, p. 2004-2018. ( <i>invited article</i> )	
37. Youhei Kawamura, Kento Ishii, Hyongdoo Jang, <b>Markus Wagner</b> , Hajime Nobuhara, Ashraf M. Dewan, Bert Veenendaal, and Itaru Kitahara (2015). Analysis of radio wave propagation in an urban environment and its application to initial disaster response support. <i>Journal of Disaster Research</i> , Vol. 10, No. 4, p. 655-666.	
38. <b>Markus Wagner</b> , Jareth Day, and Frank Neumann (2013). A Fast and Effective Local Search Algorithm for Optimizing the Placement of Wind Turbines. <i>Renewable Energy Journal</i> , Vol. 51, p. 64-70.	A 4.357
39. Katya Vladislavleva, Tobias Friedrich, Frank Neumann, and <b>Markus Wagner</b> (2013). Predicting the Energy Output of Wind Farms Based on Weather Data: Important Variables and their Correlation. <i>Renewable Energy Journal</i> , Vol. 50, p. 236-243.	A 5.439
40. Olaf Mersmann, Bernd Bischl, Heike Trautmann, <b>Markus Wagner</b> , and Frank Neumann (2013). A Novel Feature-Based Approach to Characterize Algorithm Performance for the Traveling Salesman Problem. <i>Annals of Mathematics and Artificial Intelligence</i> , Vol. 69, No. 2, p. 151-182.	C 1.109
Refereed Conference Papers	CORE ranking
41. Madura Shelton, Niels Samwel, Łukasz Chmielewski, <b>Markus Wagner</b> , Lejla Batina, and Yuval Yarom (2022). Rosita++: Automatic Higher-Order Leakage Elimination from Cryptographic Code. <i>ACM Conference on Computer and Communications Security (CCS) 2022</i> .	A*
42. James Caddy, <b>Markus Wagner</b> , Christoph Treude, Earl T. Barr, Miltiadis Allamanis (2022). Is Surprisal in Issue Trackers Actionable? <i>Mining Software Repositories (MSR) - registered report</i>	
43. Hiran Assimi, Frank Neumann, <b>Markus Wagner</b> and Xiaodong Li (2022). Novelty-Driven Binary Particle Swarm Optimisation for Truss Optimisation Problems. <i>EvoCOP</i> . Online.	B
44. Hiran Assimi, Ben Koch, Chris Garcia, <b>Markus Wagner</b> , and Frank Neumann (2022). Run-of-Mine stockyard recovery scheduling and optimisation for multiple reclaimers. <i>Symposium On Applied Computing</i> . Online.	B
45. Madura A Shelton, Niels Samwel, Lejla Batina, Francesco Regazzoni, <b>Markus Wagner</b> , and Yuval Yarom (2021). Rosita: Towards Automatic Elimination of Power-Analysis Leakage in Ciphers. <i>Network &amp; Distributed System Security (NDSS) Symposium</i> .	A*
46. Mohamed El Yafrani, Marcella Scoczynski Ribeiro Martins, Inkyung Sung, <b>Markus Wagner</b> , Carola Doerr, and Peter Nielsen (2021). MATE: A Model-based Algorithm Tuning Engine. <i>Evolutionary Computation in Combinatorial Optimization (EvoCOP)</i> .	B
47. Hiran Assimi, Ben Koch, Chris Garcia, <b>Markus Wagner</b> , and Frank Neumann (2021). Modelling and Optimization of Run-of-Mine Stockpile Recovery. <i>Symposium On Applied Computing</i> . Online.	B

48. Ragav Sachdeva, Frank Neumann, and <b>Markus Wagner</b> (2020). The Dynamic Travelling Thief Problem: Benchmarks and Performance of Evolutionary Algorithms. International Conference on Neural Information Processing (ICONIP), Bangkok, Thailand.	A
49. Mahfouth Alghamdi, Christoph Treude and <b>Markus Wagner</b> (2020). Human-Like Summaries from Heterogeneous and Time-Windowed Software Development Artefacts. Parallel Problem Solving from Nature (PPSN), Leiden, The Netherlands.	A
50. Marko Durasevic, Domagoj Jakobovic, Marcella Martins, Stjepan Picek and <b>Markus Wagner</b> (2020). Fitness landscape analysis of dimensionally-aware genetic programming featuring Feynman equations. Parallel Problem Solving from Nature (PPSN), Leiden, The Netherlands.	A
51. Mahmoud A. Bokhari, Brad Alexander, <b>Markus Wagner</b> (2020). Towards Rigorous Validation of Energy Optimisation Experiments. Genetic and Evolutionary Computation Conference (GECCO), Cancun, Mexico.	A
52. Mehdi Neshat, Bradley Alexander, Nataliia Y. Sergiienko, and <b>Markus Wagner</b> (2020). Optimisation of Large Wave Farms using a Multi-strategy Evolutionary Framework. Genetic and Evolutionary Computation Conference (GECCO), Cancun, Mexico. <b>[Best Paper Award, RWA Track]</b>	A
53. Nataliia Y. Sergiienko, Mehdi Neshat, Leandro S.P. da Silva, Bradley Alexander and <b>Markus Wagner</b> (2020). Design optimisation of a multi-mode wave energy converter. 39th International Conference on Ocean, Offshore & Arctic Engineering (OMAE).	A
54. Thomas Weise, Zijun Wu, and <b>Markus Wagner</b> (2019). An Improved Generic Bet-and-Run Strategy for Speeding Up Stochastic Local Search. 33 <sup>rd</sup> AAAI Conference on Artificial Intelligence (AAAI), Honolulu, USA.	A*
55. Jakob Bossek, Pascal Kerschke, Aneta Neumann, <b>Markus Wagner</b> , Frank Neumann and Heike Trautmann (2019). Evolving Diverse TSP Instances by Means of Novel and Creative Mutation Operators. Foundations of Genetic Algorithms (FOGA), Potsdam, Germany.	A*
56. Mehdi Neshat, Ehsan Abbasnejad, Qinfeng Shi, Bradley Alexander, and <b>Markus Wagner</b> (2019). Adaptive Neuro-Surrogate-Based Optimisation Method for Wave Energy Converters Placement Optimisation. International Conference on Neural Information Processing (ICONIP), Sydney, Australia.	A
57. Domagoj Jakobovic, Stjepan Picek, Marcella S. R. Martins, and <b>Markus Wagner</b> (2019). A characterisation of S-box fitness landscapes in cryptography. Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic.	A
58. Mehdi Neshat, Bradley Alexander, Nataliia Y. Sergiienko, and <b>Markus Wagner</b> (2019). A Hybrid Evolutionary Algorithm Framework for Optimising Power Take Off and Placements of Wave Energy Converters. Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic. <b>[Best Paper Award, RWA Track]</b>	A
59. Alexander E.I. Brownlee, Justyna Petke, Brad Alexander, Earl T. Barr, <b>Markus Wagner</b> , and David R. White (2019). Gin: Genetic Improvement Research Made Easy. Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic.	A
60. Aneta Neumann, Wanru Gao, <b>Markus Wagner</b> , and Frank Neumann (2019). Evolutionary Diversity Optimization Using Multi-Objective Indicators. Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic. <b>[Best Paper Nomination, GA Track]</b>	A
61. Christoph Treude and <b>Markus Wagner</b> (2019). Predicting Good Configurations for GitHub and Stack Overflow Topic Models. Mining Software Repositories (MSR), Montreal, Canada.	A
62. Mahmoud Bokhari, Lujung Weng, <b>Markus Wagner</b> , Bradley Alexander (2019). Mind the gap - a distributed framework for enabling energy optimisation on modern smart-phones in the presence of noise, drift, and statistical insignificance. In Proceedings of the IEEE Congress on Evolutionary Computation (CEC), Wellington, New Zealand.	B
63. Marcella Scoczynski, Mohamed El Yafrani, Myriam R. B. S. Delgado, Ricardo Lüders, Inkyung Sung, <b>Markus Wagner</b> , and Diego Oliva (2019). On updating probabilistic graphical models in a Bayesian Optimisation Algorithm. Brazilian Conference on Intelligent Systems, Salvador, Brazil.	A
64. Mahmoud A. Bokhari, Brad Alexander and <b>Markus Wagner</b> (2018). In-vivo and offline optimisation of energy use in the presence of small energy signals -- A case study on a popular Android library. In Proceedings of Mobiculous, New York City, USA.	A
65. Carola Doerr and <b>Markus Wagner</b> (2018). Sensitivity of Parameter Control Mechanisms with Respect to Their Initialization. In Proceedings of Parallel Problem Solving from Nature (PPSN), Coimbra, Spain.	A
66. Tobias Friedrich, Andreas Goebel, Francesco Quinzan, and <b>Markus Wagner</b> (2018). Heavy-tailed Mutation Operators in Single-Objective Combinatorial Optimization. In Proceedings of Parallel Problem Solving from Nature (PPSN), Coimbra, Spain.	A
67. Didac Rodriguez Arbones, Nataliia Y. Sergiienko, Boyin Ding, Oswin Krause, Christian Igel, and <b>Markus Wagner</b> (2018). Sparse incomplete LU-decomposition for Wave Farm Designs under Realistic Conditions. In Proceedings of Parallel Problem Solving from Nature (PPSN), Coimbra, Spain.	A
68. Carola Doerr and <b>Markus Wagner</b> (2018). Simple On-the-Fly Parameter Selection Mechanisms for Classical Discrete Black-Box Optimization Benchmarks. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A
69. Tobias Friedrich, Francesco Quinzan and <b>Markus Wagner</b> (2018). Escaping Large Deceptive Basins of Attraction with Heavy Mutation Operators. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A

70. Aneta Neumann, Wanru Gao, Carola Doerr, Frank Neumann, and <b>Markus Wagner</b> (2018). Discrepancy-based Evolutionary Diversity Optimization. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A
71. Mehdi Neshat, Bradley Alexander, Yuanzhong Xia and <b>Markus Wagner</b> (2018). A Detailed Comparison of Meta-Heuristic Methods for Optimising Wave Energy Converter Placements. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A
72. Junhua Wu, Sergey Polyakovskiy, <b>Markus Wagner</b> and Frank Neumann. Evolutionary Computation plus Dynamic Programming for the Bi-Objective Travelling Thief Problem. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A
73. Mohamed El Yafrani, Marcella Martins, Mehdi El Krari, <b>Markus Wagner</b> , Myriam Delgado, Belaid Ahiod, Ricardo Lüders: A fitness landscape analysis of the Travelling Thief Problem. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan.	A
74. Vivek Nair, Amritanshu Agrawal, Jianfeng Chen, Wei Fu, George Mathew, Tim Menzies, Leandro Minku, <b>Markus Wagner</b> and Zhe Yu (2018). Data-Driven Search-based Software Engineering. In Proceedings of Mining Software Repositories (MSR), Gothenburg, Sweden.	A
75. Junhua Wu, <b>Markus Wagner</b> , Sergey Polyakovskiy, and Frank Neumann (2017). Exact Approaches for the Travelling Thief Problem. In Proceedings of the International Conference on Simulated Evolution and Learning (SEAL), Shenzhen, China.	B
76. Andrei Lissovoi, Dirk Sudholt, <b>Markus Wagner</b> , and Christine Zarges (2017). Theoretical results on bet-and-run as an initialisation strategy. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), Berlin, Germany.	A
77. Marcella Scoczynski Ribeiro Martins, Mohamed El Yafrani, <b>Markus Wagner</b> , Myriam Delgado, Belaid Ahiod, and Ricardo Lüders (2017). HSEDA: A Heuristic Selection Approach Based on Estimation of Distribution Algorithm for the Travelling Thief Problem. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), Berlin, Germany.	A
78. Wenwen Li, Ender Ozcan, Robert John, John H. Drake, Aneta Neumann and <b>Markus Wagner</b> (2017). A Modified Indicator-based Evolutionary Algorithm (mlBEA). In Proceedings of IEEE Congress on Evolutionary Computation (CEC), San Sebastian, Spain.	B
79. <b>Markus Wagner</b> , Tobias Friedrich and Marius Lindauer (2017). Improving local search in a minimum vertex cover solver for classes of networks. In Proceedings of IEEE Congress on Evolutionary Computation (CEC), San Sebastian, Spain.	B
80. Meinolf Sellmann and <b>Markus Wagner</b> (2017). Learning a Reactive Restart Strategy to Improve Stochastic Search. In Proceedings of the 11 <sup>th</sup> Learning and Intelligent Optimisation Conference (LION), Nizhny Novgorod, Russia	
81. Tobias Friedrich, Timo Kötzing, and <b>Markus Wagner</b> (2017). A Generic Bet-and-run Strategy for Speeding Up Stochastic Local Search. In Proceedings of the 31 <sup>st</sup> Association for the Advancement of Artificial Intelligence Conference (AAAI), San Francisco, USA.	A*
82. Shahriar Mahbub, <b>Markus Wagner</b> , and Luigi Crema (2016). Multi-Objective Optimisation with Multiple Preferred Regions. In Proceedings of the Australasian Conference on Artificial Life and Computational Intelligence (ACALCI), Melbourne, Australia.	
83. Dídac Rodríguez Arbonès, Boyin Ding, Nataliia Y. Sergiienko, <b>Markus Wagner</b> (2016). Fast and Effective Multi-Objective Optimisation of Wave Energy Converters. In Proceedings of the 14th International Conference on Parallel Problem Solving from Nature (PPSN), Edinburgh, Scotland.	A
84. <b>Markus Wagner</b> (2016). Stealing items more efficiently with ants. In Proceedings of the 10 <sup>th</sup> International Conference on Swarm Intelligence (ANTS), Brussels, Belgium.	B
85. Shelvin Chand and <b>Markus Wagner</b> (2016). Fast Heuristics for the Multiple Traveling Thieves Problem. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), Denver, USA.	A
86. Junhua Wu, Slava Shekh, Nataliia Sergiienko, Benjamin Cazzolato, Boyin Ding, Frank Neumann, and <b>Markus Wagner</b> (2016). Fast and effective optimisation of arrays of submerged wave energy converters. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), Denver, USA.	A
87. Daniel Lückehe, Oliver Kramer, and <b>Markus Wagner</b> (2016). Constrained Evolutionary Wind Turbine Placement with Penalty Functions. In Proceedings of the IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (CEC), Vancouver, Canada.	B
88. Mahmoud Bokhari, Thorsten Bormer, and <b>Markus Wagner</b> (2015). An Improved Beam-Search for Testing Formal Verification Systems. In Proceedings of 7th Symposium on Search-Based Software Engineering (SSBSE), Bergamo, Italy.	
89. Hayden Faulkner, Tom Schultz, Sergey Polyakovskiy, and <b>Markus Wagner</b> (2015). Fast and efficient heuristics for the Traveling Thief Problem. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Madrid, Spain.	A
90. Daniel Lückehe, <b>Markus Wagner</b> , and Oliver Kramer (2015). Self-Adaptive Evolutionary Wind Turbine Placement with Geo-Constraints. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Madrid, Spain.	A

91. Anh Quang Nguyen, <b>Markus Wagner</b> , and Frank Neumann (2014). User preferences for Approximation-Guided Multi-Objective Evolution. In Proceedings of the 10 <sup>th</sup> Int. Conference on Simulated Evolution and Learning (SEAL), Dunedin, New Zealand.	B
92. Mohammad Reza Bonyadi, Zbigniew Michalewicz, and <b>Markus Wagner</b> (2014). Beyond the edge of feasibility: analysis of bottlenecks. In Proceedings of the 10 <sup>th</sup> Int. Conference on Simulated Evolution and Learning (SEAL), Dunedin, New Zealand.	B
93. Samadhi Nallaperuma, <b>Markus Wagner</b> , and Frank Neumann (2014). Parameter Prediction based on Features of Evolved Instances for Ant Colony Optimization and the Traveling Salesperson Problem. In Proceedings of Parallel Problem Solving from Nature (PPSN), Ljubljana, Slovenia.	A
94. <b>Markus Wagner</b> (2014). Maximising Axiomatization Coverage and Minimizing Regression Testing Time. In Proceedings of the IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (CEC), Beijing, China.	A
95. <b>Markus Wagner</b> and Frank Neumann (2014). Single- and Multi-Objective Genetic Programming: New Runtime Results for SORTING. In Proceedings of the IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (CEC), Beijing, China.	A
96. Sergey Polyakovskiy, Mohammad Reza Bonyadi, <b>Markus Wagner</b> , Zbigniew Michalewicz, and Frank Neumann (2014). A Comprehensive Benchmark Set and Heuristics for the Travelling Thief Problem. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Vancouver, Canada.	A
97. <b>Markus Wagner</b> and Frank Neumann (2013). A Fast Approximation-Guided Evolutionary Multi-Objective Algorithm. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Amsterdam, The Netherlands.	A
98. Raymond Tran, Junhua Wu, Christopher Denison, Thomas Ackling, <b>Markus Wagner</b> , and Frank Neumann (2013). Fast and Effective Multi-Objective Optimisation of Wind Turbine Placement. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO), Amsterdam, The Netherlands.	A
99. <b>Markus Wagner</b> and Tobias Friedrich (2013). Efficient Parent Selection for Approximation-Guided Evolutionary Multi-Objective Optimization. In Proceedings of the IEEE Congress on Evolutionary Computation (CEC), Cancun, Mexico.	A
100. Anh Nguyen, Tommaso Urli, and <b>Markus Wagner</b> (2013). Single- and multi-objective genetic programming: new bounds for weighted order and majority (pre-conference title: Improved Computational Complexity Results for Weighted ORDER and MAJORITY). In Proceedings of Foundations of Genetic Algorithms XII (FOGA), Adelaide, Australia.	A*
101. Samadhi Nallaperuma, <b>Markus Wagner</b> , Frank Neumann, Bernd Bischl, Olaf Mersmann, and Heike Trautmann (2013). A Feature-Based Comparison of Local Search and the Christofides Algorithm for the Travelling Salesperson Problem. In Proceedings of Foundations of Genetic Algorithms XII (FOGA), Adelaide, Australia.	A*
102. Bernhard Beckert, <b>Markus Wagner</b> , and Thorsten Bormer (2013). A Metric for Testing Program Verification Systems. In Proceedings of the 7 <sup>th</sup> International Conference on Tests and Proofs (TAP), Budapest, Hungary.	B
103. Bernhard Beckert, Thorsten Bormer, and <b>Markus Wagner</b> (2013). Heuristically Creating Test Cases for Program Verification Systems. In Proceedings of the 10 <sup>th</sup> Metaheuristics International Conference (MIC), Singapore.	
104. <b>Markus Wagner</b> and Frank Neumann (2012). Parsimony Pressure versus Multi-Objective Optimization for Variable Length Representations. In Proceedings of 12 <sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN), Sicily, Italy.	A
105. Tommaso Urli, <b>Markus Wagner</b> , and Frank Neumann (2012). Experimental Supplements to the Computational Complexity Analysis of Genetic Programming for Problems Modelling Isolated Program Semantics. In Proceedings of 12 <sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN), Sicily, Italy.	A
106. Joseph Yuen, Sophia Gao, <b>Markus Wagner</b> , and Frank Neumann (2012). An Adaptive Data Structure for Evolutionary Multi-Objective Algorithms with Unbounded Archives. In Proceedings of the IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (CEC), Brisbane, Australia.	A
107. Kalyan Veeramachaneni, <b>Markus Wagner</b> , Una-May O'Reilly and Frank Neumann (2012). Optimizing Energy Output and Layout Costs for Large Wind Farms using Particle Swarm Optimization. In Proceedings of the IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (CEC), Brisbane, Australia.	A
108. Olaf Mersmann, Bernd Bischl, Jakob Bossek, Heike Trautmann, <b>Markus Wagner</b> , and Frank Neumann (2012). Local Search and the Traveling Salesman Problem: A Feature-Based Characterization of Problem Hardness. In Proceedings of the Learning and Intelligent Optimization Conference (LION), Paris, France.	
109. Benjamin Doerr, Daniel Johannsen, Timo Kötzing, Per Kristian Lehre, and <b>Markus Wagner</b> , and Carola Winzen (2011). Faster Black-Box Algorithms Through Higher Arity Operators. In Proceedings of the Foundations of Genetic Algorithms XI (FOGA), Schwarzenberg, Austria.	A*
110. Timo Kötzing, Frank Neumann, Dirk Sudholt, and <b>Markus Wagner</b> (2011). Simple Max-Min Ant Systems and the Optimization of Linear Pseudo-Boolean Functions. In Proceedings of the Foundations of Genetic Algorithms (FOGA), Schwarzenberg, Austria.	A*
111. Karl Bringmann, Tobias Friedrich, Frank Neumann, and <b>Markus Wagner</b> (2011). Approximation-Guided Evolutionary Multi-Objective Optimization. In Proceedings of the 21 <sup>st</sup> International Joint Conference on Artificial Intelligence (IJCAI), Barcelona, Spain.	A*

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112. **Markus Wagner**, Jareth Day, Dora Jordan, Trent Kroeger, and Frank Neumann (2011). Evolving Pacing Strategies for Team Pursuit Track Cycling. In Proceedings of the 9<sup>th</sup> Metaheuristics International Conference (MIC), Udine, Italy. **[Best Paper Award, 120 accepted papers]**
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113. Thorsten Bormer and **Markus Wagner** (2010). Towards Testing a Verifying Compiler. In Pre-Proceedings of the International Conference on Formal Verification of Object-Oriented Software (FoVeOOS), Paris, France.
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114. Claudia Obermaier and **Markus Wagner** (2009). Towards an Evolved Lower Bound for the Most Circular Partition of a Square. In Proceedings of the 2009 IEEE Congress on Evolutionary Computation (CEC), Trondheim, Norway. A
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115. Bernhard Beckert and **Markus Wagner** (2009). Probabilistic Models for the Verification of Human-Computer Interaction. In Proceedings of the 32<sup>nd</sup> Annual German Conference on Artificial Intelligence (KI), Paderborn, Germany. C
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116. Cody Boisclair and **Markus Wagner** (2008). Better Huffman Coding via Genetic Algorithm. In Proceedings of the 2008 International Conference on Genetic and Evolutionary Methods (GEM), Las Vegas, USA.
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- Workshop Papers, Conference Posters, Abstracts, and other Articles.
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117. Chitchanok Chuengsatiansup, **Markus Wagner**, and Yuval Yarom (2022). Opportunities for Genetic Improvement of Cryptographic Code. GI@GECCO 2022 Paper.
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118. Sherlock Licorish and **Markus Wagner** (2022). Dissecting Copy/Delete/Replace/Swap mutations: Insights from a GIN Case Study. GI@GECCO 2022 Paper.
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119. Mohamed El Yafrani, Marcella Scoczynski Ribeiro Martins, Myriam Delgado, Ricardo Lüders, Peter Nielsen, and **Markus Wagner** (2022). On the Fitness Landscapes of Interdependency Models in the Travelling Thief Problem. GECCO 2022 Poster.
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120. Sherlock A. Licorish and **Markus Wagner** (2022). Combining GIN and PMD for Code Improvements. GECCO 2022 Poster.
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121. Aldeida Aleti, Mark Wallace, and **Markus Wagner** (2022). On the Effectiveness of Restarting Local Search. GECCO 2022 Poster.
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122. Nathanael Carraz, Vlad Hosu, Laurent Najman, Fabien Teytaud, Olivier Teytaud, **Markus Wagner**, and Mariia Zameshina (2022). Fairness in Generative Modeling: do it Unsupervised! GECCO 2022 Poster.
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123. Brittany Reid, **Markus Wagner**, Marcelo d'Amorim and Christoph Treude (2022). Software Engineering User Study Recruitment on Prolific: An Experience Report. International Workshop on Recruiting Participants for Empirical Software Engineering (RoPES) 2022 Paper.
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124. Hira Assimi, Frank Neumann, **Markus Wagner**, and Xiaodong Li (2021). Novelty Particle Swarm Optimisation for Truss Optimisation Problems. GECCO 2021 Poster.
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125. Aldeida Aleti, Mark Wallace, and **Markus Wagner** (2021). On the Effectiveness of Restarting Local Search. GECCO 2021 Poster.
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126. William B. Langdon, Westley Weimer, Justyna Petke, Erik Fredericks, Seongmin Lee, Emily Winter, Michail Basios, Myra B. Cohen, Aymeric Blot, **Markus Wagner**, Bobby R. Bruce, Shin Yoo, Simos Gerasimou, Oliver Krauss, Yu Huang and Michael Garten. Genetic Improvement @ ICSE 2020. SIGSOFT Software Engineering Notes, Vol. 45, No. 4.
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127. Sebastian Baltes and **Markus Wagner** (2020). An Annotated Dataset of Stack Overflow Post Edits. Genetic Improvement Workshop GI@GECCO 2020.
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128. Brittany Reid, Christoph Treude, and **Markus Wagner** (2020). Optimising the Fit of Stack Overflow Code Snippets into Existing Code. Genetic Improvement Workshop GI@GECCO 2020.
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129. Mahmoud A. Bokhari, Brad Alexander, and **Markus Wagner** (2020). Genetic Improvement of Software Efficiency: The Curse of Fitness Estimation. Genetic Improvement Workshop GI@GECCO 2020.
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130. **Markus Wagner** (2019). An Improved Generic Bet-and-Run Strategy with Performance Prediction for Stochastic Local Search. Programme Gaspard Monge (PGMODAYS), Paris, France.
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131. **Markus Wagner**, Hanhe Lin, Shujun Li, and Dietmar Saupe (2019). Algorithm Selection for Image Quality Assessment. Configuration and Selection of Algorithms Workshop (COSEAL), Potsdam, Germany.
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132. **Markus Wagner** (2019). Kinder Surprise's Debut in Discrete Optimisation – A Real-World Toy Problem that can be Subadditive. GECCO 2019 Companion - Black-Box Discrete Optimisation Benchmarking Workshop.
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133. Mahfouth Alghamdi, Christoph Treude, and **Markus Wagner** (2019). Toward Human-Like Summaries Generated from Heterogeneous Software Artefacts. GECCO 2019 Companion - Genetic Improvement of Software Workshop.
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134. Mahmoud A. Bokhari, **Markus Wagner**, and Brad Alexander (2019). The Quest for Non-Functional Property Optimisation in Heterogeneous and Fragmented Ecosystems: a Distributed Approach. GECCO 2019 Companion - Genetic Improvement of Software Workshop.
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135. Justyna Petke, Brad Alexander, Earl T. Barr, Alexander E.I. Brownlee, **Markus Wagner**, and David R. White (2019). A Survey of Genetic Improvement Search Spaces. GECCO 2019 Companion - Genetic Improvement of Software Workshop.
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136. Asad Sagharia, Shima Rahmani, Amir-Reza Kosari, **Markus Wagner** (2017). Optimal Orbit of a Typical Earth Observation Satellite with the purpose of Propellant and Payload Mass Minimization. In Proceedings of the 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia.
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137. Shima Rahmani, Asad Saghari, Masoud Ebrahimi, **Markus Wagner** (2017). Reliability-based orbital design optimisation for an Earth observation satellite. In Proceedings of the 68<sup>th</sup> International Astronautical Congress, Adelaide, Australia.
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138. Mahmoud A. Bokhari, Bobby R. Bruce, Brad Alexander and **Markus Wagner** (2017). Deep Parameter Optimisation on Android Smartphones for Energy Minimisation - A Tale of Woe and a Proof-of-Concept. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) Companion, Genetic Improvement Workshop, Berlin, Germany.
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139. Mohamed El Yafrani, Shelvin Chand, **Markus Wagner**, Aneta Neumann, and Belaid Ahoud (2017). A Case Study of Multi-objectiveness in Multi-component Problems. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) Companion, Berlin, Germany.
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140. Mahmoud Bokhari, Bo Zhou, Yuanzhong Xia, Brad Alexander, and **Markus Wagner** (2017). Validation of Internal Meters of Mobile Android Devices. Technical Report.
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141. Boyin Ding, Leandro Souza Pinheiro da Silva, Nataliia Sergiienko, Fantai Meng, Jonathan David Piper, Luke Bennetts, **Markus Wagner** and Benjamin Cazzolato (2017). Study of fully submerged point absorber wave energy converter - modelling, simulation and scaled experiment. In Proceedings of the 32<sup>nd</sup> International Workshop on Water Waves and Floating Bodies (IWWWFB), Dalian, China.
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142. Nataliia Sergiienko, Boyin Ding, Benjamin Cazzolato, Junhua Wu, **Markus Wagner**, Maziar Arjomandi (2016). An array of the three-tether wave energy converters. In Proceedings of the Australian Ocean Renewable Energy Symposium, Melbourne, Australia.
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143. **Markus Wagner** (2016). Speeding up the proof strategy in formal software verification. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) Companion, Genetic Improvement Workshop, Denver, USA.
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144. Mahmoud Bokhari and **Markus Wagner** (2016). Optimising energy consumption on Android mobile phones. In Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) Companion, Genetic Improvement Workshop, Denver, USA. **[Best Presentation Award]**
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145. Mahmoud Bokhari and **Markus Wagner** (2015). Local Beam Search to Improve Test Coverage of Verification Systems. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO) Companion, Madrid, Spain.
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146. Samadhi Nallaperuma, **Markus Wagner**, and Frank Neumann (2013). Ant colony optimisation and the traveling salesperson problem - hardness, features and parameter. In Proceedings of Genetic and Evolutionary Computation Conference (GECCO) Companion, Amsterdam, The Netherlands.
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147. Samadhi Nallaperuma, **Markus Wagner**, Frank Neumann, Bernd Bischl, Olaf Mersmann, and Heike Trautmann, (2012). Features of Easy and Hard Instances for Approximation Algorithms and the Travelling Salesperson Problem. Automated Selection and Tuning of Algorithms Workshop, at the 12<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN), Sicily, Italy.
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148. Frank Neumann, Una-May O'Reilly, Kalyan Veeramachaneni, and **Markus Wagner** (2011). Optimizing the Layout of 1000 Wind Turbines. In Proceedings of the European Wind Energy Association (EWEA), Brussels, Belgium.
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149. **Markus Wagner** and Frank Neumann (2011). Computational Complexity Results for Genetic Programming and the Sorting Problem. Internal technical report.
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150. **Markus Wagner** (2009). Probabilistic User Models for the Verification of Human-Computer Interaction. In Proceedings of the GI Informatiktage, Bonn, Germany.
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151. Tomasz Oliwa and **Markus Wagner** (2008). Composing Music with Neural Networks and Probabilistic Finite-State Machines. In Proceedings of the 6<sup>th</sup> European Workshop on Evolutionary and Biologically Inspired Music (EvoMUSART), Naples, Italy.
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152. Gerd Beuster, Niklas Henrich, and **Markus Wagner** (2006). Real World Verification – Experiences from the Verisoft Email Client. In Proceedings of the FLoC'06 Workshop on Empirical Successfully Computerized Reasoning (ESCoR), Seattle, USA.
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All publications are available online or upon request: <http://cs.adelaide.edu.au/~markus/publications.html>

All citations can be found online: <http://scholar.google.com.au/citations?hl=en&user=9cbh6PoAAAAJ>

ERA stands for "Excellence in Research for Australia", which is a research management initiative by the Australian Government.

The impact factors are taken from the journal's page or from <http://www.scimagojr.com>, if not available at the journal.

The listed CORE ranking is from the year in which the event took place.

## Services to the Community

### Chairing Activities

1. Tentative Local Chair – Genetic and Evolutionary Computation Conference (GECCO) 2024
2. General Chair – Genetic and Evolutionary Computation Conference (GECCO) 2022
3. Chair – IEEE CIS Canberra Artificial Intelligence Summer School (CAI-SS) 2020, Australia – USD 5400 support from the IEEE CIS
4. Chair – IEEE CIS Summer School on Artificial Life and Computational Intelligence 2018, Wellington, New Zealand – USD 3200 support from the IEEE CIS
5. Local Organising Committee Co-Chair – IEEE Symposium Series on Computational Intelligence (SSCI) 2020
6. General Chair – Australasian Conference on Artificial Life and Computational Intelligence (ACALCI) 2018, which has become the IEEE CIS Summer School on Artificial Life and Computational Intelligence 2018, Wellington, New Zealand
7. Program Chair – Australasian Conference on Artificial Life and Computational Intelligence (ACALCI) 2017
8. Chair for Competitions – Genetic and Evolutionary Computation Conference (GECCO) 2018-2021
9. Chair for Tutorials – Australasian Joint Conference on Artificial Intelligence (AI) 2018
10. Chair for Workshops – Genetic and Evolutionary Computation Conference (GECCO) 2016 & 2017
11. Founding Chair (2020) – IEEE Computational Intelligence Society "Task Force on Benchmarking"

12. Founding Chair (2014) and Chair (2015) – IEEE Computational Intelligence Society “Task Force on Computational Intelligence in the Energy Domain” (in 2016 & 2017: Co-Chair)
13. Chair – IEEE Computational Intelligence Society “University Curricula” 2017
14. Chair – IEEE Computational Intelligence Society “University Curricula” 2016
15. Chair – IEEE Computational Intelligence Society “Educational Material” 2015
16. Chair – IEEE Computational Intelligence Society “Educational Repository” 2014

## Editorial Activities

17. Editorial Board Member of Genetic Programming and Evolvable Machines (GPEM) since 2021
18. Guest Editor of the Special Issue “Recent Advances in Deep Learning Towards Securing IoT Intelligence Systems” at the IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI) 2020
19. Associate Editor of IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI) since 2019
20. Guest Editor of the Special Issue “Benchmarking of Computational Intelligence Algorithms” at Computational Intelligence Journal 2018, moved to the Elsevier Applied Soft Computing Journal in July 2018 (ongoing in 2019)
21. Managing Editor of the Proceedings of the Australasian Conference on Artificial Life and Computational Intelligence (ACALCI) 2018
22. Associate Editor on the Editorial Board of “Optimization”, a specialty of Frontiers in Applied Mathematics and Statistics 2015-2019
23. Managing Guest Editor for the Special Issue “Optimization Methods in Renewable Energy Systems Design” (Elsevier Renewable Energy Journal, >130 submissions) 2015/2016
24. Guest Editor for the Special Issue “Computational Energy Management in Smart Grids” (Elsevier Neurocomputing Journal) 2014

## Other Activities

1. Co-Organiser – GECCO Workshop Genetic Improvement of Software (GI@GECCO) 2022
2. Co-Organiser – IEEE CEC 2021 Special Session on Benchmarking of Computational Intelligence Algorithms (BOCIA) (a paper this is special session won this conference’s best paper award)
3. Co-Organiser – GECCO Workshop Genetic Improvement of Software (GI@GECCO) 2020
4. Co-Organiser – GECCO Workshop Black Box Discrete Optimization Benchmarking (BB-DOB) 2020
5. Co-Organiser – PPSN Workshop Black Box Discrete Optimization Benchmarking (BB-DOB) 2020
6. Business Committee Member – ACM SIG Evolutionary Computation 2019-2025
7. Sustainability Officer – ACM SIG Evolutionary Computation 2019-2025
8. Co-Organiser – GECCO Workshop Genetic Improvement of Software (GI@GECCO) 2019
9. Co-Organiser – GECCO Workshop Black Box Discrete Optimization Benchmarking (BB-DOB) 2019
10. Co-Organiser – EMO 2019 Competition “Optimisation of Problems with Multiple Interdependent Components”
11. Co-Organiser – CEC 2019 Competition “Evolutionary Computation in Uncertain Environments: A Smart Grid Application”
12. Co-Organiser – CEC 2019 Special Session on Evolutionary Algorithms for Optimisation in the Energy Domain
13. Co-Organiser – CEC 2019 Special Session on Genetic Improvement and Search-Based Software Engineering
14. Co-Organiser – CEC 2019 Special Session on Benchmarking of Evolutionary Algorithms for Discrete Optimization (BEADO)
15. Co-Organiser – Adelaide Autumn School on Software Engineering 2018
16. Co-Organiser – PPSN Workshop Black Box Discrete Optimization Benchmarking (BB-DOB) 2018
17. Co-Organiser – GECCO Workshop Black Box Discrete Optimization Benchmarking (BB-DOB) 2018
18. Main-Organiser – GECCO Workshop Genetic Improvement of Software (GI@GECCO) 2018
19. Co-Organiser – International Workshop on Benchmarking of Computational Intelligence Algorithms (BOCIA) 2018
20. Co-Organiser – IEEE CEC 2017 / GECCO 2017 Competition “Optimisation of Problems with Multiple Interdependent Components”
21. Co-Organiser – GECCO Workshop on Evolutionary Algorithms for Smart Grids (SmartEA) 2017
22. Main-Organiser – NII Shonan Meeting “Data-Driven Search-Based Software Engineering” 2017
23. Co-Organiser – IEEE WCCI/CEC 2016 Special Session “Genetic Improvement of Software”
24. Co-Organiser – IEEE CEC 2015 Competition “Optimisation of Problems with Multiple Interdependent Components”
25. Co-Organiser – IEEE CEC 2015 Special Session “Evolutionary Computation in the Energy Domain”
26. Co-Organiser – PPSN 2014 Workshop “Renewable Energy and Evolutionary Computation”
27. Co-Organiser – Uni-Tech Outreach Activity “My First Red-Eye Removal” 2015
28. Co-Organiser – IEEE WCCI/CEC 2014 Competition “Optimisation of Problems with Multiple Interdependent Components”
29. Co-Organiser – IEEE WCCI/CEC 2014 Special Session “Heuristic Methods for Multi-Component Optimization Problems”
30. Co-Organiser – Uni-Tech Outreach Activity “My First Red-Eye Removal” 2014
31. Co-Organiser – Colloquium on Combinatorics (KOLKOM) Saarbrücken 2010
32. Co-Organiser – International Conference Summer Koblenz 2005
33. Member – IEEE CIS “Theory Task Force” 2018+
34. Member – IEEE CIS “Task Force on Automated Algorithm Design, Configuration and Selection” 2019+
35. Member – IEEE CIS “Task Force on Computational Intelligence in the Energy Domain” 2018+
36. Committee Member – IEEE Computational Intelligence Society “Intelligent Systems Applications Technical Committee 2017”
37. Committee Member – IEEE Computational Intelligence Society “Webinars Committee” 2016
38. Committee Member – IEEE Computational Intelligence Society “Intelligent Systems Applications Technical Committee 2016”
39. Committee Member – IEEE Computational Intelligence Society “Education Committee” 2015
40. Committee Member – IEEE Computational Intelligence Society “Multimedia Subcommittee” 2015
41. Committee Member – IEEE Computational Intelligence Society “Intelligent Systems Applications Technical Committee 2015”
42. Committee Member – IEEE Computational Intelligence Society “Education Committee” 2014
43. Committee Member – IEEE Computational Intelligence Society “Multimedia Subcommittee” 2014



44. Committee Member – IEEE Computational Intelligence Society “Intelligent Systems Applications Technical Committee 2014”
45. Task Force Member - IEEE Computational Intelligence Society Task Force on Many-Objective Optimisation 2017
46. Volunteer – The University of Adelaide “Open Day” 2018
47. Volunteer – The University of Adelaide “Open Day” 2017
48. Volunteer – The University of Adelaide “Open Day” 2016
49. Volunteer – The University of Adelaide “Open Day” 2015
50. Volunteer – The University of Adelaide “Open Day” 2014
51. Volunteer – Young Women in Technology (The University of Adelaide) 2013
52. Volunteer – The University of Adelaide “Open Day” 2013
53. Volunteer – ACM South Pacific Regional Programming Contest 2011
54. Volunteer – South Australian Science and Engineering Super Challenge 2011 (stage coordinator)

## PC Member

1. 35<sup>th</sup> Australasian Joint Conference on Artificial Intelligence (AJCAI) 2022
2. IEEE Symposium Series on Computational Intelligence (SSCI) 2022, Multi-Criteria Decision Making (MCDM)
3. Second International Workshop on Parallel and Distributed Algorithms for Decision Sciences (PDADS) 2022
4. 17<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN) 2022
5. Special Session “AutoDesign4EC” (WCCI/CEC 2022)
6. Special Session “Theoretical Foundations of Bio-inspired Computation” (WCCI/CEC) 2022
7. 9<sup>th</sup> IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2022, co-located with ICSE 2022)
8. Evo\* (EvoCOP) Conference 2022
9. Australasian Joint Conference on Artificial Intelligence (AJCAI) 2021
10. Realising Artificial Intelligence Synergies in Software Engineering (RAISE) 2021
11. NIER Track of the 44<sup>th</sup> International Conference on Software Engineering (ICSE NIER) 2022
12. ASE 2021 Artifact Evaluation PC
13. Ideas, Visions and Reflections (V&R) Track of ESEC/FSE 2021
14. IEEE Symposium Series on Computational Intelligence (SSCI) 2021, Multi-Criteria Decision Making (MCDM)
15. IEEE Symposium Series on Computational Intelligence (SSCI) 2021, Foundations of Computational Intelligence (FOCI)
16. Special Session on Representation Learning meets Meta-heuristic Optimization (RePL4Opt) at IEEE CEC 2021
17. Genetic and Evolutionary Computation Conference (GECCO) 2021 “Search-Based Software Engineering Track”
18. Foundations of Genetic Algorithms XVI (FOGA) 2021
19. Progress in Applied Electrical Engineering (PAEE) 2020
20. IEEE Symposium on CI in Multicriteria Decision-Making (MCDM) 2020
21. Visions and Reflections (V&R) Track of ESEC/FSE 2020
22. RAISE2020 (Realizing Artificial Intelligence Synergies in Software Engineering) 2020
23. Learning and Intelligent Optimization Conference (LION) 2020
24. Genetic and Evolutionary Computation Conference (GECCO) 2020 “Search-Based Software Engineering Track”
25. 16<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN) 2020
26. Evo\* Conference 2020
27. 34<sup>th</sup> AAAI Conference on Artificial Intelligence 2020
28. IEEE Symposium Series on Computational Intelligence (SSCI) 2019
29. 32<sup>th</sup> Australasian Joint Conference on Artificial Intelligence (AI) 2019
30. International Joint Conference on Artificial Intelligence (IJCAI) 2019
31. Genetic Improvement @ ICSE Workshop 2019
32. Genetic and Evolutionary Computation Conference (GECCO) 2019 “Search-Based Software EngineeringTrack”
33. Foundations of Genetic Algorithms XV (FOGA) 2019
34. EvoApplications (EvoApps) 2019
35. Australasian Conference on Artificial Intelligence (AI) 2018
36. Workshop at PPSN 2018 on Investigating Optimization Problems from Machine Learning and Data Analysis
37. 10<sup>th</sup> Symposium on Search-Based Software Engineering (SSBSE) 2018
38. IEEE Symposium Series on Computational Intelligence (SSCI) 2018, Foundations of Computational Intelligence (FOCI)
39. 24<sup>th</sup> Constraint Programming (CP) 2018
40. Genetic Improvement @ ICSE Workshop 2018
41. 15<sup>th</sup> International Conference on Parallel Problem Solving from Nature (PPSN) 2018
42. Genetic and Evolutionary Computation Conference (GECCO) 2018 “Evolutionary Combinatorial Optimization and Metaheuristics Track”
43. International Joint Conference on Artificial Intelligence (IJCAI) 2018
44. 5<sup>th</sup> International Workshop on Computational Energy Management in Smart Grids (CEMiSG) 2018
45. IEEE Symposium Series on Computational Intelligence (SSCI) 2017, Foundations of Computational Intelligence (FOCI)
46. Genetic and Evolutionary Computation Conference (GECCO) 2017 “Evolutionary Combinatorial Optimization and Metaheuristics Track”
47. ECML/PKDD Fifth International Workshop on Data Analytics for Renewable Energy Integration (DARE) 2017
48. 11<sup>th</sup> Int. Conference on Simulated Evolution and Learning (SEAL) 2017

49. 3rd International Conference on Machine learning, Optimization & Big Data (MOD) 2017
  50. 30<sup>th</sup> Australasian Joint Conference on Artificial Intelligence (AI) 2017
  51. 13th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI) 2017
  52. 4<sup>th</sup> International Workshop on Computational Energy Management in Smart Grids (CEMiSG) 2017
  53. International Joint Conference on Artificial Intelligence (IJCAI) 2017
  54. IEEE Congress on Evolutionary Computation (CEC) 2017 "Theoretical Foundations of Bio-inspired Computation Track"
  55. Genetic Improvement @ GECCO 2017
  56. Genetic and Evolutionary Computation Conference (GECCO) 2016 "Evolutionary Combinatorial Optimization and Metaheuristics Track"
  57. International Conference on Evolutionary Multi-Objective Optimisation (EMO) 2016
  58. Evo\*Conference: EvoEnergy 2017
  59. Foundations of Genetic Algorithms XIV (FOGA) 2017
  60. International Joint Conference on Artificial Intelligence (IJCAI) 2016
  61. 14<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN) 2016
  62. 20<sup>th</sup> Asia-Pacific Symposium on Intelligent and Evolutionary Systems (IES) 2016
  63. IEEE Congress on Evolutionary Computation (CEC) 2016 "Theoretical Foundations of Bio-inspired Computation Track"
  64. 3<sup>rd</sup> International Workshop on Computational Energy Management in Smart Grids (CEMiSG) 2016
  65. Evo\*Conference: EvoEnergy 2016
  66. PlanSOpt@AI-15: AI-2015 Workshop on Planning, Search, and Optimization 2015
  67. Foundations of Genetic Algorithms XIII (FOGA) 2015
  68. Evo\*Conference: EvoEnergy 2015
  69. 2<sup>nd</sup> International Workshop on Computational Energy Management in Smart Grids (CEMiSG) 2015
  70. Learning and Intelligent Optimization Conference (LION) 2015
  71. IEEE Congress on Evolutionary Computation (CEC) 2015 "Theoretical Foundations of Bio-inspired Computation Track"
  72. IEEE Symposium Series on Computational Intelligence (SSCI) 2014 "Special Session on Benchmarking and Testing for Production and Logistics Optimization"
  73. IEEE Congress on Evolutionary Computation (CEC) 2014 "Theoretical Foundations of Bio-inspired Computation Track"
  74. International Conference on Computational Science (ICCS) 2014 "Computational Optimisation in the Real World Workshop"
  75. 13<sup>th</sup> International Conference on Parallel Problem Solving from Nature (PPSN) 2014
  76. 12<sup>th</sup> European Conference on Artificial Life (ECAL) 2013
  77. 12<sup>th</sup> International Conference on Artificial Immune Systems (ICARIS) 2013
  78. Genetic and Evolutionary Computation Conference (GECCO) 2013 "Evolutionary Multi-Objective Optimization Track"
  79. IEEE Congress on Evolutionary Computation (CEC) 2013 "Theoretical Foundations of Bio-inspired Computation"
  80. Learning and Intelligent Optimization Conference (LION) 2013
  81. IEEE Symposium Series on Computational Intelligence (SSCI) 2013 "Special Session on Scalable Evolutionary Logistic Planning"
  82. 11<sup>th</sup> International Conference on Artificial Immune Systems (ICARIS) 2012
  83. 12<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN) 2012
  84. Genetic and Evolutionary Computation Conference (GECCO) 2012 "Evolutionary Multi-Objective Optimization Track"
  85. Genetic and Evolutionary Computation Conference (GECCO) 2011 "Theory Track"
- Reviewer
1. Journal of Simulation (JOS) 2022
  2. Artificial Intelligence (ARTINT) 2022
  3. Computers and Operations Research (CAOR) 2022
  4. Renewable and Sustainable Energy Reviews (RSER) 2022
  5. IEEE Transactions on Software Engineering (TSE) 2021
  6. Information and Software Technology (IST) 2021
  7. Data Mining and Knowledge Discovery (DAMI) 2021
  8. ACM Transactions on Software Engineering and Methodology (TOSEM) 2021
  9. Applied Soft Computing (ASOC) 2021
  10. Empirical Software Engineering (EMSE) 2021
  11. 7th International Conference on Artificial Intelligence and Security (ICAIS) 2021
  12. Springer Nature Computer Science (SNCS) 2020
  13. IEEE Transactions on Systems, Man and Cybernetics: Systems (SMC) 2020
  14. IEEE Symposium Series on Computational Intelligence (SSCI) 2020
  15. Future Generation Computer Systems (FGCS) 2020
  16. Applied Mathematics & Computer Science (AMCS) 2020
  17. South African Medical Research Council (SAMRC) 2020 – Grant Review for BRICS (Brazil, Russian Federation, India, China and South Africa) multilateral project, BRICS-STI Framework Programme
  18. Czech Science Foundation (CSF) 2020 – Grant Review on the panel P103 (Cybernetics, artificial intelligence and information processing)
  19. Soft Computing (SOCO) 2020
  20. SN Operations Research Forum (ORFO) 2020
  21. ACM Transactions on Evolutionary Learning and Optimization (TELO) 2020

22. Elsevier Theoretical Computer Science (TCS) 2019
23. IEEE Transactions on Cybernetics (CYB) 2019
24. Natural Sciences and Engineering Research Council of Canada (NSERC/CRSNG) – Discovery Grants 2019
25. MIT Press Evolutionary Computation Journal (ECJ) 2018
26. IEEE Transactions on Evolutionary Computation (TEVC) 2018
27. Elsevier Theoretical Computer Science (TCS) 2018
28. IEEE Transactions on Cybernetics (CYB) 2018
29. Applied Soft Computing (ASOC) 2018
30. IEEE Transactions on Software Engineering (TSE) 2017
31. IEEE Transactions on Cybernetics (CYB) 2017
32. Swarm and Evolutionary Computation (SWEVO) 2017
33. IEEE Transactions on Evolutionary Computation (TEVC) 2017
34. MIT Press Evolutionary Computation Journal (ECJ) 2017
35. International Transactions in Operational Research (ITOR) 2017
36. Springer Natural Computing (NACO) 2017
37. IEEE Transactions on Software Engineering (TES) 2016
38. IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI) 2016
39. IEEE Transactions on Evolutionary Computation (TEVC) 2016
40. IEEE Transactions on Cybernetics (CYB) 2016
41. MIT Press Evolutionary Computation Journal (ECJ) 2016
42. Elsevier Applied Energy (APEN) 2015
43. IEEE Transactions on Design Automation of Electronic Systems (TODAES) 2015
44. IEEE Computational Intelligence Magazine (CIM) 2015
45. IEEE Transactions on Cybernetics (CYB) 2015
46. IEEE Transactions on Power Engineering Systems (PES) 2015
47. MIT Press Evolutionary Computation Journal (ECJ) 2015
48. IEEE Transactions on Evolutionary Computation (TEVC) 2015
49. Elsevier Journal of Neurocomputing (NEUCOM) 2015
50. Informs Journal on Computing (JOC) 2014
51. Springer Natural Computing (NACO) 2014
52. IEEE Symposium Series on Computational Intelligence (SSCI) 2014
53. Elsevier Cleaner Production (JCLEPRO) 2014
54. Elsevier Energy Conversion and Management (ECM) 2014
55. IEEE Transactions on Evolutionary Computation (TEVC) 2014
56. MIT Press Evolutionary Computation Journal (ECJ) 2014
57. Emerald Engineering Computations (ENCOM) 2014
58. IEEE Congress on Evolutionary Computation (CEC) 2014
59. Elsevier Theoretical Computer Science (TCS) 2013
60. Elsevier Renewable Energy Journal (RENE) 2013
61. Springer Journal of Mathematical Modelling and Algorithms in Operations Research (JMMA) 2013
62. Elsevier Journal of Neurocomputing (NEUCOM) 2013
63. Emerald Engineering Computations (ENCOM) 2013
64. IEEE Transactions on Evolutionary Computation (TEVC) 2013
65. IEEE Transactions on Cybernetics (CYB) 2013
66. MIT Press Evolutionary Computation Journal (ECJ) 2013
67. IEEE Congress on Evolutionary Computation (CEC) 2013
68. 12<sup>th</sup> International Symposium on Experimental Algorithms (SEA) 2013
69. Elsevier Journal of Systems and Software (JSS) 2012
70. Springer Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS) 2012
71. IEEE Congress on Evolutionary Computation (CEC) 2012
72. IEEE Transactions on Evolutionary Computation (TEVC) 2011
73. 24<sup>th</sup> Australasian Joint Conference on Artificial Intelligence (AI) 2011
74. 10<sup>th</sup> International Conference on Artificial Immune Systems (ICARIS) 2011
75. 15<sup>th</sup> Portuguese Conference on Artificial Intelligence (EPIA) 2011
76. 28<sup>th</sup> Int. Symposium on Theoretical Aspects of Computer Science (STACS) 2011
77. 11<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN) 2010
78. Elsevier Information Processing Letters (IPL) 2010
79. MIT Press Evolutionary Computation Journal (ECJ) 2010
80. 7<sup>th</sup> Int. Conference of Numerical Analysis and Applied Mathematics (ICNAAM) 2009
81. 3<sup>rd</sup> Indian International Conference on Artificial Intelligence (IICAI) 2007

Note: being a PC Member or higher typically entails the reviewer role.

**Attended Events, Invited Talks**

1. Talk – ADSTAR 2022
2. Talk – GI@GECCO 2022
3. Talk – ARC Training Centre OPTIMA Seminar Series 2021
4. Talk – IEEE CIS Queensland Chapter, Seminar Talk 2021
5. Tutorial – GECCO 2021: Genetic Improvement of Software (Advanced Tutorial)
6. Talk – Google Sydney, Tech Talk “Improving software documentation quality” 2021
7. Tutorial – ASE 2020: Genetic Improvement of Software
8. Talk – Data Science Seminar, Centre for Research in Mathematics, Western Sydney University, Australia 2020
9. Tutorial – GECCO 2020: Genetic Improvement of Software (Advanced Tutorial)
10. Talk – Genetic and Evolutionary Computation Conference (GECCO) 2020
11. Invited Talk – 62<sup>nd</sup> CREST Open Workshop “Automated Program Repair and Genetic Improvement”, University College London, UK 2020
12. Talk – PGM Days, Paris, France, 2019
13. Talk – CISUC, Department of Informatics Engineering, University of Coimbra, Portugal 2019
14. Talk – Dagstuhl Seminar “Theory of Randomized Algorithms”, Dagstuhl, Germany 2019
15. Attendance – Sports Technology and Applied Research Symposium (STARS), Canberra, Australia 2019
16. 4 Talks, including an invited talk at “Evolutionary Computation in Practice (ECiP)” – Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic 2019
17. Tutorial – IEEE CEC 2019: Genetic Improvement of Software
18. Talk – Genetic and Evolutionary Computation Conference (GECCO), Kyoto, Japan 2018
19. Talk – Hasso Plattner Institute, Potsdam, Germany 2018
20. Talk – Institute de Recherches Interdisciplinaires et de Developements en Intelligence Artificielle, Brussels, Belgium, 2018
21. Talk – Machine Learning Lab, Albert-Ludwigs-Universität Freiburg, Germany 2018
22. Opening Keynote Speaker – Symposium on Evolutionary Computation, Hefei, China 2017
23. Talk - Institute of Applied Optimization, Hefei University, Hefei, China 2017
24. 2 Talks – 68<sup>th</sup> International Astronautical Congress (IAC), Adelaide, Australia 2017
25. 2 Talks & 1 Poster – Genetic and Evolutionary Computation Conference (GECCO), Berlin, Germany, 2017
26. Talk – Hasso Plattner Institute, Potsdam, Germany 2017
27. Talk – 2<sup>nd</sup> International Summer School on Search-Based Software Engineering, Malaga, Spain, 2017
28. Talk (invited lecturer) – Data 61’s 5<sup>th</sup> International Optimisation Summer School, Kioloa, Australia 2017
29. Talk – Department of Informatics, University of Leicester, UK 2016
30. Talk – Algorithms Group, University of Sheffield, UK 2016
31. Talk – Automated Scheduling, Optimisation and Planning Research Group, University of Nottingham, UK 2016
32. 2 Talks (invitation-only event) – Dagstuhl Seminar “Automated Algorithm Selection and Configuration”, Dagstuhl, Germany 2016
33. Talk – Centre for Research on Evolution, Search and Testing (CREST), University College London, UK 2016
34. Poster – 14<sup>th</sup> International Conference on Parallel Problem Solving from Nature (PPSN), Edinburgh, UK 2016
35. 2 Talks & 2 Posters – Configuration and Selection of Algorithms Workshop (COSEAL), Eindhoven, The Netherlands 2016
36. Talk & Poster – 10<sup>th</sup> International Conference on Swarm Intelligence (ANTS), Brussels, Belgium 2016
37. Attendance – 6<sup>th</sup> International Workshop on Model-based Metaheuristics (Matheuristics), Brussels, Belgium 2016
38. Attendance – IEEE World Congress on Computational Intelligence (WCCI), Vancouver, Canada 2016
39. Talk – Genetic and Evolutionary Computation Conference (GECCO), Denver, USA 2016
40. Talk – School of Computer Science, The University of Adelaide, Adelaide Australia 2016
41. Talk – Albert Ludwig University Freiburg, Germany 2015
42. Talk – Hasso Plattner Institute, Potsdam, Germany 2015
43. 2 Talks, 1 Poster - Genetic and Evolutionary Computation Conference (GECCO), Madrid, Spain 2015
44. Attendance - Becoming an Effective Supervisor or Teacher, The University of Adelaide, Adelaide, Australia 2015
45. Talk – School of Computer Science, The University of Adelaide, Adelaide Australia 2015
46. Opening Keynote Speaker – 2<sup>nd</sup> Workshop on System Integration of Renewable Energy (WSIRE), Oldenburg, Germany 2014
47. Talk (invitation-only event) – NII Shonan Meeting “Computational Intelligence for Software Engineering”, Shonan Village Centre, Japan, 2014
48. Talk – Lehrstuhl für Wirtschaftsinformatik und BWL, Johannes Gutenberg Universität, Germany 2014
49. Attendance – South Australian Renewable Energy Institute (SAREI) Technical Symposium, Adelaide, Australia 2014
50. 2 Talks, 1 Competition, 1 Special Session – IEEE World Congress on Computational Intelligence: Congress on Evolutionary Computation (WCCI/CEC), Beijing, China 2014
51. Attendance – 2<sup>nd</sup> International Optimisation Summer School, Kioloa, Australia 2014
52. Attendance – Empowering more effective and enjoyable teaching, Adelaide, Australia 2013
53. Talk – 10<sup>th</sup> Metaheuristics International Conference (MIC), Singapore 2013
54. Talk – Genetic and Evolutionary Computation Conference (GECCO), Amsterdam, The Netherlands 2013
55. Talk (invitation-only event) – Dagstuhl Seminar “Computer Science in High Performance Sport”, Dagstuhl, Germany 2013
56. Attendance – Felder-Brent “Effective Teaching” Workshop, Adelaide, Australia 2013
57. Attendance – Foundations of Genetic Algorithms XII (FOGA), Adelaide, Australia 2013
58. Talk – School of Computer Science, The University of Adelaide, Adelaide, Australia 2013

59. Attendance – 1<sup>st</sup> International Optimisation Summer School, Kioloa, Australia 2013
60. Talk – Dipartimento di Ingegneria Elettrica, Università degli Studi di Udine, Udine, Italy, 2012
61. 2 Posters, 1 Talk – 12<sup>th</sup> International Conference on Parallel Problem Solving From Nature (PPSN), Sicily, Italy 2012
62. Attendance – 21<sup>st</sup> Int. Symposium on Mathematical Programming (ISMP), Berlin, Germany 2012
63. Talk – Evolutionary Computation and Machine Learning Group, RMIT University, Melbourne, Australia 2012
64. Talk – Lehrstuhl für Theoretische Informatik I, Friedrich-Schiller-Universität Jena, Germany 2012
65. Talk – School of Computer Science, The University of Adelaide, Adelaide, Australia 2012
66. Attendance – AIESEC State Conference, Piccadilly, Australia 2012
67. Attendance – Integrated Planning and Optimization Summit (IPOS), Adelaide, Australia 2012
68. Talk – Sobolev Institute of Mathematics, Novosibirsk, Russia 2012
69. Poster – HDR Poster Day, School of Computer Science, Adelaide, Australia 2011
70. Talk – China Nine / Group of Eight HDR Forum "Clean Energy and Sustainable Future", Beijing, China 2011
71. Talk – 9<sup>th</sup> Metaheuristics International Conference (MIC), Udine, Italy 2011
72. Poster – 21<sup>st</sup> International Joint Conference on Artificial Intelligence (IJCAI), Barcelona, Spain 2011
73. Talk – 5<sup>th</sup> Workshop on Theory of Randomized Search Heuristics (ThRaSH), Kopenhagen, Denmark
74. Talk – Max Planck Institute for Informatics, Saarbrücken, Germany 2011
75. Talk – CSIRO Information and Communication Technologies Centre, Sydney, Australia 2011
76. Talk – School of Computer Science, The University of Adelaide, Adelaide, Australia 2011
77. Talk – Foundations of Genetic Algorithms XI (FOGA), Schwarzenberg, Austria 2011
78. Attendance – Colloquium on Combinatorics (KOLKOM), Saarbrücken, Germany 2010
79. Talk – Technical University Dortmund, Dortmund, Germany 2010
80. Talk – Int. Conference on Formal Verification of Object-Oriented Software (FoVeOOS), Paris, France
81. Poster – Interdisciplinary College 2010 Play, Act and Learn (IK), Günne at Lake Möneseesee, Germany
82. Poster – 32<sup>nd</sup> Annual German Conference on Artificial Intelligence (KI), Paderborn, Germany
83. Talk – IEEE Congress on Evolutionary Computation (CEC), Trondheim, Norway 2009
84. Poster – GI Informatiktage 2009, Bonn, Germany 2009
85. Talk – 7<sup>th</sup> KeY Symposium, Gothenburg, Sweden 2008
86. Poster – 6<sup>th</sup> European Workshop on Evolutionary and Biologically Inspired Music, Art and Design (EvoMusArt), Naples, Italy 2008
87. Talk – 5<sup>th</sup> KeY Symposium, Speyer, Germany 2006
88. Attendance – International Conference Summer, Koblenz, Germany 2005
89. Talk – 4<sup>th</sup> KeY Symposium, Lökeberg, Sweden 2005
90. Attendance – German Verification Day, Oldenburg, Germany 2005