Yi Mei

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Education

Ph.D. in Computer Science   **09/2007–06/2010**
University of Science and Technology of China
Thesis: Meta-heuristics for Solving Arc Routing Problems

M.Sc. in Computer Science   **09/2005–06/2007**
University of Science and Technology of China
Thesis: Applications of Evolutionary Algorithms in Arc Routing
(1.5 years coursework, including Artificial Intelligence, Algorithm Design and Analysis, Software Engineering, Operating System, Machine Learning and Data Mining, Intelligent System, Cryptology)

B.Sc. in Mathematics   **09/2001-06/2005**
University of Science and Technology of China
Thesis: Drift Analysis in Evolutionary Algorithms
(Computer Science courses including C programming, Data Structure, Databases, Network)

Employment History

Senior Lecturer   **01/2019–present**
Victoria University of Wellington, New Zealand

Lecturer   **08/2016–12/2018**
Victoria University of Wellington, New Zealand

Postdoctoral Research Fellow   **08/2015–07/2016**
Victoria University of Wellington, New Zealand

ARC Discovery Research Fellow   **08/2012–07/2015**
RMIT University, Australia

Provost's Research Associate   **08/2010–07/2012**
Chinese University of Hong Kong, Hong Kong

Research Interests

My main research lies in designing new algorithms using evolutionary computation to efficiently solve challenging optimisation problems in various areas, such as web service composition and location allocation, data analytics, intelligent systems, databases, cloud computing, automatic software design and testing, logistics, supply chain, and tourist recommendation.

Teaching Experience

Lecturer   **2016–present**

School of Engineering and Computer Science, Victoria University of Wellington

- 2018, COMP261 (300+ students, 6 weeks): Algorithms and Data Structures
- 2018, COMP307 (200+ students, 9 weeks): Introduction to Artificial Intelligence
- 2018, COMP361 (60+ students, 6 weeks): Design and Analysis of Algorithms
- 2018, COMP422 (30 students, 6 weeks): Data Mining, Neural Networks and Genetic Programming
- 2017, COMP261 (280+ students, 6 weeks): Algorithms and Data Structures
- 2017, SWEN221 (270+ students, 6 weeks): Software Development
- 2017, COMP422 (30 students, 6 weeks): Data Mining, Neural Networks and Genetic Programming
- 2017, SWEN304 (100+ students, 3 weeks): Database Engineering
- 2016, COMP307 (150 students, 3 weeks): Introduction to Artificial Intelligence
- 2016, COMP422 (25 students, 6 weeks): Data Mining, Neural Networks and Genetic Programming

Guest Lecturer and Tutor   **2015**

School of Engineering and Computer Science, Victoria University of Wellington

- COMP422: 1 guest lecture, marking 2 projects for 13 students, join design and discuss assignments and projects, provide advices and guidance to students
- COMP102: 6 helpdesks, guide students to do assignment, explain background, help debugging

Supervision Experience

- **(Co-)Supervisors for PhD students**
  1) Mazhar Ansari (Victoria University of Wellington), from July 2018 (with Prof. Mengjie Zhang)
  2) Harry He (Victoria University of Wellington), from December 2017 (with Prof. Marc Aurel Schnabel)
  3) Fangfang Zhang (Victoria University of Wellington), "Genetic Programming for Dyanmic Arc Routing", from November 2017 (with Prof. Mengjie Zhang)
  4) Mehdi Abdollahi (Victoria University of Wellington), "AI for natural language process", from November 2017 (with Dr. Sharon Gao)
  5) Boxiong Tan (Victoria University of Wellington), "Evolutionary Web Service Provision and Scheduling" from October 2016 (with Dr. Hui Ma and Prof. Mengjie Zhang)
  6) Atiya Masood (Victoria University of Wellington) "Many-Objective Job Shop Scheduling" from July 2015 (with Dr. Aaron Chen and Prof. Mengjie Zhang)
  7) Deepak Karunakaran (Victoria University of Wellington), "Island-based Model for Multi-Objective Job Shop Scheduling" from July 2015 (with Prof. Mengjie Zhang and Dr. Aaron Chen)
  8) John Park (Victoria University of Wellington), "Evolving rule ensembles for Dynamic Job Shop Scheduling" from November 2015 (with Prof. Mengjie Zhang and Dr. Aaron Chen)
  9) Saiedur Rahaman (RMIT University, Australia), "Context-aware journey planning", 2015 (with Dr. Margaret Hamilton and Dr. Flora Salim)
  10) Jonathan Liono (RMIT University, Australia), "Personalised region ranking", 2015 (with Dr. Flora Salim)
  11) Pietro Consoli (University of Birmingham, UK), "Online Operator Selection in Evolutionary Algorithms", from August 2014 (with Prof. Xin Yao and Dr. Leandro Minku)
  12) Youhan Xia (RMIT University, Australia), "Personalised tourist trip planning", 2016 (with Jeffrey Chan)

13) Alexandre Sawczuk Da Silva (Victoria University of Wellington), "Evolutionary QoS-based Web Service Composition" from July 2015 (with Dr. Hui Ma and Prof. Mengjie Zhang, **successfully completed in 2019**)

14) Md. Jakirul Islam (RMIT University, Australia), "Structural Topological Optimization Using Evolutionary Techniques", from July 2014 (with A/Prof. Xiaodong Li, **successfully completed in 2018**)

15) Yuxin Liu (Southwestern University, China), "Genetic Programming Hyper-heuristics for Uncertain Arc Routing Problem", from September 2016 (with Prof Zili Zhang, **successfully completed in 2019**)

16) Jing Xie (RMIT University, Australia), "Hyper-heuristics for Warehouse Layout Optimization", Jan 2013 – June 2017 (with Dr. Andy Song and Dr. Andreas Ernst, **successfully completed in 2017**)

- **(Co-)Supervisors for Masters students**
  1) Shaolin Wang (Victoria University of Wellington), "Ensemble Learning in Genetic Programming Hyper-heuristics for Uncertain Capacitated Arc Routing Problem", 2018–2019
  2) Boxiong Tan (Victoria University of Wellington), "Evolutionary Computation for Service Location Allocation", 2015 (with Dr. Hui Ma and Prof. Mengjie Zhang, **successfully completed**)
  3) Youhan Xia (University of Melbourne), "Ant Colony System for Itinerary Planning with Restaurants", 2015 (with Dr. Jeffrey Chan, **successfully completed**)
  4) Haobo Fu (University of Science and Technology of China), "Meta-heuristics for Capacitated Arc Routing Problems", 2007–2010 (with Dr. Ke Tang, **successfully completed**)

- **(Co-)Supervisors for Honours students**
  1) Sam Meredith (Victoria University of Wellington), "Genetic programming hyper-heuristic for tourist planning"
  2) Michael Sirvid (Victoria University of Wellington), "Reinforcement learning for online bin packing"
  3) Corey Wilkinson (Victoria University of Wellington), "Genetic programming for stochastic tourist trip design"
  4) Daniel Yska (Victoria University of Wellington), "Co-evolving Routing and Sequencing Dispatching Rules for Dynamic Flexible Job Shop Scheduling", 2017 (with Prof Mengjie Zhang, **1 international conference (GECCO18) paper**)
  5) Valerie Chan (Victoria University of Wellington), "Evolutionary Computation for Dynamic Tourist Trip Planning", 2017 (with Dr Aaron Chen)
  6) Juan Wang (University of Science and Technology of China), "Guided Local Search for Arc Routing Problem", 2010 (with Dr. Ke Tang)

- **(Co-)Supervisors for Summer Scholarship Projects**
  1) Daniel Yska (Victoria University of Wellington), "Genetic Programming and Feature Selection for Dynamic Flexible Job Shop Scheduling", Oct 2017–Feb 2018 (with Prof Mengjie Zhang, **1 international conference (EuroGP17) paper**)
  2) Jordan MacLachlan (Victoria University of Wellington), "Machine Learning and Optimisation in Dynamic Vehicle Routing", Oct 2017–Feb 2018
  3) Josiah Grocott (Victoria University of Wellington), "Genetic Programming Hyper-heuristic for Dynamic Vehicle Routing", Oct 2016–Feb 2017, **1 international conference (IEEE CEC) paper**.
  4) Will Hardwick-Smith (Victoria University of Wellington), "Reinforcement Learning for AI in games", Oct 2016–Feb 2017 (with Dr Aaron Chen, **1 international conference (Australasian AI) paper**)
  5) Scott Holdaway (Victoria University of Wellington), "Evolving State Features in Reinforcement Learning through NEAT", Oct 2016–Feb 2017 (with Dr Aaron Chen, **1 international conference (ACM GECCO) poster paper**)
  6) Michael Riley (Victoria University of Wellington), "Feature Selection and Construction in Designing Dispatching Rules for Job Shop Scheduling", Oct 2015–Feb 2016, **1 international conference**

(IEEE CEC) paper.

7) Longfei Yan (Victoria University of Wellington), "Web Service Composition with New Meta-heuristics", Oct 2015–Feb 2016 (with Dr. Hui Ma, **1 international conference (IEEE CEC) paper**)

8) Michael Riley (Victoria University of Wellington), "Feature Selection and Construction in Designing Dispatching Rules for Job Shop Scheduling", Oct 2015–Feb 2016, **1 international conference (IEEE CEC) paper**

Research Collaborations

Intenational Collaborations

- Prof. Xin Yao, University of Birmingham, UK (*Xin is the President of IEEE Computational Intelligence Society*) — Evolutionary Computation, Combinatorial Optimisation
- Prof. Juergen Branke, University of Warwick, UK — Simulation Optimisation, Operations Research
- Prof. Ke Tang, University of Science and Technology of China — Arc Routing Problem, Evolutionary Computation
- Prof. Jinyan Li, University of Technology Sydney — Text mining
- Prof. Jianhua Liu, Fujian University of Technology, China — Particle Swarm Optimisation, Meta-heuristics
- Prof. Yan Wang, Jiangnan University — Job Shop Scheduling
- A/Prof. Xiaodong Li, RMIT University, Australia — Large Scale Optimisation
- A/Prof. Margaret Hamilton, RMIT University, Australia — Journey Planning and Public Transport Optimisation
- Dr. Su Nguyen, La Trobe University, Australia — Job Shop Scheduling, Genetic Programming
- Dr. Andy Song, RMIT University, Australia — Warehouse Optimisation, Genetic Programming
- Dr. Andreas Ernst, Monash University, Australia — Mathematical Programming, Warehouse Optimisation
- Dr. Flora Salim, RMIT University, Australia — Context-Aware Path-finding, Combinatorial Optimisation
- Dr. Jeffrey Chan, RMIT University, Australia — Personalised Itinerary Recommendation, Combinatorial Optimisation
- Dr. Mohammad Nabi Omidvar, University of Birmingham, UK — Large Scale Global Optimisation
- Dr. Leandro Minku, University of Birmingham, UK — Analysis in Evolutionary Computation
- Dr. Yuzhou Zhang, Anqing Normal University, China — Arc Routing Problem, Combinatorial Optimisation
- Dr. Wei Fang, Jiangnan University — Large Scale Optimisation

VUW Collaborations

- Prof. Mengjie Zhang (COMP): Evolutionary Scheduling and Combinatorial Optimisation, Web Service Composition and Location Allocations
- Prof. Marc Aurel Schnabel (School of Architecture): Evolutionary Computation for Architecture Optimisation
- Dr. Hui Ma (SWEN): Web Service Composition and Location Allocations
- Dr. Aaron Chen (NWEN): Job Shop Scheduling, Hyper-heuristics
- Dr. Sharon Gao (COMP): Evolutionary Text Mining
- Dr. Bing Xue (COMP): Evolutionary Feature Selection and Construction, Data Mining

Grants

- 2017–2020, "Automatic Design of Heuristics for Dynamic Arc Routing Problem with Genetic Programming", VUW1614, **Marsden Fund of New Zealand (Fast-Start)**, $300,000 NZD. (Sole PI)
- 2017–2020, "Cooperative Co-evolution for Large Scale Black Box Optimisation", 61673194, **National Natural Science Foundation of China**, ¥610,000 CNY (Key overseas member)
- 2018, "Solving Huawei's Job Shop Scheduling Problem", **Huawei Innovation Research Program**, $80,000 NZD. (Co-PI)
- 2018, "Real-Time Tourist Trip Recommendation using Genetic Programming", Victoria University of Wellington University Research Grant, $30,000 NZD. (Sole PI)
- 2017, "Evolving Interpretable Flexible Job Shop Scheduling Rules with GP", Victoria University of Wellington Research Establishment Grant, $10,000 NZD. (Sole PI)
- 2016–2018, "Digital Data in Schools: An exploration of research and practice", Victoria University of Wellington Digital Future Grant, $20,000 NZD. (Co-PI)
- 2014 RMIT Near-miss grant ($25,000 AUD awarded for being ranked top 10% among the unsuccessful Australian Research Council DECRA applications)
- 2009 IEEE CIS Walter Karplus Summer Research Grant
- 2009 IEEE CIS Student Travel Grant for IEEE Congress on Evolutionary Computation

Awards

- 2018, Victoria University of Wellington Early Research Excellence Award
- 2017, IEEE Transactions on Evolutionary Computation (top journal in EC, IF = 10.629) Outstanding Paper Award.
- 2014, 2nd Prize, Competition at IEEE World Congress on Computational Intelligence: Optimisation of Problems with Multiple Interdependent Components (as sole algorithm designer and programmer)
- 2010, Chinese Academy Of Sciences Dean's Award (Top 200 postgraduates all over China)

Research Reputation and Leadership

- **Vice-Chair** of IEEE CIS Emergent Technologies Technical Committee
- **Member** of
  - IEEE CIS Intelligent Systems Applications Technical Committee
  - IEEE Task Force on Evolutionary Computation for Feature Selection and Construction
  - IEEE Task Force on Evolutionary Scheduling and Combinatorial Optimization
  - IEEE New Zealand Central Section Committee
- **(Co-)Organiser** of
  - *Pacific Rim International Conference on Artificial Intelligence (PRICAI) 2019* (Tutorial Co-Chair)
  - *IEEE Congress on Evolutionary Computation (CEC) 2019* (Proceedings chair)
  - *Australasian Joint Conference on Artificial Intelligence 2018* (Sponsorship chair)
  - *International Conference on Data Intelligence and Security (ICDIS) 2018* (Technical Co-chair)
  - *International Conference on Computers and Industrial Engineering 2018* (Organising Committee)
  - Special Session on Evolutionary Scheduling and Combinatorial Optimization, *IEEE Congress on Evolutionary Computation (CEC) 2016, 2017, 2018, 2019*

- – Special Session on Evolutionary Computation for Service-Oriented Computing, *IEEE Congress on Evolutionary Computation (CEC) 2017, 2018, 2019*
- – Special Session on Evolutionary Computation for Smart Logistics, *IEEE Congress on Evolutionary Computation (CEC) 2019*
- – Special Session on Genetic Expression Programming and Its Applications, *IEEE Congress on Evolutionary Computation (CEC) 2019*
- – Special Session on Transfer Learning in Evolutionary Computation, *IEEE Congress on Evolutionary Computation (CEC) 2016, 2017*
- – Special Session on Computational Intelligence for Scheduling and Combinatorial Optimization, *Asia-Pacific Symposium on Intelligent and Evolutionary Systems (IES) 2016*
- – IEEE Symposium on Computational Intelligence in Production and Logistics Systems, *IEEE Symposium Series on Computational Intelligence (SSCI) 2013*

- **Invited Talks**
  - – Genetic Programming Hyper-heuristics and Its Applications, Shanghai Marine University, China, Jan 2019
  - – Genetic Programming for Evolving Dispatching Rules in Job Shop Scheduling, Northeastern University, China, Dec 2018
  - – Genetic Programming Hyper-heuristics and Its Applications, Nanjing University of AA, China, Dec 2018
  - – Genetic Programming Hyper-heuristics and Its Applications, Jiangnan University, China, Dec 2018
  - – Genetic Programming for Evolving Dispatching Rules in Job Shop Scheduling, Jiangnan University, China, Nov 2017
  - – Genetic Programming Hyper-Heuristics for Combinatorial Optimisation, Beihang University, China, Dec 2016
  - – Genetic Programming Hyper-Heuristics for Combinatorial Optimisation, IEEE CIS Webinar, Dec 2016
  - – Hyper-heuristics for Large and Dynamic Scheduling, University of Science and Technology of China, China, Dec 2015
  - – Divide-and-Conquer Methods for Improving Scalability, RMIT University, Australia, June 2015
  - – Divide-and-Conquer Methods for Improving Scalability, IBM Research, Australia, March 2015
  - – Large Scale Arc Routing, University of Birmingham, UK, July 2014
  - – Decomposition-based Methods for Large Scale Scheduling, Victoria University of Wellington, June 2014

Professional Activities

PhD thesis examiner

Examined 4 PhD theses from Victoria University of Wellington, University of Adelaide.

Masters thesis examiner

Examined 4 Masters theses from Victoria University of Wellington, University of Waikato, The University of the South Pacific.

Editor for International Journals

- **Editorial Board Member**, *International Journal of Bio-Inspired Computation*
- **Associate Editor**, *International Journal of Applied Evolutionary Computation*
- **Guest Editor**, Special Issue on Automated Design and Adaptation of Heuristics for Scheduling and Combinatorial Optimisation, *Genetic Programming and Evolvable Machines*, 2016

Peer Reviewer for International Journals

- IEEE Transactions on Evolutionary Computation (**ARC Tier A***)
- Evolutionary Computation Journal (**ARC Tier A**)
- IEEE Transactions on Cybernetics (**ARC Tier A**, *Outstanding Reviewer 2018*)
- European Journal of Operational Research (**ARC Tier A**)
- Transportation Research Part C (**ARC Tier A**)
- Journal of Heuristics (**ARC Tier A**)
- Journal of Operational Research Society (**ARC Tier A**)
- IEEE Computational Intelligence Magazine
- Applied Soft Computing (*Outstanding Reviewer 2015, 2017* - top 10% number of reviews)
- Information Sciences
- Robotics and Computer-Integrated Manufacturing
- IEEE Transactions on Services Computing
- IEEE Access
- Genetic Programming and Evolvable Machines
- Transportation Research Part D
- Engineering Applications of Artificial Intelligence
- Journal of Information Technology & Software Engineering
- Journal of Scheduling
- Journal of Computer Science and Technology
- Applied Sciences
- Soft Computing
- Complex & Intelligent Systems
- Computational Optimization and Applications
- NeuroComputing
- Memetic Computing
- Journal of Industrial and Production Engineering
- Journal of Computer Science and Technology
- Natural Computing
- EURASIP Journal on Wireless Communications and Networking
- Computers (ISSN 2073-431X)
- PLOS ONE Journal
- Frontier of Computer Science

International Conference Committee Member

- AAAI 2018 (**ARC/CORE Tier A***)
- ACM Genetic and Evolutionary Computation Conference (GECCO) 2017, 2018, 2019 (**ARC/CORE Tier A**)
- IEEE Congress on Evolutionary Computation (CEC) 2013, 2014, 2016, 2017, 2018, 2019 (**ARC Tier A**)
- Australasian Joint Conference on Artificial Intelligence (Australasian AI) 2015, 2017, 2018, 2019
- International Conference on Computational Collective Intelligence (ICCCI) 2019
- International Conference on Advanced Computational Intelligence (ICACI) 2018

- International Conference on Swarm Intelligence (ICSI) 2018
- International Conference on Data Mining and Big Data (DMBD) 2018, 2019
- International Conference on Data Intelligence and Security (ICDIS) 2018
- International Conference on Computer Science and Application Engineering 2018
- IEEE Symposium Series on Computational Intelligence (SSCI) 2016, 2017, 2018
- International Conference on Swarm Intelligence (ANTS) 2016, 2018
- International ACM Conference on Management of Emergent Digital EcoSystems (MEDES) 2018, 2019
- International Workshop on Evolutionary Computation and Its Applications (ECIA) 2018
- International Conference on Simulated Evolution And Learning (SEAL) 2014, 2017
- International Conference on Data Intelligence and Security (ICDIS) 2019
- Australasian Conference on Artificial Life and Computational Intelligence (ACALCI) 2016, 2017
- Asia-Pacific Symposium on Intelligent and Evolutionary Systems (IES) 2016, 2017
- International Conference on Innovations in Bio-Inspired Computing and Applications (IBICA) 2015, 2016, 2017
- International Conference of Soft Computing and Pattern Recognition (SoCPaR) 2015, 2016
- International Conference on Hybrid Intelligent Systems (HIS) 2016
- International Conference on Intelligent Systems Design and Applications (ISDA) 2016
- World Congress on Nature and Biologically Inspired Computing (NaBIC) 2016
- BRICS Congress on Computational Intelligence (BRCIS-CCI) 2015

Publications

Google Scholar Citations (Nov 2018):

- **Citations**: 1251 (1156 since 2013)
- **h-index**: 16 (15 since 2013)
- **i10-index**: 23 (23 since 2013)

Journals

1. Su Nguyen, **Yi Mei**, Bing Xue, Mengjie Zhang, "A Hybrid Genetic Programming Algorithm for Automated Design of Dispatching Rules," *Evolutionary Computation Journal*, accepted, 2018, ACM. (**ARC Tier A**)

2. Boxiong Tan, Hui Ma, **Yi Mei**, Mengjie Zhang, "Evolutionary Multi-objective Optimization for Web Service Location Allocation Problem," *IEEE Transactions on Services Computing*, DOI: 10.1109/TSC.2018.2793266, 2018, IEEE. (**Impact Factor = 3.520**)

3. John Park, **Yi Mei**, Su Nguyen, Gang Chen, Mengjie Zhang, "An investigation of ensemble combination schemes for genetic programming based hyper-heuristic approaches to dynamic job shop scheduling," *Applied Soft Computing*, vol. 63, pp. 72–86, 2018, Elsevier. (**Impact Factor = 3.541**)

4. Alexandre S. da Silva, **Yi Mei**, Hui Ma, Mengjie Zhang,"Evolutionary Computation for Automatic Web Service Composition – An Indirect Representation Approach," *Journal of Heuristics*, vol. 24, no. 3, pp. 425-456, 2018, Springer. (**ARC Tier A, Impact Factor = 1.807**)

5. **Yi Mei**, Su Nguyen, Bing Xue, Mengjie Zhang, "An Efficient Feature Selection Algorithm for Evolving Job Shop Scheduling Rules with Genetic Programming," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. 1, no. 5, pp. 339–353, 2017, IEEE.

6. Md. Jakirul, Xiaodong Li, **Yi Mei**, "A Time-Varying Transfer Function for Balancing Exploration and Exploitation ability for a Binary PSO," *Applied Soft Computing*, vol. 59, pp. 182–196, 2017, Elsevier. (**Impact Factor = 3.541**)

7. Mohammad Nabi Omidvar, Ming Yang, **Yi Mei**, Xiaodong Li, and Xin Yao, "DG2: A Faster and More Accurate Differential Grouping for Large-Scale Black-Box Optimization," *IEEE Transactions on Evolutionary Computation*, vol. 21, no. 6, pp. 929-942, 2017, IEEE. (**ARC Tier A*, Impact Factor = 10.629**)

8. Su Nguyen, **Yi Mei**, Mengjie Zhang, "Genetic Programming for Production Scheduling: A Survey with A Unified Framework," *Complex and Intelligent Systems*, vol. 3, no. 1, pp. 41–66, 2017, Springer.

9. Yuzhou Zhang, **Yi Mei**, Ke Tang, Keqing Jiang, "Memetic Algorithm with Route Decomposing for Periodic Capacitated Arc Routing Problem," *Applied Soft Computing*, vol. 52, pp. 1130–1142, 2017, Elsevier. (**Impact Factor = 3.541**)

10. Mohammad Saiedur Rahaman, **Yi Mei**, Margaret Hamilton, Flora D. Salim, "CAPRA: A contour-based accessible path routing algorithm," *Information Sciences*, vol. 385–386, pp. 157–173, 2017, Elsevier. (**Impact Factor = 3.364**)

11. Jing Xie, **Yi Mei**, Andreas T. Ernst, Xiaodong Li and Andy Song, "A Bi-level Optimisation Model for Grouping Constrained Storage Location Assignment Problems," *IEEE Transactions on Cybernetics*, DOI: 10.1109/TCYB.2016.2638820, 2016, IEEE. (**ARC Tier A, Impact Factor = 7.384**)

12. Jianhua Liu, **Yi Mei**, Xiaodong Li, "An Analysis of the Inertia Weight Parameter for Binary Particle Swarm Optimization," *IEEE Transactions on Evolutionary Computation*, vol. 20, no. 5, pp. 666–681, 2016, IEEE. (**ARC Tier A*, Impact Factor = 10.629**)

13. **Yi Mei**, Flora Salim, Xiaodong Li, "Efficient Meta-heuristics for Multi-Objective Time-Dependent Orienteering Problem," *European Journal of Operational Research*, vol. 254, no. 2, pp. 443–457, 2016, Elsevier. (**ARC Tier A, Impact Factor = 3.297**)

14. Pietro A. Consoli, **Yi Mei**, Leandro L. Minku, Xin Yao, "Dynamic Selection of Evolutionary Operators Based on Online Learning and Fitness Landscape Analysis," *Soft Computing*, vol. 20, no. 10, pp. 3889–3914, 2016, Springer. (**Impact Factor = 2.472**)

15. **Yi Mei**, Xiaodong Li, and Xin Yao, "On Investigation of Interdependence Between Sub-problems of the Travelling Thief Problem," *Soft Computing*, vol. 20, no. 1, pp. 157–172, 2016, Springer. (**Impact Factor = 2.472**)

16. **Yi Mei**, Mohammad Nabi Omidvar, Xiaodong Li, and Xin Yao, "Competitive Divide-and-Conquer Algorithm for Unconstrained Large Scale Black-Box Optimization," *ACM Transactions on Mathematical Software*, vol. 42, no. 2, pp. 13:1–24, 2016, ACM. (**ARC Tier A*, Impact Factor = 3.275**)

17. **Yi Mei**, Xiaodong Li, and Xin Yao, "Cooperative Co-evolution with Route Distance Grouping for Large-Scale Capacitated Arc Routing Problems," *IEEE Transactions on Evolutionary Computation*, vol. 18, no. 3, pp. 435–449, 2014, IEEE. (**ARC Tier A*, Impact Factor = 10.629**)

18. Mohammad Nabi Omidvar, Xiaodong Li, **Yi Mei**, and Xin Yao, "Cooperative Co-evolution with Differential Grouping for Large Scale Optimization," *IEEE Transactions on Evolutionary Computation*, vol. 18, no. 3, pp. 378–393, 2014, IEEE. (**ARC Tier A*, Impact Factor = 10.629, 2017 IEEE TEC Outstanding Paper Award**)

19. **Yi Mei**, Ke Tang, and Xin Yao, "A Memetic Algorithm for Periodic Capacitated Arc Routing Problem," *IEEE Transactions on Systems, Man, and Cybernetics: Part B*, Vol. 41, no. 6, pp. 1654–1667, 2011, IEEE. (**ARC Tier A, Impact Factor = 7.384**)

20. **Yi Mei**, Ke Tang, and Xin Yao, "Decomposition-based Memetic Algorithm for Multi-Objective Capacitated Arc Routing Problems," *IEEE Transactions on Evolutionary Computation*, vol. 15, no. 2, pp. 151–165, 2011, IEEE. (**ARC Tier A*, Impact Factor = 10.629**)

21. Ke Tang, **Yi Mei**, and Xin Yao, "Memetic Algorithm with Extended Neighborhood Search for Capacitated Arc Routing Problems," *IEEE Transactions on Evolutionary Computation*, vol. 13, no. 5, pp. 1151–1166, 2009, IEEE. (**ARC Tier A*, Impact Factor = 10.629**)

22. **Yi Mei**, Ke Tang and Xin Yao, "A Global Repair Operator for Capacitated Arc Routing Problem," *IEEE Transactions on Systems, Man, and Cybernetics: Part B*, vol. 39, no. 3, pp. 723–734, 2009, IEEE. (**ARC Tier A, Impact Factor = 7.384**)

Refereed Book Chapters

23. Daniel Yska, **Yi Mei**, Mengjie Zhang, "Genetic Programming Hyper-heuristic with Cooperative Co-evolution for Dynamic Flexible Job Shop Scheduling," *Proceedings of European Conference on Genetic Programming (EuroGP)*, pp. 306–321, 2017, Springer.

24. John Park, **Yi Mei**, Su Nguyen, Gang Chen, Mengjie Zhang, "Investigating Machine Breakdown Genetic Programming Approach for Dynamic Job Shop Scheduling," *Proceedings of European Conference on Genetic Programming (EuroGP)*, pp. 253–270, 2017, Springer.

25. Atiya Masood, Gang Chen, Yi Mei, Mengjie Zhang, "Reference Point Adaptation Method for Genetic Programming Hyper-heuristic in Many-Objective Job Shop Scheduling," *Proceedings of European Conference on Evolutionary Computation in Combinatorial Optimization (EvoCOP)*, pp. 116–131, 2017, Springer.

26. **Yi Mei**, Su Nguyen, Mengjie Zhang, "Constrained Dimensionally Aware Genetic Programming for Evolving Interpretable Dispatching Rules in Dynamic Job Shop Scheduling," *Simulated Evolution and Learning (SEAL)*, LNCS vol. 10593, pp. 435-447, 2017, Springer.

27. Will Hardwick-Smith, Yiming Peng, Gang Chen, **Yi Mei**, Mengjie Zhang, "Evolving Transferable Solutions to Gameplay Tasks via NEAT with Phased Search," Australasian AI, Lecture Notes in Computer Science, vol. 10400, pp. 39-51, 2017, Springer.

28. **Yi Mei**, Su Nguyen, Mengjie Zhang, "Evolving Time-Invariant Dispatching Rules in Job Shop Scheduling with Genetic Programming", *Proceedings of the 20th European Conference on Genetic Programming (EuroGP)*, Lecture Notes in Computer Science, vol. 10196, pp. 147-163, 2017, Springer.

29. Qi Chen, Bing Xue, **Yi Mei**, Mengjie Zhang, "Geometric Semantic Crossover with an Angle-Aware Mating Scheme in Genetic Programming for Symbolic Regression", *Proceedings of the 20th European Conference on Genetic Programming (EuroGP)*, Lecture Notes in Computer Science, vol. 10196, pp. 229-245, 2017, Springer.

30. John Park, **Yi Mei**, Su Nguyen, Gang Chen, Mengjie Zhang, "Investigating the Generality of Genetic Programming based Hyper-heuristic Approach to Dynamic Job Shop Scheduling with Machine Breakdown," *Australasian Conference on Artificial Life and Computational Intelligence*, pp. 301-313, 2017, Springer.

31. Atiya Masood, **Yi Mei**, Gang Chen, Mengjie Zhang, "A PSO-based Reference Point Adaption Method for Genetic Programming Hyper-heuristic in Many-Objective Job Shop Scheduling," *Australasian Conference on Artificial Life and Computational Intelligence*, pp. 326-338, 2017, Springer.

32. Deepak Karunakaran, **Yi Mei**, Gang Chen, Mengjie Zhang, "Dynamic Job Shop Scheduling Under Uncertainty Using Genetic Programming," *Proceedings of the 20th Asia-Pacific Symposium on Intelligent and Evolutionary Systems*, pp. 195-210, 2016, Springer.

33. Alexandre S. da Silva, **Yi Mei**, Hui Ma, Mengjie Zhang, "Particle Swarm Optimisation with Sequence-Like Implicit Representation for Web Service Composition," *Proceedings of the 16th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP). Lecture Notes in Computer Science*, vol. 9595, pp. 202–218, 2016. (**Nominated for the best paper award**)

34. Boxiong Tan, **Yi Mei**, Hui Ma, Mengjie Zhang, "Particle Swarm Optimization for Multi-Objective Web Service Location Allocation," *Proceedings of the 16th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP). Lecture Notes in Computer Science*, vol. 9595, pp. 219–234, 2016.

35. John Park, **Yi Mei**, Su Nguyen, Aaron Chen, Mark Johnston, Mengjie Zhang, "Genetic Programming based Hyper-heuristic to Dynamic Job Shop Scheduling: A Cooperative Coevolutionary Approach," *Proceedings of the 19th European Conference on Genetic Programming (EuroGP). Lecture Notes in Computer Science*, vol. 9594, pp. 115-132, 2016.

36. **Yi Mei**, Xiaodong Li and Xin Yao, "Improving Efficiency of Heuristics for the Large Scale Traveling Thief Problem," *Simulated Evolution and Learning - 10th International Conference (SEAL), Lecture Notes in Computer Science*, vol. 8886, pp. 631-643, 2014.

37. Jing Xie, **Yi Mei**, Andreas Ernst, Xiaodong Li and Andy Song, "Scaling Up Solutions to Storage Location Assignment Problems by Genetic Programming," *Simulated Evolution and Learning - 10th International Conference (SEAL), Lecture Notes in Computer Science*, vol. 8886, pp. 691-702, 2014.

38. **Yi Mei**, Ke Tang and Xin Yao, "Evolutionary Computation for Dynamic Capacitated Arc Routing Problem," *Evolutionary Computation for Dynamic Optimization Problems*, Shengxiang Yang and Xin Yao (Eds.), Studies in Computational Intelligence Volume 490, pp. 377-401, 2013.

Conference Proceedings

39. Fangfang Zhang, **Yi Mei** and Mengjie Zhang, "Genetic Programming with Multi-tree Representation for Dynamic Flexible Job Shop Scheduling," *The Australasian Joint Conference on Artificial Intelligence*, pp. 472-484, 2018. (**Best Paper Runner-Up Award**)

40. Fangfang Zhang, **Yi Mei** and Mengjie Zhang, "Surrogate-assisted Genetic Programming for Dynamic Flexible Job Shop Scheduling," *The Australasian Joint Conference on Artificial Intelligence*, pp. 766-772, 2018.

41. Jordan MacLachlan, **Yi Mei**, Juergen Branke and Mengjie Zhang, "An improved Genetic Programming Hyper-heuristic for the Uncertain Capacitated Arc Routing Problem," *The Australasian Joint Conference on Artificial Intelligence*, pp. 432-444, 2018.

42. John Park, **Yi Mei**, Su Nguyen, Gang Chen and Mengjie Zhang, "Evolutionary Multitask Optimisation for Dynamic Job Shop Scheduling using Niched Genetic Programming," *The Australasian Joint Conference on Artificial Intelligence*, pp. 739-751, 2018.

43. Atiya Masood, Gang Chen, **Yi Mei** and Mengjie Zhang, "Adaptive Reference Point Generation for Many-Objective Optimization using NSGA-III," *The Australasian Joint Conference on Artificial Intelligence*, pp. 358-370, 2018.

44. Mahdi Abdollahi, Xiaoying Gao, **Yi Mei**, Shameek Ghosh and Jinyan Li, "Uncovering discriminative knowledge-guided medical concepts for classifying coronary artery disease notes," *The Australasian Joint Conference on Artificial Intelligence*, pp. 104-110, 2018.

45. Boxiong Tan, Hui Ma and **Yi Mei**, "A Genetic Programming Hyper-heuristic Approach for online Resource Allocation in Container-based Clouds," *The Australasian Joint Conference on Artificial Intelligence*, pp. 146-152, 2018.

46. Deepak Karunakaran, **Yi Mei**, Gang Chen and Mengjie Zhang, "Sampling Heuristics for Multi-Objective Dynamic Job Shop Scheduling Using Genetic Programming," *International Conference on Parallel Problem Solving from Nature (PPSN)*, in press, 2018. (**ARC and CORE Tier A**)

47. Alexandre S. da Silva, Hui Ma, **Yi Mei**, Mengjie Zhang, "A Hybrid Memetic Approach for Fully Automated Multi-Objective Web Service Composition," *IEEE International Conference on Web Services*, DOI: 10.1109/ICWS.2018.00011, 2018, IEEE. (**ARC and CORE Tier A, Best Paper Runner-Up**)

48. **Yi Mei**, Mengjie Zhang, "Genetic Programming Hyper-Heuristic for Multi-Vehicle Uncertain Capacitated Arc Routing Problem", *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, in press, 2018, ACM. (**ARC and CORE Tier A**)

49. Daniel Yska, **Yi Mei**, Mengjie Zhang, "Feature Construction in Genetic Programming Hyper-Heuristic for Dynamic Flexible Job Shop Scheduling", *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, in press, 2018, ACM. (**ARC and CORE Tier A**)

50. **Yi Mei**, Mengjie Zhang, "Genetic Programming Hyper-heuristic for Stochastic Team Orienteering Problem with Time Windows," *Proceedings of IEEE Congress on Evolutionary Computation (CEC)*, in press, 2018, IEEE (**ARC Tier A**).

51. Yuxin Liu, **Yi Mei**, Mengjie Zhang, "Automated Heuristic Design Using Genetic Programming Hyper-Heuristic for Uncertain Capacitated Arc Routing Problem," *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, pp. 290-297, 2017, ACM. (**ARC and CORE Tier A**)

52. Deepak Karunakaran, **Yi Mei**, Gang Chen and Mengjie Zhang, "Toward Evolving Dispatching Rules for Dynamic Job Shop Scheduling Under Uncertainty," *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, pp. 282-289, 2017, ACM. (**ARC and CORE Tier A**)

53. Alexandre S. da Silva, **Yi Mei**, Hui Ma, Mengjie Zhang, "Fragment-based Genetic ProgrammingMulti-Objective Webfor Fully Automated Service Composition," *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO)*, pp. 353-360, 2017, ACM.

54. Yiming Peng, Gang Chen, Scott Holdaway, **Yi Mei**, Mengjie Zhang, "Evolving State Features for Actor-Critic Reinforcement Learning through NEAT," *Genetic and Evolutionary Computation Conference (GECCO)*, pp. 135–136, 2017, ACM.

55. Josiah Jacobsen-Grocott, **Yi Mei**, Gang Chen and Mengjie Zhang, "Evolving Heuristics for Dynamic Vehicle Routing with Time Windows Using Genetic Programming," *Proceedings of IEEE Congress on Evolutionary Computation (CEC)*, pp. 1948–1955, 2017. (**ARC Tier A**)

56. Deepak Karunakaran, **Yi Mei**, Gang Chen and Mengjie Zhang, "Evolving Dispatching Rules for Dynamic Job Shop Scheduling with Uncertain Processing Times," *Proceedings of IEEE Congress on Evolutionary Computation (CEC)*, pp. 364–371, 2017. (**ARC Tier A**)

57. Boxiong Tan, Hui Ma and **Yi Mei**, "A NSGA-II-based Approach for Service Resource Allocation in Cloud," *Proceedings of IEEE Congress on Evolutionary Computation (CEC)*, pp. 2574–2581, 2017. (**ARC Tier A**)

58. **Yi Mei**, Mengjie Zhang, Su Nguyen, "Feature Selection in Evolving Job Shop Dispatching Rules with Genetic Programming," *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, pp. 365–372, 2016. (**ARC and CORE Tier A**)

59. **Yi Mei**, Bing Xue, Mengjie Zhang, "Fast Bi-Objective Feature Selection Using Entropy Measures and Bayesian Inference," *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, pp. 469–476, 2016. (**ARC and CORE Tier A**)

60. **Yi Mei**, Mengjie Zhang, "A Comprehensive Analysis on Reusability of GP-Evolved Job Shop Dispatching Rules," *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 3590–3597, 2016. (**ARC Tier A**)

61. John Park, **Yi Mei**, Su Nguyen, Aaron Chen, Mark Johnston, Mengjie Zhang, "Niching Genetic Programming based Hyper-heuristic Approach to Dynamic Job Shop Scheduling: An Investigation into Distance Metrics,", *Proceedings of Genetic and Evolutionary Computation Conference (GECCO)*, pp. 109–110, 2016. (**ARC and CORE Tier A**)

62. Su Nguyen, **Yi Mei**, Hui Ma, Aaron Chen, Mengjie Zhang, "Evolutionary Scheduling and Combinatorial Optimisation: Applications, Challenges, and Future Directions", *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 3053–3060, 2016. (**ARC Tier A**)

63. Alexandre S. da Silva, **Yi Mei**, Hui Ma, Mengjie Zhang, "A Memetic Algorithm-Based Indirect Approach to Web Service Composition," *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 3385–3392, 2016. (**ARC Tier A**)

64. Atiya Masood, **Yi Mei**, Aaron Chen, Mengjie Zhang, "Comparison of MOEAs for Solving Many-Objective Job Shop Scheduling," *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 209–216, 2016. (**ARC Tier A**)

65. Michael Riley, **Yi Mei**, Mengjie Zhang, "Adaptive Terminal Ranking and Selection in Evolving Job Shop Dispatching Rules with Genetic Programming," *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 3362–3369, 2016. (**ARC Tier A**)

66. Longfei Yan, **Yi Mei**, Hui Ma, Mengjie Zhang, "Evolutionary Web Service Composition with Graph-based Memetic Algorithm," *Proceedings of IEEE World Congress on Computational Intelligence (WCCI)*, pp. 201–208, 2016. (**ARC Tier A**)

67. Jing Xie, **Yi Mei**, and Andy Song, "Evolving Self-Adaptive Tabu Search Algorithm for Storage Location Assignment Problems," *Proceedings of the Companion Publication of the 2015 on Genetic and Evolutionary Computation Conference (GECCO)*, ACM Press, pp. 779-780, Madrid, Spain, 11-15 July 2015. (**ARC and CORE Tier A**)

68. **Yi Mei**, Xiaodong Li, Flora Salim and Xin Yao, "Heuristic Evolution with Genetic Programming for Traveling Thief Problem," *Proceedings of the 2015 IEEE Congress on Evolutionary Computation (CEC)*, IEEE Press, pp. 2753–2760, Sendai, Japan, 25-28 May, 2015. (**ARC Tier A**)

69. Jing Xie, **Yi Mei**, Andreas Ernst, Xiaodong Li and Andy Song, "A Restricted Neighbourhood Tabu Search for Storage Location Assignment Problem," *Proceedings of the 2015 IEEE Congress on Evolutionary Computation*, IEEE Press, pp. 2805–2812, Sendai, Japan, 25-28 May 2015. (**ARC Tier A**)

70. **Yi Mei**, Xiaodong Li and Xin Yao, "Variable Neighborhood Decomposition for Large Scale Capacitated Arc Routing Problem," *Proceedings of the 2014 IEEE Congress on Evolutionary Computation (CEC2014)*, pp. 1313–1320, Beijing, China, 6-11 July 2014. (**ARC Tier A**)

71. Jing Xie, **Yi Mei**, Andreas Ernst, Xiaodong Li and Andy Song, "A Genetic Programming-based Hyper-heuristic Approach for Storage Location Assignment Problem," *Proceedings of the 2014 IEEE Congress*

on Evolutionary Computation (CEC2014), pp. 3000-3007, Beijing, China, 6-11 July 2014. (**ARC Tier A**)

72. Mohammad Nabi Omidvar, **Yi Mei** and Xiaodong Li, "Effective Decomposition of Large-Scale Separable Continuous Functions for Cooperative Co-evolutionary Algorithms," *Proceedings of the 2014 IEEE Congress on Evolutionary Computation (CEC2014)*, pp. 1305-1312, Beijing, China, 6-11 July 2014. (**ARC Tier A**)

73. **Yi Mei**, Xiaodong Li and Xin Yao, "Decomposing Large-Scale Capacitated Arc Routing Problems using a Random Route Grouping Method," *Proceedings of the 2013 IEEE Congress on Evolutionary Computation (CEC2013)*, IEEE Press, pp. 1013–1020, Cancun, Mexico, 20-23 June 2013. (**ARC Tier A**)

74. Elain Wah, **Yi Mei**, and Benjamin Wah, "Portfolio Optimization through Data Conditioning and Aggregation," *Proceedings of the 2011 IEEE International Conference on Tools with Artificial Intelligence*, pp. 253–260, 2011.

75. **Yi Mei**, Ke Tang and Xin Yao, "Capacitated Arc Routing Problem in Uncertain Environments," *Proceedings of the 2010 IEEE Congress on Evolutionary Computation (CEC2010)*, Barcelona, Spain, 18-23 July 2010, IEEE Press. (**ARC Tier A**)

76. Haobo Fu, **Yi Mei**, Ke Tang and Yanbo Zhu, "Memetic Algorithm with Heuristic Candidate List Strategy for Capacitated Arc Routing Problem," *Proceedings of the 2010 IEEE Congress on Evolutionary Computation (CEC2010)*, Barcelona, Spain, 18-23 July 2010, IEEE Press. (**ARC Tier A**)

77. **Yi Mei**, Ke Tang and Xin Yao, "Improved Memetic Algorithm for Capacitated Arc Routing Problem," *Proceedings of the 2009 IEEE Congress on Evolutionary Computation (CEC2009)*, IEEE Press, pp. 1699–1706, Trondheim, Norway, 18-21 May 2009. (**ARC Tier A**)

Patents

- Chinese Patent, **Search method for path planning**, Publication Number 101650805A, 2010.