Mustafa MISIR[1,2,3,4,5,6,7,8,9]
Curriculum Vitæ

Division of Natural and Applied Sciences
Duke Kunshan University
Duke Avenue No: 8
215316 Kunshan
Jiangsu Province / China

Tel: +90 551 000 0000 / +86 (0) 512 3665 7863
Email: mustafamisir [at] gmail.com
Web: http://mustafamisir.github.io

Turkish Citizen

EDUCATION

Ph.D. KU Leuven, Computer Science, 2009–2012. Advisors: Patrick De Causmaecker, Greet Vanden Berghe and Katja Verbeeck
M.Sc. Yeditepe University, Computer Engineering, 2007–2008. Advisor: Ender Özcan
B.Sc. Yeditepe University, Computer Engineering, 2002–2007. Advisor: Ender Özcan

OTHER EDUCATIONAL ACTIVITIES

Learning and Innovation Fellowship (LIF) Programme by Duke Kunshan U & Duke U, 2021
Operations Management Summer Camp by Lee Kong Chian School of Business @ Singapore MU, 2014
Program Analysis and Verification Spring School by Labex Digicosme @ Supelec, 2013
A Forum in Computation, Inference and Optimization by Michael Jordan (U.C. Berkeley) @ IHES, 2013
Symposium on OR Problems and AI Techniques by KU Leuven & VUB @ KU Leuven, 2011
Dynadec/COMET Training by Pascal Van Hentenryck (Brown U.) @ Louvain-la-Neuve, 2009
Hyper-heuristics Summer School by Rong Qu & Gabriela Ochoa (U. Nottingham) @ Istanbul TU, 2007

EXPERIENCE

July 2021–	∼	Associate Professor, Data and Computational Science, Division of Natural and Applied Sciences, Data Science Major Coordinator (July 2023–2024) & Leading the Machine lEarning and Operations Research (MEmORy) Lab[10], Duke Kunshan University, China
Apr. 2019–June 2021		Associate Professor (Chair), Department of Computer Engineering / Vice Dean of Engineering & Vice Chair of the Medical Artificial Intelligence Research and Application Center (TYZAUM) & Leading the Machine lEarning and Operations Research (MEmORy) Lab, Istinye University, Türkiye
Apr. 2016–Apr. 2019		Associate Professor, Leading the Machine lEarning and Operations Research (MEmORy) Lab, Institute of Machine Learning and Computational Intelligence, College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, China
Jan. 2015–Mar. 2016		Postdoctoral Researcher, Machine Learning for Automated Algorithm Design (ML4AAD) Research Group, Department of Computer Science, University of Freiburg, Germany
Nov. 2013–Jan. 2015		Postdoctoral Researcher, Living Analytics Research Centre (LARC) (a joint institute with Carnegie Mellon University), School of Information Systems, Singapore Management University, Singapore
Oct. 2012–Nov. 2013		Postdoctoral Researcher (ERCIM Marie Curie Fellow), Machine Learning and Optimisation (TAO) Team, LRI, Université Paris-Sud XI - INRIA Saclay, France

---

[1]Institutional Email(s): mustafa.misir [at] dukekunshan.edu.cn / mm940 [at] duke.edu
[2]Other Academic Email(s): mustafa.misir [at] ieee.org
[3]https://scholar.google.com/citations?user=MuJmTFUAAAAJ
[4]https://scholars.duke.edu/person/mustafa.misir
[5]https://orcid.org/0000-0002-6885-6775
[6]https://scopus.com/authid/detail.uri?authorId=36458858100
[7]https://publons.com/researcher/2847814/mustafa-misir/
[8]https://dblp.org/pid/51/8572.html
[9]https://linkedin.com/in/mustafa-misir-2193213/
[10]http://memoryrlab.github.io

Oct. 2013–Oct. 2013	Visiting Researcher, Dynamic and Distributed Information Systems (DDIS) Group, Department of Informatics, University of Zurich, Switzerland
June 2013–June 2013	Visiting Researcher, Laboratory for Relational Algorithmics, Complexity and Learning (LARCA), Department of Software, Universitat Politécnica de Catalunya, Spain
Jan. 2009–Oct. 2012	Doctoral Researcher, Combinatorial Optimisation and Decision Support (CODeS) Research Group, Department of Computer Science, KU Leuven, Belgium
Sept. 2007–Aug. 2008	Research Assistant, Artificial Intelligence (AR+I) Laboratory, Department of Computer Engineering, Yeditepe University, Türkiye
Sept. 2007–Aug. 2008	Teaching Assistant, Department of Computer Engineering, Yeditepe University, Türkiye
June 2007–Sept. 2007	Researcher, Artificial Intelligence (AR+I) Laboratory, Department of Computer Engineering, Yeditepe University, Türkiye
Dec. 2005–June 2007	Software Developer, Logic Information Systems & Consultant Plc., Türkiye
Sept. 2006–June 2007	Student Assistant, Department of Computer Engineering, Yeditepe University, Türkiye
July 2006–Aug. 2006	Intern as a Software Developer, Nortel Networks Netas R&D, Türkiye
June 2005–Sept. 2005	Intern as a Database Developer, Data Automation Center, Yeditepe University, Türkiye
June 2005–Sept. 2005	Intern as a Research Assistant, Network Laboratory, Department of Computer Engineering, Yeditepe University, Türkiye

TEACHING[11],[12]

Spring 2026	Introduction to Programming and Data Structures (COMPSCI 201) [40 students], LLMs as Algorithm Co-Designers (Exploratory Mini-Term) [18 Students] @ Duke Kunshan University
Fall 2025	Design and Analysis of Algorithms (COMPSCI 308) [7 students], Introduction to Databases (COMPSCI 310) [11 students], Principles of Machine Learning (STATS 302) [24 students] @ Duke Kunshan University
Summer 2025	Introduction to Computer Science and Programming (2000520013002) [102 students] @ International Summer School, Wuhan University
Spring 2025	Introduction to Programming and Data Structures (COMPSCI 201) [60 students], Design and Analysis of Algorithms (COMPSCI 308) [32 students] @ Duke Kunshan University
Fall 2024	Principles of Machine Learning (STATS 302 / COMPSCI 309) [10 students], Introduction to Programming and Data Structures (COMPSCI 201) [40 students], Introduction to Databases (COMPSCI 310) [21 students] @ Duke Kunshan University
Summer 2024	Introduction to Computer Science and Programming (2000520013002) [91 students] @ International Summer School, Wuhan University
Spring 2024	Algorithms and Databases (COMPSCI 301) [41 students], Design and Analysis of Algorithms (COMPSCI 308) [28 students], Elements of Machine Learning (COMPSCI 309) [10 students], Software Engineering (ECE 651K–Graduate) [23 students] @ Duke Kunshan University
Fall 2023	Principles of Machine Learning (STATS 302) [11 students], Introduction to Databases (COMPSCI 310) [8 students] @ Duke Kunshan University
Spring 2023	Introduction to Computer Science (COMPSCI 101) [33 students], Elements of Machine Learning (COMPSCI 309) [7 students], Automated Machine Learning (AutoML – Signature Work Mini-Term) [18 Students] @ Duke Kunshan University
Fall 2022	Principles of Machine Learning (STATS 302) [9 students], Design and Analysis of Algorithms (COMPSCI 308) [3 students] @ Duke Kunshan University
Spring 2022	Introduction to Data Science (STATS 102) [25 students] @ Duke Kunshan University
Fall 2021	Principles of Machine Learning (STATS 302) [22 students] @ Duke Kunshan University
Spring 2020	Data Mining (ENT018) [11 students], Database Systems (ISE204 / ENT019) [32 students] @ Department of Computer Engineering, Istinye University
Fall 2020	Principles of Artificial Intelligence (COE207) [50 + 52 students], Machine Learning (ENS305) [2 students] @ Department of Computer Engineering, Istinye University

[11] the courses prior to Fall 2015 are the ones supported as a teaching assistant
[12] https://mustafamisir.github.io/teach.html

Spring 2019	Principles of Artificial Intelligence (COE206) [10 students], Neural Networks and Machine Learning (YAZ 304) [15 students] @ Department of Computer Engineering, Istinye University
Fall 2019	Problem Solving with Computers in C (COE201) [8 students], Computational Thinking (XXE103) [140 (Section 1: 67; Section 2: 73) students] @ Department of Computer Engineering, Istinye University
Spring 2019	Machine Learning with Python (Artificial Intelligence Workshop) [30 students] @ Department of Computer Engineering, Istinye University
Fall 2018	Modern Software Development Technology (1610311W) @ College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics
Spring 2017	Knowledge Management (1610308W) @ College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics
Fall 2017	Modern Software Development Technology (1610311W) @ College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics
Fall 2016	Modern Software Development Technology (1610311W), Software Development/+ Methods Experiment (16302180/+90), Data Mining @ College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics
Fall 2015	Machine Learning and Optimization for Algorithm Design @ Department of Computer Science, University of Freiburg
Fall 2014	Guided Research in Information Systems (IS470) @ School of Information Systems, Singapore Management University
Fall 2010	Optimisation Techniques (59235) @ Department of Computer Science, KU Leuven
Spring 2008	Data Structures (CSE211), Software Engineering (CSE344), Data Communications & Computer Networks (CSE471), Special Topics in Computer Networks (CSE402) @ Department of Computer Engineering, Yeditepe University
Fall 2007	Data Structures (CSE211), Introduction to Artificial Intelligence (CSE462), Software Engineering (CSE344) @ Department of Computer Engineering, Yeditepe University
Spring 2007	Computer Programming Practices (CSE112), Principles of Programming Languages (CSE252), Analysis of Algorithms (CSE311) @ Department of Computer Engineering, Yeditepe University
Fall 2006	Computer Programming Practices (CSE112), Principles of Programming Languages (CSE252), Digital Electronics (CSE321) @ Department of Computer Engineering, Yeditepe University

COLLABORATORS

I have published/submitted/been working on papers with the following 49 co-authors: Floyd A. Beckford (Duke Kunshan U.), Burak Bilgin (KU Leuven), Edmund K. Burke (U. Nottingham), Xinye Cai (Nanjing U. Aeronautics & Astronautics), Siyuan Cao (Duke Kunshan U.), Josep Carmona (U. Politécnica de Catalunya), Patrick De Causmaecker (KU Leuven), Tianlai Chen (Duke Kunshan U.), Shih-Fen Cheng (Singapore Management U.), Peter Demeester (KAHO-KU Leuven), Zhun Fan (Shantou U.), Aldy Gunawan (Singapore Management U.), Daniel Handoko (Singapore Management U.), Zhongyi Hu (Wuhan U.), Frank Hutter (U. Freiburg), Graham Kendall (U. Nottingham), Ahmed Kheiri (U. Nottingham/Cardiff), Hoong Chuin Lau (Singapore Management U.), Jingwei Li (Duke Kunshan U.), Yajuan Lin (Texas A&M U.), Yuanjun Lin (Duke Kunshan U.), Marius Lindauer (U. Freiburg), Jiang Lingxiao (Singapore Management U.), Jiazheng Miao (Duke Kunshan U.), Samadhi Nallaperuma (U. Sheffield), Dang Viet Anh Nguyen (Singapore Management U. / TU Denmark), Gabriela Ochoa (U. Nottingham/Stirling), Ender Özcan (U. Nottingham), Joel Ribeiro (U. Politécnica de Catalunya), Michele Sebag (CNRS-INRIA-U. Paris Sud XI), Xiwen Shu (Duke Kunshan U.), Pieter Smet (KU Leuven), Muhammad Sulaman (Nanjing U. Aeronautics & Astronautics), Wenxue Sun (Nanjing U. Aeronautics & Astronautics), Kay Chen Tan (City U. Hong Kong), Wim Vancroonenburg (KU Leuven), Greet Vanden Berghe (KU Leuven), Pieter Vansteenwegen (KU Leuven), Pradeep Varakantham (Singapore Management U.), Katja Verbeeck (KAHO-KU Leuven), Markus Wagner (U. Adelaide), Jiabao Brad Wang (Duke Kunshan U.), Tony Wauters (KU Leuven), Hongxuan Wu (Duke Kunshan U.), Chao Xia (Nanjing U. Aeronautics & Astronautics), Li Xiang (Singapore Management U.), Tao Xu (Civil Aviation U. China), Yiliang Yuan (Duke Kunshan U.), Huiyuan Zhou (Duke Kunshan U.)

Journal Papers

1. "Molecular Embedding–Based Algorithm Selection in Protein–Ligand Docking" (joint work with Jiabao Brad Wang, Siyuan Cao, Hongxuan Wu and Yiliang Yuan), arXiv preprint arXiv:2512.02328, under review.
https://arxiv.org/pdf/2512.02328

2. "Deep Reinforcement Learning Framework for Solving the Stochastic E-Waste Collection Problem" (joint work with Dang Viet Anh Nguyen, Aldy Gunawan, Lim Kwan Hui and Pieter Vansteenwegen), *European Journal of Operational Research*, Elsevier, 2025 (SCI – IF: 6.0).
https://www.sciencedirect.com/science/article/pii/S0377221725003182

3. "Deep Learning for Predicting 16S rRNA Copy Number" (joint work with Jiazheng Miao, Tian-Lai Zang and Yajuan Lin), *Scientific Reports*, Nature Portfolio, 2024 (SCI – IF: 5.516).
https://www.biorxiv.org/content/10.1101/2022.11.26.518038v3
https://www.nature.com/articles/s41598-024-64658-5

4. "Algorithm Selection for Protein-Ligand Docking: Strategies and Analysis on ACE" (joint work with Tianlai Chen, Xiwen Shu, Huiyuan Zhou and Floyd A. Beckford), *Scientific Reports*, 13(1), Nature Portfolio, 2023 (SCI – IF: 5.516).
https://chemrxiv.org/engage/chemrxiv/article-details/637bc3f374b7b6b5a70684da
https://www.nature.com/articles/s41598-023-35132-5

5. "A Bi-objective Constrained Robust Gate Assignment Problem: Formulation, Instances and Algorithm" (joint work with Xinye Cai, Wenxue Sun, Qin Kai, K.C. Tan and Zhun Fan), *IEEE Transactions on Cybernetics*, 51(9), IEEE, 2021 (SCI – IF: 11.8).
https://ieeexplore.ieee.org/abstract/document/8944038/

6. "A Case Study of Algorithm Selection for the Traveling Thief Problem" (joint work with Markus Wagner, Marius Lindauer, Samadhi Nallaperuma and Frank Hutter), *Journal of Heuristics (arXiv:1609.00462)*, 24, Springer, 2018 (SCI – IF: 1.129).
https://link.springer.com/article/10.1007/s10732-017-9328-y

7. "Alors: an Algorithm Recommender System" (joint work with Michele Sebag), *Artificial Intelligence*, 244, Elsevier, 2017 (SCI – IF: 3.034).
https://www.sciencedirect.com/science/article/pii/S0004370216301436

8. "An Analysis of Generalised Heuristics for Vehicle Routing and Personnel Rostering Problems" (joint work with Pieter Smet and Greet Vanden Berghe), *Journal of the Operational Research Society*, 66(5), Palgrave Macmillan, 2015 (SCI – IF: 1.077).
https://link.springer.com/article/10.1057/jors.2014.11

9. "An Investigation on the Generality Level of Selection Hyper-heuristics under Different Empirical Conditions" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), *Applied Soft Computing*, 13(7), Elsevier, 2013 (SCI – IF: 3.907).
https://www.sciencedirect.com/science/article/pii/S1568494613000604

10. "A New Hyper-heuristic as a General Problem Solver: an Implementation in HyFlex" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), *Journal of Scheduling*, 16(3), Springer, 2013 (SCI – IF: 1.153).
https://link.springer.com/article/10.1007/s10951-012-0295-8

11. "One Hyperheuristic Approach to Two Timetabling Problems in Health Care" (joint work with Burak Bilgin, Peter Demeester, Wim Vancroonenburg and Greet Vanden Berghe), *Journal of Heuristics*, 18(3), Springer, 2012 (SCI – IF: 1.129).
https://link.springer.com/article/10.1007/s10732-011-9192-0

12. "Monte Carlo Hyper-heuristics for Examination Timetabling" (joint work with Edmund Burke, Graham Kendall and Ender Özcan), *Annals of Operations Research*, 196(1), Springer, 2012 (SCI – IF: 1.864).
https://link.springer.com/article/10.1007/s10479-010-0782-2

13. "A Reinforcement Learning - Great-Deluge Hyper-heuristic for Examination Timetabling" (joint work with Ender Özcan, Gabriela Ochoa and Edmund Burke), *International Journal of Applied Metaheuristic Computing*, 1(1), IGI Global, 2010.
https://www.igi-global.com/chapter/reinforcement-learning-great-deluge-hyper/63803

Book Chapters

14. "Hyper-heuristics: Autonomous Problem Solvers", *Automated Machine Learning and Search*, Springer, 2021.
https://link.springer.com/chapter/10.1007/978-3-030-72069-8_7

15. "Towards Personalized Data-driven Bundle Design with QoS Constraint" (joint work with Hoong Chuin Lau), *New Ideas in Business and Consumer Analytics*, Springer, 2019.
https://link.springer.com/chapter/10.1007/978-3-030-06222-4_23

16. "A Hyper-heuristic with Learning Automata for the Traveling Tournament Problem" (joint work with Tony Wauters, Katja Verbeeck and Greet Vanden Berghe), *Metaheuristics: Intelligent Decision Making, the 8th Metaheuristics International Conference - Post Conference Volume*, Operations Research/Computer Science Interfaces Series, Springer, 2011.

International Conference / Workshop Papers

17. "MC-GNNAS-Dock: Multi-criteria GNN-based Algorithm Selection for Molecular Docking" (joint work with Siyuan Cao, Hongxuan Wu, Jiabao Brad Wang, Yiliang Yuan), *the 22nd Pacific Rim International Conference on Artificial Intelligence (PRICAI)*, Wellington, New Zealand. LNAI XX, Springer, 2025.
https://arxiv.org/abs/2509.26377

18. "Outperforming the Best with Minimal Effort: Algorithm Selection for Constrained Multi-objective Optimization" (joint work with Aldy Gunawan), *the IEEE Congress on Evolutionary Computation (CEC)*, Hangzhou, China, 2025.
https://ieeexplore.ieee.org/document/11043080

19. "Enhancing AutoML with Algorithm Selection: A Path to Better Performance" (joint work with Yinuo Guo, Zhongyi Hu), in *the International Conference in Optimization and Learning (OLA)*, Dubai, UAE. CCIS, Springer, 2025.

20. "GNNAS-Dock: Budget Aware Algorithm Selection with Graph Neural Networks for Molecular Docking" (joint work with Yiliang Yuan), *Workshop on AI for New Drug Modalities (AIDrugX), the 38th Annual Conference on Neural Information Processing Systems (NeurIPS)*, Vancouver, Canada, 2024.
https://sites.google.com/view/newmodality-aidrug/
https://arxiv.org/abs/2411.12597

21. "Enhancing Molecular Docking with GNN-based Algorithm Selection" (joint work with Yiliang Yuan), *the 8th International Conference on Computational Biology and Bioinformatics (ICCBB)*, Kyoto, Japan, ACM Proceedings, 2024.
https://dl.acm.org/doi/10.1145/3715020.3715040

22. "Algorithm Selection for Protein Structure Prediction on 2D AB Off-lattice Model", *the 8th International Conference on Computational Biology and Bioinformatics (ICCBB)*, Kyoto, Japan, ACM Proceedings, 2024.
https://dl.acm.org/doi/10.1145/3715020.3715049

23. "Algorithm Selection on Molecular Docking for State-of-the-Art Performance" (joint work with Yiliang Yuan), *the 8th International Conference on Computer Science and Artificial Intelligence (CSAI)*, Beijing, China, ACM Proceedings, 2024.
https://dl.acm.org/doi/10.1145/3709026.3709046

24. "Algorithm Selection for Robust Automated Machine Learning" (joint work with Yinuo Guo), *the 6th Data Science for Optimization (DSO) Workshop, International Joint Conference on Artificial Intelligence (IJCAI)*, Jeju, Korea, 2024.
https://sites.google.com/view/ijcai-2024-dso-workshop/program

25. "Prediction of Banking Customer Churn based on XGBoost with Feature Fusion" (joint work with Zhongyi Hu, Fangrui Dong and Jiang Wu), *the 23rd Wuhan International Conference on E-business (WHICEB)*, Wuhan, China. Lecture Notes in Business Information Processing, LNBIP 517, Springer, 2024.
https://link.springer.com/chapter/10.1007/978-3-031-60324-2_13

26. "Tourism Demand Forecasting with Multi-terminal Search Query Data and Deep Learning" (joint work with Zhongyi Hu and Xue Li), *the 23rd Wuhan International Conference on E-business (WHICEB)*, Wuhan, China. Lecture Notes in Business Information Processing, LNBIP 517, Springer, 2024.
https://link.springer.com/chapter/10.1007/978-3-031-60324-2_35

27. "Integrating Q-learning into GRASP for Solving E-waste Collection Problem with Stochastic Travel Times" (joint work with Dang Viet Anh Nguyen and Aldy Gunawan), *the 24th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP)*, Aberystwyth, Wales, UK.
https://link.springer.com/chapter/10.1007/978-3-031-57712-3_4

28. "Characterization of CEC Single-Objective Optimization Competition Benchmarks and Algorithms", in *the IEEE Symposium Series on Computational Intelligence (SSCI)*, Mexico, 2023.
https://ieeexplore.ieee.org/abstract/document/10372043/

29. "An Adaptive Large Neighborhood Search for Heterogeneous Vehicle Routing Problem with Time Windows" (joint work with Aldy Gunawan, Minh Pham Kien Nguyen, Vincent F. Yu), in *the 19th International Conference on Automation Science and Engineering (CASE)*, Auckland, New Zealand, 2023.
https://ieeexplore.ieee.org/document/10260380

30. "Neural Network based Heuristic Selection for Selection Hyper-heuristics" (joint work with Jingwei Li and Yuanjun Lin), in *the 22th IEEE Congress on Evolutionary Computation (CEC)*, Chicago, USA, July 2023.
https://ieeexplore.ieee.org/document/10254068

31. "Algorithm Selection for Large-Scale Multi-objective Optimization" (joint work with Xinye Cai), in *the International Conference in Optimization and Learning (OLA)*, Malaga, Spain. CCIS, Springer, 2023.
https://link.springer.com/chapter/10.1007/978-3-031-34020-8_3

32. "Cross-domain Algorithm Selection: Algorithm Selection across Selection Hyper-heuristics", in *the IEEE Symposium Series on Computational Intelligence (SSCI)*, Singapore, 2022.
https://ieeexplore.ieee.org/document/10022078/

33. "Algorithm Selection across Algorithm Configurators: A Case Study on Multi-objective Optimization", in *the IEEE Symposium Series on Computational Intelligence (SSCI)*, Singapore, 2022.
https://ieeexplore.ieee.org/document/10022231/

34. "Automated Portfolio Generation for Selection Hyper-heuristics: an Application to Protein Structure Prediction on 2D HP Model", in Proceedings of *the 19th IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)*, Ottawa, ON, Canada. IEEE, 2022.
https://ieeexplore.ieee.org/document/9863039/

35. "Algorithm Selection for the Team Orienteering Problem" (joint work with Aldy Gunawan and Pieter Vansteenwegen), in Proceedings of *the 22nd European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP)*, Madrid, Spain. LNCS 12931, Springer, 2022.
https://link.springer.com/chapter/10.1007/978-3-031-04148-8_3

36. "Selection-based Per-Instance Heuristic Generation for Protein Structure Prediction of 2D HP Model", in *the IEEE Symposium Series on Computational Intelligence (SSCI)*, Virtual, 2021.
https://ieeexplore.ieee.org/document/9660025

37. "Generalized Automated Energy Function Selection for Protein Structure Prediction on 2D and 3D HP Models", in *the IEEE Symposium Series on Computational Intelligence (SSCI)*, Virtual, 2021.
https://ieeexplore.ieee.org/document/9659895/

38. "Algorithm Selection on Adaptive Operator Selection: A Case Study on Genetic Algorithms", in *the 15th Learning and Intelligent Optimization Conference (LION)*, Athens, Greece (Virtual), 2021.

39. "Algorithm Selection for Protein Structure Prediction on 2D AB Off-lattice Model", in *the 15th Learning and Intelligent Optimization Conference (LION)*, Athens, Greece (Virtual) - *Presentation Only*, 2021.

40. "Selection-based Per-Instance Heuristic Generation for Protein Structure Prediction of 2D HP Model", in *the 5th International Conference on Machine Learning, Optimization, and Data Science (LOD)*, Grasmere, Lake District, UK, *under review*.

41. "Generalized Automated Energy Function Selection for Protein Structure Prediction on 2D and 3D HP Models", in *the 5th International Conference on Machine Learning, Optimization, and Data Science (LOD)*, Grasmere, Lake District, UK, *under review*.

42. "Benchmark Set Reduction for Cheap Empirical Algorithmic Studies", in *the 20th IEEE Congress on Evolutionary Computation (CEC)*, Kraków, Poland (Virtual), June-July 2021.
https://ieeexplore.ieee.org/document/9505012/

43. "Algorithm Selection across Selection Hyper-heuristics", in the *DSO @ IJCAI 2020 workshop at the 29th International Joint Conference on Artificial Intelligence (IJCAI) and the 17th Pacific Rim International Conference on Artificial Intelligence (PRICAI)*, Yokohama, Japan (Virtual), Jan. 2021.
https://sites.google.com/view/ijcai-2020-dso-workshop/

44. "Active Matrix Completion for Algorithm Selection", in *the 5th International Conference on Machine Learning, Optimization, and Data Science (LOD), LNCS 11943*, Siena-Tuscany, Italy, Sept. 2019 / 2020.
https://link.springer.com/chapter/10.1007/978-3-030-37599-7_27

45. "Matrix Factorization based Benchmark Set Analysis: A Case Study on HyFlex", in *the 11th International Conference on Simulated Evolution and Learning (SEAL), LNCS 10593*, Shenzhen, China, Nov. 2017.
https://link.springer.com/chapter/10.1007/978-3-319-68759-9_16

46. "Simulated Annealing with an Improvement Heuristic for Ready-mix Concrete Delivery" (joint work with Muhammad Sulaman and Xinye Cai), in *the 11th International Conference on Simulated Evolution and Learning (SEAL), LNCS 10593*, Shenzhen, China, Nov. 2017.
https://link.springer.com/chapter/10.1007/978-3-319-68759-9_4

47. "Greedy based Pareto Local Search for Bi-objective Robust Airport Gate Assignment Problem" (joint work with Wenxue Sun, Xinye Cai, Chao Xia, Muhammad Sulaman and Zhun Fan), in *the 11th International Conference on Simulated Evolution and Learning (SEAL), LNCS 10593*, Shenzhen, China, Nov. 2017.
https://link.springer.com/chapter/10.1007/978-3-319-68759-9_56

48. "ADVISER$^+$: Toward a Usable Web-based Algorithm Portfolio Deviser" (joint work with Hoong Chuin Lau, Li Xiang and Jiang Lingxiao), in *the 12th Metaheuristics International Conference (MIC)*, Barcelona, Spain, July 2017.

49. "Data Sampling through Collaborative Filtering for Algorithm Selection", in *the 16th IEEE Congress on Evolutionary Computation (CEC)*, Donostia, Spain, June 2017.
https://ieeexplore.ieee.org/document/7969608

50. "Matrix Factorization based Benchmark Set Analysis: A Case Study on HyFlex", in *the Workshop on Data Science meets Optimisation (DSO)*, Donostia, Spain, June 2017.

51. "Ensemble Move Acceptance in Selection Hyper-heuristics" (joint work with Ahmed Kheiri and Ender Ozcan), in *the 31st International Symposium on Computer and Information Sciences (ISCIS), CCIS 659*, Krakow, Poland, Oct. 2016.
https://link.springer.com/chapter/10.1007/978-3-319-47217-1_3

52. "Designing and Comparing Multiple Portfolios of Parameter Configurations for Online Algorithm Selection" (joint work with Aldy Gunawan and Hoong Chuin Lau), in *the 10th Learning and Intelligent Optimization Conference (LION), LNCS 10079*, Napoli, Italy, May-June 2016.
https://link.springer.com/chapter/10.1007/978-3-319-50349-3_7

53. "Designing a Portfolio of Parameter Configurations for Online Algorithm Selection" (joint work with Aldy Gunawan and Hoong Chuin Lau), in *the 29th AAAI Conference on Artificial Intelligence: Workshop on Algorithm Configuration*, Austin/Texas, USA, Jan. 2015.

54. "OSCAR: Online Selection of Algorithm Portfolios with Case Study on Memetic Algorithms" (joint work with Daniel Handoko and Hoong Chuin Lau), in *Proceedings of the 9th Learning and Intelligent Optimization Conference (LION), LNCS 8994*, Lille, France, Jan. 2015, **Best Paper Runner-up**.

55. "ADVISER: A Web-based Algorithm Portfolio Deviser" (joint work with Daniel Handoko and Hoong Chuin Lau), in *Proceedings of the 9th Learning and Intelligent Optimization Conference (LION), LNCS 8994*, Lille, France, Jan. 2015.

56. "A Recommender System for Process Discovery" (joint work with Joel Ribeiro, Josep Carmona and Michele Sebag), in *Proceedings of the 12th International Conference on Business Process Management (BPM), LNCS 8659*, Eindhoven, Netherlands, Sep. 2014.

57. "Diversity-Oriented Bi-Objective Hyper-heuristics for Patrol Scheduling" (joint work with Hoong Chuin Lau), in *Proceedings of the 10th International Conference on the Practice and Theory of Automated Timetabling (PATAT)*, York, UK, Aug. 2014.

58. "Building Algorithm Portfolios for Memetic Algorithms" (joint work with Daniel Handoko and Hoong Chuin Lau), in *Proceedings of the 16th Annual Conference on Genetic and Evolutionary Computation Companion (GECCO)*, Vancouver/British Columbia, Canada, Jul. 2014.

59. "A Dynamic Bundle Recommender System for Leisure Parks" (joint work with Shih-Fen Cheng, Hoong Chuin Lau and Pradeep Varakantham), in *the Production and Operations Management Society International Conference (POMS)*, Singapore, Jul. 2014.

60. "Group Decision Making in Selection Hyper-heuristics" (joint work with Ender Özcan and Ahmed Kheiri), in *Proceedings of the 13th Annual Workshop on Computational Intelligence*, Surrey, UK, Sep. 2013.

61. "The Effect of the Set of Low-level Heuristics on the Performance of Selection Hyper-heuristics" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the 12th International Conference on Parallel Problem Solving From Nature (PPSN), LNCS 7492*, Taormina, Italy, Sep. 2012.

62. "An Intelligent Hyper-heuristic Framework for CHeSC 2011" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the 6th Learning and Intelligent Optimization Conference (LION), LNCS 7219*, Paris, France, Jan. 2012, **CHeSC 2011 Winner**.

63. "A New Hyper-heuristic Implementation in HyFlex: a Study on Generality" (joint work with Patrick De Causmaecker, Greet Vanden Berghe and Katja Verbeeck), in *Proceedings of the 23rd Benelux Conference on Artificial Intelligence (BNAIC)*, Gent, Belgium, Nov. 2011.

64. "Security Personnel Routing and Rostering: a Hyper-heuristic Approach" (joint work with Pieter Smet, Greet Vanden Berghe and Katja Verbeeck), in *Proceedings of the 3rd International Conference on Applied Operational Research (ICAOR), LNMS 3*, Istanbul, Türkiye, Aug. 2011.

65. "A New Hyper-heuristic Implementation in HyFlex: a Study on Generality" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the 5th Multidisciplinary International Scheduling Conference: Theory & Applications (MISTA)*, Phoenix/Arizona, USA, Aug. 2011.

66. "A Selection Hyper-heuristic for Scheduling Deliveries of Ready-Mixed Concrete" (joint work with Wim Vancroonenburg, Katja Verbeeck and Greet Vanden Berghe), in *Proceedings of the 9th Metaheuristics International Conference (MIC)*, Udine, Italy, Jul. 2011.

67. "A Hyper-heuristic Combined with a Greedy Shuffle Approach to the Nurse Rostering Competition" (joint work with Burak Bilgin, Peter Demeester, Wim Vancroonenburg, Greet Vanden Berghe and Tony Wauters), in *the 8th International Conference on the Practice and Theory of Automated Timetabling (PATAT)*, Belfast, Northern Ireland, Aug. 2010, **INRC 2010 Finalist**.

68. "A Hyper-heuristic Approach for Assigning Patients to Hospital Rooms" (joint work with Wim Vancroonenburg, Burak Bilgin, Peter Demeester and Greet Vanden Berghe), in *Proceedings of the 8th International Conference on the Practice and Theory of Automated Timetabling (PATAT)*, Belfast, Northern Ireland, Aug. 2010.

69. "Hyper-heuristics with a Dynamic Heuristic Set for the Home Care Scheduling Problem" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the IEEE Congress on Evolutionary Computation (CEC)*, Barcelona, Spain, Jul. 2010.

70. "A Hyper-heuristic Approach to the Home Care Scheduling Problem" (joint work with Patrick De Causmaecker, Katja Verbeeck and Greet Vanden Berghe), in *Proceedings of the 14th Belgian-French-German Conference on Optimization (BFG)*, Leuven, Belgium, Sep. 2009.

71. "A Hyper-heuristic Approach to the Patient Admission Scheduling Problem" (joint work with Burak Bilgin, Peter Demeester, Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the 35th International Conference of Operational Research Applied to Health Services (ORAHS)*, Leuven, Belgium, Jul. 2009.

72. "A New Learning Hyper-heuristic for the Traveling Tournament Problem" (joint work with Tony Wauters, Katja Verbeeck and Greet Vanden Berghe), in *Proceedings of the 8th Metaheuristics International Conference (MIC)*, Hamburg, Germany, Jul. 2009.

73. "A Self-organising Hyper-heuristic Framework" (joint work with Ender Özcan and Edmund Burke), in *Proceedings of the 4th Multidisciplinary International Scheduling Conference: Theory & Applications (MISTA)*, Dublin, Ireland, Aug. 2009.

74. "A Study of Simulated Annealing Hyperheuristics" (joint work with Edmund Burke, Graham Kendall and Ender Özcan), in *Proceedings of the 7th International Conference on the Practice and Theory of Automated Timetabling (PATAT)*, Montreal, Canada, Aug. 2008.

75. "Learning Heuristic Selection in Hyper-heuristics for Examination Timetabling" (joint work with Edmund Burke, Gabriela Ochoa and Ender Özcan), in *Proceedings of the 7th International Conference on the Practice and Theory of Automated Timetabling (PATAT)*, Montreal, Canada, Aug. 2008.

NATIONAL CONFERENCE / WORKSHOP PAPERS

76. "Design Principles and Performance Analysis of a Selection Hyper-heuristic across Multiple Problem Domains" (joint work with Katja Verbeeck, Patrick De Causmaecker and Greet Vanden Berghe), in *Proceedings of the 26th Belgian Conference on Operations Research (ORBEL)*, Brussels, Belgium, Feb. 2012.

77. "An Adaptive Selection Hyper-heuristic for CHeSC 2011" (joint work with Patrick De Causmaecker, Greet Vanden Berghe and Katja Verbeeck), in *Proceedings of the OR53 Annual Conference*, Nottingham, UK, Sep. 2011.

78. "Design of a Generic Selection Hyper-heuristic" (joint work with Katja Verbeeck, Greet Vanden Berghe and Patrick De Causmaecker), in *Proceedings of the 25th Belgian Conference on Operations Research (ORBEL)*, Gent, Belgium, Feb. 2011.

79. "An Introduction to New Application Domains for the Home Care Scheduling Problem" (joint work with Pieter Smet and Greet Vanden Berghe), in *Proceedings of the 25th Belgian Conference on Operations Research (ORBEL)*, Gent, Belgium, Feb. 2011.

80. "A Hyper-heuristic Approach for the Ready-Mixed Concrete Delivery Problem" (joint work with Wim Vancroonenburg and Greet Vanden Berghe), in *Proceedings of the 25th Belgian Conference on Operations Research (ORBEL)*, Gent, Belgium, Feb. 2011.

81. "Hyper-heuristics Learning a Varying Set of Low-level Heuristics" (joint work with Katja Verbeeck, Greet Vanden Berghe and Patrick De Causmaecker), in *Proceedings of the 24th Belgian Conference on Operations Research (ORBEL)*, Liege, Belgium, Jan. 2010.

82. "Hyper-heuristics: Raising the Level of Generality" (joint work with Patrick De Causmaecker, Katja Verbeeck and Greet Vanden Berghe), in *Proceedings of the 23rd Belgian Conference on Operations Research (ORBEL)*, Leuven, Belgium, Feb. 2009.

TECHNICAL REPORTS

83. "Algorithm Selection as a Collaborative Filtering Problem" (joint work with Michele Sebag), INRIA, Tech. Report, 2013.

84. "A New Hyper-heuristic Approach to the Ready-Mixed Concrete Delivery Problem" (joint work with Wim Vancroonenburg, Katja Verbeeck and Greet Vanden Berghe), KAHO Sint-Lieven, Tech. Report, 2011.

85. "A Hyper-heuristic Approach to the Home Care Scheduling Problem" (joint work with Katja Verbeeck, Greet Vanden Berghe and Patrick De Causmaecker), KAHO Sint-Lieven, Tech. Report, 2009.

OTHER PUBLICATIONS

86. "Intelligent Hyperheuristics: A Tool for Solving Generic Optimisation Problems", Ph.D. Dissertation, Department of Computer Science, KU Leuven, 2012, **ERCIM Cor Baayen Award 2013 Finalist**.

87. "Group Decision Making for Move Acceptance in Hyperheuristics", M.Sc. Thesis, Department of Computer Engineering, Yeditepe University, 2008.

88. "A New Hyperheuristic, IDWalk based Hyperheuristic Strategy", B.Sc. Graduation Project Report, Department of Computer Engineering, Yeditepe University, 2007.

JOURNAL / BOOK / PROCEEDINGS EDITOR

2021	Turkish Journal of Electrical Engineering & Computer Sciences, TUBITAK
2019	Proceedings of the 8th International Conference on Computer Engineering and Networks (CENet 2018), Shanghai, China – *Advances in Intelligent Systems and Computing*, Springer
2019	Proceedings of the 6th International Conference on Information Science and Cloud Computing (ISCC 2018), Guangzhou, China – *Advances in Intelligent Systems and Computing*, Springer

CITATION REPORT

Google scholar[9]: # citations = 1571, h-Index = 20

RESEARCH GRANTS

05/2025 - 07/2025	Principal Investigator, *MC-GNNAS-Dock: Multi-Criteria Graph Neural Networks for Molecular Docking*, Duke Kunshan University (DKU) Summer Research Scholars & Wang-Cai and Synear Research Funds (12K RMB = ∼1.7K USD), valid until 06/2026.
05/2025 - 07/2025	Principal Investigator, *GNNASeR: Graph Neural Network based Algorithm Selection for Routing Problems*, Duke Kunshan University (DKU) Summer Research Scholars.
05/2025 - 07/2025	Principal Investigator, *Transformer based Heuristic Selection for Selection Hyperheuristics*, Duke Kunshan University (DKU) Summer Research Scholars.
07/2023 - 06/2025	Principal Investigator, *Multi-objective Automated Machine Learning in Model Generation* — Wuhan University - Duke Kunshan University Joint Seeding Program (100K RMB = ∼14K USD)
07/2023 - 09/2024	Principal Investigator, *Deep Learning based Automated Algorithm Selection for Protein-Ligand Docking* — Kunshan Government Research Fund (362K RMB = ∼50K USD)
05/2023 - 07/2023	Principal Investigator, *Algorithm Selection on Hyper-parameter Optimization*, Duke Kunshan University (DKU) Summer Research Scholars.
01/2022 - 12/2022	Principal Investigator, *Cross-domain Algorithm Selection: Towards a Generalizable Solver for Search and Optimization Problems* — Kunshan Supercomputing Center (KSSC) Access Program
07/2021 - 06/2023	Principal Investigator (with Floyd A. Beckford), *Automated Molecular Docking Method Selector* — Duke Kunshan University Interdisciplinary Research Seed Grant (57K RMB = ∼9K USD)
10/2020 - 09/2022	Principal Investigator[13], *aTLAS: Transfer Learning for Algorithm Selection* — Istinye University Internal Research Grant (800K TRY = ∼100K USD)
09/2020 - 08/2022	Principal Investigator[14], *Deep Learning based Diabetic Retinopathy Stage Diagnosis, Progression and Risk Estimation* — Istinye University Internal Research Grant (1.5M TL/TRY = ∼200K USD)

---

[9] https://scholar.google.com/citations?user=MuJmTFUAAAAJ
[13] the project is closed due to leaving the university
[14] the project is closed due to leaving the university

09/2020 - 12/2021		Researcher, *Financial Pattern Recognition with Deep Learning based Image Processing* — Istinye University Internal Research Grant (50K TL/TRY = ∼7K USD)
09/2020 - 12/2021		Researcher, *Sustainable Aggregate Production Planning using Multi-Criteria Decision-Making, Mathematical Modeling and Dynamic Programming* — Joint Grant by Scientific and Technological Research Council of Türkiye & Iran Ministry of Science, Technology and Innovation (MSRT) (TUBITAK 2535) (165K TL/TRY = ∼25K USD)
05/2019 - 05/2021		Principal Investigator, *Automated Algorithm Design for Ab Initio Protein Structure Prediction* — Reintegration Grant by Scientific and Technological Research Council of Türkiye (TUBITAK 2232) (170K TRY = ∼30K USD)
04/2016 - 12/2017		Principal Investigator, *Algorithm Selection for Multiobjective Optimization* — Nanjing University of Aeronautics and Astronautics Research Fund (80K RMB = ∼13K USD)

INDUSTRIAL RESEARCH PROJECTS

2013 - 2015		Researcher, *Dynamic Learning and Optimization of User Experience in Travel and Tourism.* Funded by National Research Foundation (NRF) of Singapore @ Singapore Management U.
2009 - 2011		Researcher, *IWT 090549 - Workforce Routing and Rostering* (A commercial optimization system called MOUNT-Q was developed – `http://www.mountq.be`). Funded by Agency for Innovation by Science and Technology (IWT) of Belgium @ KU Leuven

PROJECT / STUDENT SUPERVISION

Dec. 2025–	∼	Yunjie Guo, Automated Machine Learning for Cryptocurrency, *Bachelor Thesis* in Math, Duke Kunshan University, Natural and Applied Sciences, China
Mar. 2025–	∼	Juliana Starr, Detection and Mitigation of Bias in AI Hiring Systems, *Bachelor Thesis* in Computer Science, Duke Kunshan University, Natural and Applied Sciences, China
Mar. 2025–	∼	Lishi Qu, CNN-based Automated Algorithm Selection for Earthquake Prediction, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Nov. 2024–Mar. 2025		Co-Mentor, Ooha Lakkadi Reddy, Exploring Ancient Transmission: a Hybrid Computer Vision Analysis of Indus and Tibetan-yi Corridor Writing Systems, *Bachelor Thesis* in Arts and Humanities / Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2024–Mar. 2025		Yinuo Guo, Talking Head Synthesis with Emotion Control, *Bachelor Thesis* in Computer Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2024–Mar. 2025		Pauline Rogers, Optimizing Autoencoder Selection for Advanced Persistent Threat Detection in Intrusion Detection Systems using Predictive Models, *Bachelor Thesis* in Computer Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2024–Mar. 2025		Jason Qiu, Democratizing State-of-the-Art ReSTIR Rendering Technique for the Open Source Rendering Community, *Bachelor Thesis* in Computer Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023		Othmane Bahraoui, Multi-objective Optimization: an Analysis and Algorithm Selection using ASAP, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023		Lihui Chen, Algorithm Selection across Selection Hyper-heuristics, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023		Tian-Lai Chen, Causal Biomarker Discovery of Gut Microbiome and Type 2 Diabetes, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023		Qiyuan Shen, Algorithm Selection across Selection Hyper-heuristics (T), *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023		Zixu Geng, Proximal Policy Optimization in Real Time Strategy Game, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China

Jan. 2022–Mar. 2023	Yuzhe Gu, Answering Open-Domain Questions in Long-form: a Pretraining Two-Stage Seq2Seq Framework for Text Generation, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Sean Guo, Cross-platform Chatbot, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Junxuan Hu, Rainbow Deep Q Network with Action Component AI Implementation in MicroRTS, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Sabhyata Jha, The Ethics of Recommendation Systems through the Model Interpretability, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Tianlai Li, Improved CycleGAN based Speech-to-Speech Neuro-Style Transfer for Voice Conversion, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Zedian Shao, Improved CycleGAN based Speech-to-Speech Neuro-style Transfer for Voice Conversion (T), *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Feifan Li, Multi-vectors Dense Retriever Model for Open-Domain Question Answering, *Bachelor Thesis* in Data Science , Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Luka Mdivani, Feature-free Algorithm Selection for Function Optimization, *Bachelor Thesis* in Data Science , Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Yuxuan Wang, Combining FTCF and ResNet for Accurate Violence Detection in Videos: a State-of-the-Art Model, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Jan. 2022–Mar. 2023	Yuchen Zhang, A Study on the Performance of Multi-layer Features Ablation BERT on Twitter Tweets Dataset, *Bachelor Thesis* in Data Science, Duke Kunshan University, Natural and Applied Sciences, China
Sept. 2017–Dec. 2019	Cheng Jingsong, Algorithm Selection through Deep Learning, *Master Thesis*[15] in Computer Science, Nanjing U. Aeronautics and Astronautics, College of Computer Science and Technology, China
Jan. 2018–June 2018	Yudistira Ashadi, Selection Hyper-heuristics for the Next Release Problem, *Bachelor Thesis* in Software Engineering & Management, Nanjing U. Aeronautics and Astronautics, College of Computer Science and Technology, China
Sept. 2016–Dec. 2017	Muhammad Sulaman, Simulated Annealing with a Time-slot Heuristic for Ready-mix Concrete Delivery, *Master Thesis* @ Nanjing U. Aeronautics and Astronautics, College of Computer Science and Technology, China (Joint Supervision: Xinye Cai)
Aug. 2015–Dec. 2015	Xiang Li, Algorithm Portfolio Generation via Configuration, *Undergraduate Research Project*, Singapore Management U., School of Information Systems, Singapore
Mar. 2015–Aug. 2015	Enrique Urra, Parameter Configuration for Hyper-heuristics, *Internship Project*, U. Freiburg, Department of Computer Science, Germany
May 2014–July 2014	Hoang Thanh Tung, Online Crossover Selection in Memetic Algorithms, *Internship Project*, Singapore Management U., School of Information Systems, Singapore

CONFERENCE / WORKSHOP COMPETITION / COMMITTEES / CHAIRS

1. Publicity chair, 16th International Conference on Information and Multimedia Technology (ICIMT), Shenzhen, China, Nov. 2026.

2. Program committee, 36th International Conference on Automated Planning and Scheduling (ICAPS), Dublin, Ireland, June-July 2026

3. Program committee, 26th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP), Toulouse, France, Apr. 2026.

---

[15]transferred the supervisory role to another faculty member due to leaving the university

4. Program committee, 22nd Pacific Rim International Conference on Artificial Intelligence (PRICAI), Wellington, New Zealand, Nov. 2025

5. Program committee, 28th European Conference on Artificial Intelligence (ECAI), Bologna, Italy, Oct. 2025

6. Program committee, 24th Annual Conference on Genetic and Evolutionary Computation (GECCO) Malaga, Spain, July 2025

7. Program committee, 16th IEEE Symposium Series on Computational Intelligence (SSCI), Trondheim, Norway, Mar. 2025

8. Program committee, 17th International Conference on Evolutionary Computation Theory and Applications (ECTA), Marbella, Spain, Oct. 2025

9. Program committee, 8th International Conference on Data Science and Information Technology (DSIT), Beijing, China, Nov. 2025

10. Program committee chair, 8th International Conference on Machine Learning and Natural Language Processing (MLNLP), Hangzhou, China, Nov. 2025

11. Program committee, 4th International Conference on Networks, Communications and Information Technology (CNCIT), Wuxi, China, Jul. 2025

12. Publication chair, 4th Asia Conference on Algorithms, Computing and Machine Learning (CACML), Guangzhou, China, Mar. 2025

13. Publication chair, 4th International Conference on Educational Innovation and Multimedia Technology (EIMT), Beijing, China, Mar. 2025

14. Technical committee, 8th International Conference on Computer Science and Artificial Intelligence (CSAI), Beijing, China, Dec. 2024

15. Program committee, 7th International Conference on Data Science and Information Technology (DSIT), Nanjing, China, Dec. 2024

16. Program committee, 16th International Conference on Evolutionary Computation Theory and Applications (ECTA), Porto, Portugal, Nov. 2024

17. Technical committee, 8th International Conference on Computational Biology and Bioinformatics (ICCBB), Kyoto, Japan, Nov. 2024

18. Program committee, 27th European Conference on Artificial Intelligence (ECAI), Santiago de Compostela, Spain, Oct. 2024

19. Program committee, 19th Parallel Problem Solving from Nature (PPSN), Hagenberg, Austria, Sept. 2024

20. Program committee, 14th International Conference on the Practice and Theory of Automated Timetabling (PATAT), Copenhagen, Denmark, Aug. 2024

21. Program committee, 25th Annual Conference on Genetic and Evolutionary Computation (GECCO), Melbourne, Australia, July 2024

22. Program committee, 24th IEEE Congress on Evolutionary Computation (CEC), Yokohama, Japan, June - July 2024

23. Program committee, International Joint Conference on Neural Networks (IJCNN), Yokohama, Japan, June - July 2024

24. Technical program committee, 3rd International Conference on Artificial Intelligence, Internet and Digital Economy (ICAID), Bangkok, Thailand, Apr. 2024.

25. Technical program committee chair, 3rd International Conference on Public Management and Big Data Analysis (PMBDA), Nanjing, China Dec. 2023

26. Program committee, 15th International Conference on Evolutionary Computation Theory and plications (ECTA), Rome, Italy, Nov. 2023

27. Program committee, 24th Annual Conference on Genetic and Evolutionary Computation (GECCO), Lisbon, Portugal, July 2023

28. Program committee, 22nd IEEE Congress on Evolutionary Computation (CEC), Chicago, USA, July 2023

29. Chair, the International Conference on Images, Algorithms and Artificial Intelligence (ICIAAI), Virtual, August 2023

30. Program committee, 24th Annual Conference on Genetic and Evolutionary Computation (GECCO), Lisbon, Portugal, July 2023

31. Program committee, 14th International Conference on Evolutionary Computation Theory and Applications (ECTA), Valletta, Malta, Oct. 2022

32. Program committee, 17th Parallel Problem Solving from Nature (PPSN), Dortmund, Germany, Sept. 2022

33. Program committee, 36th AAAI Conference on Artificial Intelligence (AAAI), Vancouer, Canada, Feb.-Mar. 2022

34. Program committee, 7th International Conference on Machine Learning, Optimization, and Data Science (LOD), Grasmere, UK, Oct. 2021

35. Program committee, 13th International Conference on Evolutionary Computation Theory and Applications (ECTA), Valletta, Malta, Oct. 2021

36. Program committee, 22nd Annual Conference on Genetic and Evolutionary Computation (GECCO), General Evolutionary Computation and Hybrids, Lille, France, July 2021

37. Program committee, 20th IEEE Congress on Evolutionary Computation (CEC) – RepL4Opt: Representation Learning meets Meta-heuristic Optimization, Kraków, Poland, June - July 2021

38. Program committee, 35th AAAI Conference on Artificial Intelligence (AAAI), Virtual, Feb. 2021

39. Program committee, 12th International Conference on Evolutionary Computation Theory and Applications (ECTA), Budapest, Hungary, Nov. 2020

40. Program committee, 16th Parallel Problem Solving from Nature (PPSN), Leiden, Netherlands, Sept. 2020

41. Program committee, 21st Annual Conference on Genetic and Evolutionary Computation (GECCO), General Evolutionary Computation and Hybrids, Cancun, Mexico, July 2020

42. Program committee, 6th International Conference on Machine Learning, Optimization, and Data Science (LOD), Siena-Tuscany, Italy, July 2020

43. Program committee, 2nd International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI), Berlin, Germany, Apr. 2020

44. Program committee, 34th AAAI Conference on Artificial Intelligence (AAAI), New York, USA, Feb. 2020

45. Program committee, IEEE Symposium on Evolutionary Scheduling and Combinatorial Optimisation (ESCO) under the IEEE Symposium Series on Computational Intelligence (SSCI), Xiamen, China, Dec. 2019

46. Program committee, 11th International Conference on Evolutionary Computation Theory and Applications (ECTA) / 11th International Joint Conference on Computational Intelligence (IJCCI), Vienna, Austria, Sept. 2019

47. Program committee, 20th Annual Conference on Genetic and Evolutionary Computation (GECCO), General Evolutionary Computation and Hybrids, Prague, Czech Republic, July 2019

48. Program committee, 1st International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI), Barcelona, Spain, Mar. 2019

49. Program committee, 33rd AAAI Conference on Artificial Intelligence (AAAI), Honolulu/Hawaii, USA, Jan.-Feb. 2019

50. Program chair, 6th International Conference on Information Science and Cloud Computing (ISCC), Guangzhuou, China, Dec. 2018

51. Program committee, 10th International Joint Conference on Computational Intelligence (IJCCI), Seville, Spain, Sept. 2018

52. Program committee, 12th International Conference on the Practice and Theory of Automated Timetabling (PATAT), Vienna, Austria, Aug. 2018

53. Program chair, 8th International Conference on Computer Engineering and NEtworks (CENet), Shanghai, China, Aug. 2018

54. Program committee, 19th Annual Conference on Genetic and Evolutionary Computation (GECCO), Kyoto, Japan , July 2018

55. Program committee, 9th International Joint Conference on Computational Intelligence (IJCCI), Funchal, Madeira - Portugal, Nov. 2017

56. Program committee, 19th Annual Conference on Genetic and Evolutionary Computation (GECCO), Evolutionary Combinatorial Optimization and Metaheuristics, Berlin, Germany, July 2017

57. Program chair, 7th International Conference on Computer Engineering and NEtworks (CENet), Shanghai, China, July 2017

58. Program committee, 3rd IEEE International Conference on Cybernetics (CYBCONF) - Special session on Deep Learning for Prediction and Estimation (DLPE), Exeter, UK, June 2017

59. Program committee, 25th International Joint Conference on Artificial Intelligence (IJCAI), New York, USA, Jul. 2016

60. Program committee, 18th Annual Conference on Genetic and Evolutionary Computation (GECCO), Search-Based Software Engineering and Self-* Search, Denver/Colorado, USA, July 2016

61. Program committee, 17th Annual Conference on Genetic and Evolutionary Computation (GECCO), Search-Based Software Engineering and Self-* Search, Madrid, Spain, July 2015

62. Program committee, 16th Annual Conference on Genetic and Evolutionary Computation (GECCO), Self-* Search, Vancouver/British Columbia, Canada, July 2014

63. Program committee, 15th Annual Conference on Genetic and Evolutionary Computation (GECCO), Self-* Search, Amsterdam, Netherlands, July 2013

64. Program committee, 14th Annual Conference on Genetic and Evolutionary Computation (GECCO), Self-* Search, Philadelphia/Pennsylvania, USA, July 2012

CONFERENCE / WORKSHOP / SPECIAL SESSION ORGANIZER

1. Special Session on *Evolutionary Multi-Objective Automated Machine Learning (EMO-AutoML)*, in the IEEE Congress on Evolutionary Computation (CEC), Hangzhou, China, June 2025

2. Special Session on *Exploring Advanced Techniques and Applications in AutoML*, in the International Joint Conference on Neural Networks (IJCNN), Rome, Italy, June-July 2025

3. Special Session on *Multi-Objective Automated Machine Learning (MO-AutoML)*, in the 3International Joint Conference on Neural Networks (IJCNN), Yokohama, Japan, June-July 2024

4. Stream on *Hyper-heuristics*, in the 30th European Conference on Operational Research (EURO), Dublin, Ireland, June 2019

5. Invited Session on *Automated Algorithm Design for Multi-objective Optimization Problems*, in the 25th International Conference on Multiple Criteria Decision Making (MCDM), Istanbul, Türkiye, June 2019

6. Stream on *Hyper-heuristics*, in the 29th European Conference on Operational Research (EURO), Valencia, Spain, July 2018

7. Special Session on *Automated Algorithm Design as Ensemble Techniques*, in the IEEE Symposium on Computational Intelligence and Ensemble Learning (CIEL) under the IEEE Symposium Series on Computational Intelligence (SSCI), Honolulu/Hawaii, USA, Nov. 2017

Reviewer

Journals: IEEE Transactions on Evolutionary Computation, Evolutionary Computation (MIT), IEEE Computational Intelligence Magazine, INFORMS Journal on Computing, Applied Soft Computing (Elsevier), Artificial Intelligence Review (Springer), European Journal of Operational Research (Elsevier), Expert Systems with Applications (Elsevier), Information Sciences (Elsevier), Computers & Operations Research (Elsevier), ACM Transactions on Evolutionary Learning and Optimization (ACM), Journal of Heuristics (Springer), Memetic Computing (Springer), Evolving Systems (Springer), Journal of Scheduling (Springer), Annals of Operations Research (Springer), Complex and Intelligent Systems (Springer), Swarm and Evolutionary Computation (Elsevier), Journal of the Operational Research Society (Palgrave Macmillan), Soft Computing (Springer), Engineering Applications of Artificial Intelligence (Elsevier), International Transactions in Operational Research (Wiley), Frontiers of Information Technology & Electronic Engineering (Springer), Communications in Nonlinear Science and Numerical Simulation (Elsevier), Automation in Construction (Elsevier), Journal of Biomolecular Structure and Dynamics (Taylor & Francis), International Journal of Metaheuristics (InderScience), International Journal of Innovative Computing and Applications (InderScience), International Journal of Bio-Inspired Computation (InderScience), Frontiers in Artificial Intelligence (Frontiers), Turkish Journal of Electrical Engineering & Computer Sciences (TUBITAK), Journal of Information Technology Research (IGI Global), Complex System Modeling and Simulation (Tsinghua U.), IEEE Access (IEEE), Algorithms (MDPI), Applied Sciences (MDPI), Big Data and Cognitive Computing (MDPI), Bioengineering (MDPI), Electronics (MDPI), Life (MDPI), Computer Communication & Collaboration (BAP), Journal of Applied Operational Research (Tadbir)

Conferences: 36th International Conference on Automated Planning and Scheduling (ICAPS 2026), 14th International Conference on Learning Representations (ICLR 2026), 26th European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP 2026), 22nd Pacific Rim International Conference on Artificial Intelligence (PRICAI 2025), 28th European Conference on Artificial Intelligence (ECAI 2025), 13th International Conference on Learning Representations (ICLR 2025), 35th International Conference on Automated Planning and Scheduling (ICAPS 2025), 24th Annual Conference on Genetic and Evolutionary Computation (GECCO 2025), 16th IEEE Symposium Series on Computational Intelligence (SSCI 2025), 17th International Conference on Evolutionary Computation Theory and Applications (ECTA 2025), 8th International Conference on Data Science and Information Technology (DSIT 2025), 27th European Conference on Artificial Intelligence (ECAI 2024), 24th Annual Conference on Genetic and Evolutionary Computation (GECCO 2024), 18th Parallel Problem Solving from Nature (PPSN 2024), 2nd IEEE Conference on Artificial Intelligence (CAI 2024), International Joint Conference on Neural Networks (IJCNN 2024), 16th International Conference on Evolutionary Computation Theory and Applications (ECTA 2024), 14th International Conference on the Practice and Theory of Automated Timetabling (PATAT 2024), 7th International Conference on Data Science and Information Technology (DSIT 2024), 24th Annual Conference on Genetic and Evolutionary Computation (GECCO 2023), 22nd IEEE Congress on Evolutionary Computation (CEC 2023), 14th IEEE Symposium Series on Computational Intelligence (SSCI 2023), 15th International Conference on Evolutionary Computation Theory and Applications (ECTA 2023), 36th AAAI Conference on Artificial Intelligence (AAAI 2022), 23rd Annual Conference on Genetic and Evolutionary Computation (GECCO 2022), 13rd IEEE Symposium Series on Computational Intelligence (SSCI 2022), 17th Parallel Problem Solving from Nature (PPSN 2022), 21st IEEE Congress on Evolutionary Computation (CEC 2022), 14th International Conference on Evolutionary Computation Theory and Applications (ECTA 2022), 22nd Annual Conference on Genetic and Evolutionary Computation (GECCO 2021), 20th IEEE Congress on Evolutionary Computation (CEC 2021), 7th International Conference on Machine Learning, Optimization, and Data Science (LOD 2021), 13th International Conference on Evolutionary Computation Theory and Applications (ECTA 2021), 34rd AAAI Conference on Artificial Intelligence (AAAI 2020), 30th International Conference on Automated Planning and Scheduling (ICAPS 2020), 21st Annual Conference on Genetic and Evolutionary Computation (GECCO 2020), 6th International Conference on Machine Learning, Optimization, and Data Science (LOD 2020), 16th

Parallel Problem Solving from Nature (PPSN 2020), 12th International Conference on Evolutionary Computation Theory and Applications (ECTA 2020), 33rd AAAI Conference on Artificial Intelligence (AAAI 2019), 20th Annual Conference on Genetic and Evolutionary Computation (GECCO 2019), IEEE Symposium on Evolutionary Scheduling and Combinatorial Optimisation (ESCO 2019) under the IEEE Symposium Series on Computational Intelligence (SSCI 2019), 18th IEEE Congress on Evolutionary Computation (CEC 2019), 11th International Conference on Evolutionary Computation Theory and Applications (ECTA 2019) / 11th International Joint Conference on Computational Intelligence (IJCCI 2019), 1st International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI 2019), 9th IEEE Symposium Series on Computational Intelligence (SSCI 2018), 10th International Joint Conference on Computational Intelligence (IJCCI 2018), 19th Annual Conference on Genetic and Evolutionary Computation (GECCO 2018), 17th IEEE Congress on Evolutionary Computation (CEC 2018), 12th International Conference on the Practice and Theory of Automated Timetabling (PATAT 2018), 2nd International Conference on Computer Science and Application Engineering (CSAE 2018), 4th International Conference on Fuzzy Systems and Data Mining (FSDM 2018), 8th IEEE Symposium Series on Computational Intelligence (SSCI 2017), 19th Annual Conference on Genetic and Evolutionary Computation (GECCO 2017), 16th IEEE Congress on Evolutionary Computation (CEC 2017), 9th International Joint Conference on Computational Intelligence (IJCCI 2017), 3rd IEEE International Conference on Cybernetics (CYBCONF) - Special session on Deep Learning for Prediction and Estimation (DLPE 2017), 25th International Joint Conference on Artificial Intelligence (IJCAI 2016), 18th Annual Conference on Genetic and Evolutionary Computation (GECCO 2016), 10th Learning and Intelligent Optimization Conference (LION 2016), 15th IEEE Congress on Evolutionary Computation (CEC 2016), 17th Annual Conference on Genetic and Evolutionary Computation (GECCO 2015), 28th Canadian Artificial Intelligence Conference (AI 2015), 16th Annual Conference on Genetic and Evolutionary Computation (GECCO 2014), 8th Learning and Intelligent Optimization Conference (LION 2014), 6th Multidisciplinary International Scheduling Conference: Theory & Applications (MISTA 2013), 15th Annual Conference on Genetic and Evolutionary Computation (GECCO 2013), 14th Annual Conference on Genetic and Evolutionary Computation (GECCO 2012)

Grant Evaluation: Scientific and Technological Research Council of Türkiye (TUBITAK) Technology and Innovation Support Programs (TEYDEB), TUBITAK International Cooperation Projects Research Support Group (UPAG), Chile National Research and Development Agency (ANID) – Fondecyt Research Initiation Project Competition

INVITED/∼ TALKS[10]

Oct.	2025	"Automated Algorithm Design: Data-Driven Algorithms", Mathematics + AI Forum by Shanghai Jiao Tong University, the 23rd Conference on International Exchange Professionals, Shanghai, China
Sep.	2025	"Automated Algorithm Design: Data-Driven Algorithms", the 13th International Conference on Information Management and Engineering (ICIME) / 7th International Conference on Big Data Engineering (BDE), Okinawa, Japan
June	2025	"Automated Algorithm Design: Data-Driven Algorithms", Tutorial, the IEEE Congress on Evolutionary Computation (CEC), Hangzhou, China
May	2025	"Automated Algorithm Design: Data-Driven Algorithms", Duke Kunshan University (DKU) Research Workshop, Kunshan, China
Feb.	2025	"Automated Algorithm Design: Data-Driven Algorithms", School of Instrument Science and Engineering, Southeast University, Nanjing, China
Jan.	2025	"Automated Algorithm Design: Data-Driven Algorithms", International Symposium on Artificial Intelligence Innovations (IS-AII), Guiyang, China
Dec.	2024	"Automated Algorithm Design: Data-Driven Algorithms", the International Symposium on AI and Cybersecurity (ISAICS), Changsha, China
Aug.	2024	"Automated Algorithm Design: Data-Driven Algorithms", the 8th International Conference on Information Science, Communication and Computing (ISCC), Zhengzhou, China
July	2024	"Automated Algorithm Design", School of Information Management, Wuhan University, China
Dec.	2023	"Automated Machine Learning: AutoML", the 5th International Conference on Big Data and Security (ICBDS), China

---

[10]excluding conference/workshop paper talks

Nov. 2023	"Automated Algorithm Design: From Optimization to Machine Learning", Electronic Information & Data Science Joint Workshop (Wuhan U. & Duke Kunshan U.), China
Oct. 2023	"Cross-domain Algorithm Selection", IEEE Task Force on Evolutionary Scheduling and Combinatorial Optimisation (ESCO) Webinar, Virtual
Sept. 2023	"Machine Learning: What, How, and When", HackDuke @ DKU: Inspiring Innovation and Impact, China
Aug. 2023	"Automated Machine Learning: AutoML", International Conference on Images, Algorithms and Artificial Intelligence (ICIAAI), Singapore / Virtual
July 2023	"The U.S.-China AI Race: Competition and Cooperation", Duke China-U.S. Summit 2023, China
Aug. 2022	"Automated Machine Learning: AutoML", the 1st International Conference on Machine Learning, Cloud Computing and Intelligent Mining (MLCCIM 2022), China
Mar. 2022	"Cross-domain Algorithm Selection", the 7th International Conference on Industrial Engineering and Operations Management (IEOM) - Global Supply Chain and Logistics (Global SCM 2022), Türkiye
Feb. 2022	"Reinforcement Learning: Basics and Applications", Duke Kunshan University – Southeast University Short Term Program, China
Nov. 2021	"Algorithm Selection: Offline + Online Techniques", the 1st International Conference on Robotics Automation and Intelligent Control (ICRAIC 2021), China
Oct. 2021	"Automated Machine Learning (AutoML)", Keynote Talk, the 11th International Conference on Computer Engineering and Networks (CENet 2021), China
Apr. 2021	"Algorithm Selection: Offline + Online Techniques", Duke Kunshan University, China
Mar. 2021	"Automated Machine Learning (AutoML)", Istinye University, Türkiye
Dec. 2020	"Artificial Intelligence in Medicine", Biomedical Engineering, Ankara University, Türkiye
May 2020	"Artificial Intelligence against COVID-19", Webinar – Qatar University, Qatar
Oct. 2019	"Artificial Intelligence in Medicine", Istinye University, Türkiye
Mar. 2018	"Algorithm Selection: Offline + Online Techniques", CODeS, Department of Computer Science, KU Leuven, Belgium
Dec. 2017	"Automated Algorithm Design in Cloud", Keynote Talk, the 5th International Conference on Information Science and Cloud Computing (ISCC 2017), China
Nov. 2017	"Algorithm Selection: Offline + Online Techniques", Tutorial, the 11th International Conference on Simulated Evolution and Learning (SEAL 2017), China
July 2017	"Algorithm Selection: Offline + Online Techniques", Keynote Talk, the 7th International Conference on Computer Engineering and Networks (CENet 2017), China
May 2017	"Automated Algorithm Design: Towards the Ultimate Algorithm Designer", ASAP, School of Computer Science, University of Nottingham, UK
Nov. 2016	"Automated Algorithm Design: Towards the Ultimate Algorithm Designer", Keynote Talk, the 6th International Conference on Computer Engineering and Networks (CENet 2016), China
June 2016	"Automated Algorithm Design: Towards the Ultimate Algorithm Designer", CODeS, Department of Computer Science, KU Leuven, Belgium
Sept. 2015	"Automated Algorithm Design: Offline and Online Techniques", College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, China
Aug. 2015	"Intelligent Hyper-heuristics: A Tool for Solving Generic Optimisation Problems", United Technologies Research Center, Ireland
May 2015	"Automated Algorithm Design: Offline and Online Techniques", Department of Computer Engineering, Abdullah Gül University, Türkiye
Apr. 2015	"Automated Algorithm Design: Offline and Online Techniques", Department of Electrical and Electronics Engineering, Istanbul Medipol University, Türkiye
Nov. 2014	"Intelligent Hyper-heuristics: A Tool for Solving Generic Optimisation Problems", Department of Computer Science, KU Leuven, Belgium
Oct. 2014	"Algorithm Selection as a Collaborative Filtering Problem", ML4AAD, Department of Computer Science, University of Freiburg, Germany
Jan. 2014	"Automated Algorithm Design: Offline and Online Techniques", College of Engineering, Antalya International University, Türkiye
Jan. 2014	"Automated Algorithm Design: Offline and Online Techniques", Department of Computer Engineering, Meliksah University, Türkiye

Jan.	2014	"Algorithm Selection as a Collaborative Filtering Problem", LARC, School of Information Systems, Singapore Management University, Singapore
Oct.	2013	"Algorithm Selection as a Collaborative Filtering Problem", DDIS, Department of Informatics, University of Zurich, Switzerland
Aug.	2013	"High-level Search: From Hyper-heuristics to Algorithm Selection", LARC, School of Information Systems, Singapore Management University, Singapore
June	2013	"Algorithm Selection as a Collaborative Filtering Problem", LARCA, Department of Software, Universitat Politécnica de Catalunya, Spain
June	2013	"Algorithm Selection as a Collaborative Filtering Problem", INRIA, LRI, Université Paris-Sud XI, France
May	2013	"Algorithm Selection as a Collaborative Filtering Problem", CODeS, Department of Computer Science, KU Leuven, Belgium
Nov.	2012	"High-level Search: From Hyper-heuristics to Algorithm Selection", INRIA, LRI, Université Paris-Sud XI, France
June	2012	"Intelligent Hyper-heuristics: A Tool for Solving Generic Optimisation Problems", Department of Computer Science, University College London, UK
May	2012	"Intelligent Hyper-heuristics: A Tool for Solving Generic Optimisation Problems", Department of Computing Science and Mathematics, University of Stirling, UK
Mar.	2012	"Intelligent Hyper-heuristics: A Tool for Solving Generic Optimisation Problems", CODeS, Department of Computer Science, KU Leuven, Belgium
Jan.	2012	"An Adaptive Selection Hyper-heuristic for CHeSC 2011", ASAP, School of Computer Science, University of Nottingham, UK
Oct.	2011	"An Adaptive Selection Hyper-heuristic for CHeSC 2011", CODeS, Department of Computer Science, KU Leuven, Belgium
Jan.	2011	"Intelligent Hyper-heuristics for Generality", KAHO Dag, KAHO Sint-Lieven, Belgium
Dec.	2009	"Free Lunches for Hyper-heuristics", Department of Computer Science, KU Leuven, Belgium
Sept.	2009	"Fitness Landscape Analysis in Hyper-heuristics", Department of Computer Science, KU Leuven, Belgium
Jan.	2009	"Hyper-heuristics", Interdisciplinary Research on Technology, Education & Communication (iTec) Seminar Series – KU Leuven, Belgium
Mar.	2008	"Group Decision Making in Hyper-heuristics", Department of Computer Engineering, Yeditepe University, Istanbul, Türkiye

INTERESTS

Major Research Interests:	*Automated Algorithm Design / Automated Machine Learning (AutoML)*, *Data Science / Analytics* and *Operations Research* with the help of *Artificial Intelligence, Machine Learning, Reinforcement Learning, Evolutionary Algorithms, Computational Intelligence, Hyper-heuristics, Meta-heuristics, Algorithm Portfolios, Adaptive/Reactive/Autonomous Search, Meta-learning, Empirical Algorithmics, Design of Experiments, Recommender Systems (Collaborative Filtering), Boolean Satisfiability, Constraint Programming, Combinatorial Optimisation, Data Mining (Knowledge Discovery), Decision Support Systems* and *Automated Planning/Scheduling*
Future Research Interests:	*Cheminformatics, Bioinformatics, (Search based) Software Engineering, Autonomous / Evolutionary Robotics, Cyber Security, GPU Computing, Evolvable Hardware, Computational Sustainability*, and *Supply Chain Management*
Others:	*Psychology, History, Architecture, Ornithology, Computer Games (mostly FPS, Racing) and Photography*[11]

AWARDS & HONOURS

Academic Visit Support, COST STSM Grant by Cost Action CA15140 – UC Dublin, 2019 (unused)
Conference Grant, COST ITC Conference Grant by Cost Action CA15140, 2019
Conference Grant, TUBITAK 2224-A Support to Participate in International Scientific Activities, 2019

---

[11]http://www.flickr.com/photos/51549378@N04/

Research Fellowship, TUBITAK 2232 Reintegration Grant, 2018
Nominee, Thousand Young Talents Program of China, 2016
Best Paper Runner-up, 9th Learning and Intelligent Optimization Conference, 2015
Finalist, ERCIM Cor Baayen Award (for Young Researchers in CS and Applied Math), 2013
Postdoctoral Fellowship, ERCIM Alain Bensoussan Fellowship Programme, 2012–2013
Winner, Cross Domain Heuristic Search Challenge (CHeSC)[12], 2011
Finalist Team Member, International Nurse Rostering Competition (INRC)[13], 2010
Ph.D Research Fellowship, Department of Computer Science, KU Leuven, 2009–2012
Turkish National Ministry of Education Scholarship for PhD in Japan & USA, 2008 (unused)
M.Sc. Graduate Assistantship, Department of Computer Engineering, Yeditepe University, 2007–2008
B.Sc. Student Assistantship, Department of Computer Engineering, Yeditepe University, 2006–2007
B.Sc. Fellowship, Department of Computer Engineering, Yeditepe University, 2002–2007
High Honour, M.Sc. Degree in Computer Engineering, Yeditepe University, 2008
Honour, B.Sc. Degree in Computer Engineering, Yeditepe University, 2007
Full Education Scholarship, Med Educational Institute, 2001–2002
Full Education Scholarship, Kadro Educational Institute, 2001–2002 (declined)
Full Education Scholarship, Odak Educational Institute, 2000–2002

COMPUTER SKILLS

Programming: *C/C++, Java, Python, Prolog, Assembly, Matlab, Bash Shell*
Computer Graphics: *VRML, QML, OpenSceneGraph*
Web Technologies: *XHTML (CSS), JScript, JSP, PHP*
Database Systems: *Oracle, {Ms/My/Postgre}SQL*
Operating Systems: *Linux, Windows*

MEMBERSHIPS

Chair, Task Force on Hyper-heuristics, IEEE Computational Intelligence Society (CIS)
Member, IEEE Intelligent System Application Technical Committee (ISATC), IEEE CIS
Member, Task Force on Automated Algorithm Design, Configuration and Selection (AADCS), IEEE CIS
Member, Task Force on Evolutionary Scheduling and Combinatorial Optimisation (ESCO), IEEE CIS
Member, COnfiguration and SElection of ALgorithms (COSEAL) Group
Member, IEEE Computational Intelligence Society (CIS)
Member, Institute of Electrical and Electronics Engineers (IEEE)
Member, Society for Industrial and Applied Mathematics (SIAM)
Member, Marie Curie Alumni Association (MCAA)
Member, Institute of Mathematical Statistics (IMS)
Member, European Chapter on Metaheuristics (EU/ME)
Member, EURO Working Group on Combinatorial Optimization (ECCO)
Member, EURO Working Group on Operational Research Applied to Health Services (ORAHS)
Member, EURO Working Group on Automated Timetabling (WATT)
Member, Turkish Foundation for Combating Soil Erosion (TEMA)
Former Member, Belgian Operations Research Society (ORBEL)
Former Member, OR Society, UK (OR)
Former (Founder) Member, Environmental Club, Yeditepe University
Former Member, Engineering Club, Yeditepe University
Former Member, Computer Society, Yeditepe University

PERSONAL

Born in November 1985, Türkiye
Speaks Turkish (*Native*) and English (*Fluent*)

---

[12]http://www.asap.cs.nott.ac.uk/external/chesc2011/
[13]http://www.kuleuven-kulak.be/nrpcompetition