IEEE Congress on Evolutionary Computation (IEEE CEC 2025)
Conference Program

June 8 - 12, 2025, Hangzhou, China   Hangzhou International Expo Center (HIEC)

Time	Code	Session Chairs	Activity	Location
			Sunday, June 8	
08:00-18:00			Registration	
09:00-18:00	Workshop 01	/	**Multimodal Data-Driven Optimization** *Organizers: Xueming Yan, Qiqi Liu, Lifang He, Yaochu Jin*	1F, 102B
	Workshop 02	/	**Physics-Informed Evolutionary Learning and Optimization** *Organizers: Yew-Soon Ong, Jiao Liu, Chinchun Ooi, Abhishek Gupta, Stefan Menzel, Kalyanmoy Deb*	1F, 102C
10:00-10:20			Coffee Break	
10:20-12:20	Tutorial 01	/	**Principle and Applications of Semantic Genetic Programming** *Organizers: Qi Chen, Bing Xue, Mengjie Zhang*	1F, 102A
	Tutorial 02	/	**Evolutionary Feature Reduction for Machine Learning** *Organizers: Bach (Hoai) Nguyen, Ruwang Jiao, Bing Xue, Mengjie Zhang*	1F, 103A
	Tutorial 03	/	**New EMO Algorithm Framework with an Unbounded External Archive: Basic Ideas and Research Directions** *Organizers: Lie Meng Pang, Hisao Ishibuchi*	1F, 103B
	Tutorial 04	/	**Evolutionary Computation for the Design of General Purpose Artificial Intelligent Systems (GPAIS)** *Organizers: Isaac Triguero, Daniel Molina, Bing Xue*	1F, 103C
12:20-14:00			Lunch Break	2F, Press Conference Room
14:00-18:00	PDW	/	**Paper Development Workshop (PDW)** *Organizer: Iván Mauricio Amaya Contreras*	1F, 102A
14:00-16:00	Tutorial 05	/	**Large Language Model Driven Evolutionary Optimization** *Organizers: Hua Xu, Xiaodong Li, Yuan Yuan, Yuan Sun, Huigen Ye*	1F, 103A
	Tutorial 06	/	**Pareto Optimization for Subset Selection: Theories and Practical Algorithms** *Organizer: Chao Qian*	1F, 103B
	Tutorial 07	/	**Distributed Evolutionary Computation for Multi-Agent Systems: Advances and Applications** *Organizer: Wei-Neng Chen*	1F, 103C
16:00-16:20			Coffee Break	
	Tutorial 08	/	**Structural Bias in Optimization Algorithms** *Organizers: Anna V. Kononova, Niki Van Stein*	1F, 103A
	Tutorial 09	/	**Large Language Model for Automatic Algorithm Design** *Organizers: Fei Liu, Zhichao Lu, Zhenkun Wang, Qingfu Zhang*	1F, 103B
	Tutorial 10	/	**Fair Performance Comparison of Evolutionary Multi-objective Algorithms** *Organizers: Lie Meng Pang, Hisao Ishibuchi*	1F, 103C

Time / Location	Session	Chair / Organizer	Details	Room
18:30–20:00	Welcome Reception			2F, Lotus Platform, Hangzhou International Expo Center
Monday, June 9				
08:00–18:00	Registration			
08:30–09:00	Opening Ceremony		Opening Ceremony	
09:00–10:00	Plenary Speech 01	Yaochu Jin	Title: "Optimization in the Darkness of Uncertainty: When You Don't Know What You Don't Know, and What You Do Know Isn't Much" — Kate Smith-Miles, The University of Melbourne, Australia	1F, Multi-Function Hall
10:00–10:20	Coffee Break			

Regular Session 01 — Chair: Liang Feng — 1F, 102A

Adaptive and Meta-Learning Driven Evolutionary Methods for Multi-Task and Dynamic Optimization

127. An Adaptive Probabilistic Evolutionary Multi-Task Algorithm for Multi-objective Recommendation
Yuanyuan Ge, Shuai Wang, Haipeng Yang, Meng Zhu, Guo Yimin, Yingjie Li, Lei Zhang

30. A Theoretical Analysis of Analogy-Based Evolutionary Transfer Optimization
Xiaoming Xue, Liang Feng, Yinglan Feng, Rui Liu, Kai Zhang, KC Tan

35. A Meta-Learning-Based Federated Surrogate-Assisted Evolutionary Algorithm for Dynamic Expensive Optimization
Liqun Wen, Hongfeng Wang

51. Effective Regularization Through Loss-Function Meta learning
Santiago Gonzalez, Xin Qiu, Risto Miikkulainen

110. Discrete Evolutionary Algorithms for Optimizing Sphere
Timo Kötzing, Aishwarya Radhakrishnan

Regular Session 02 — Chair: Zhenan He — 1F, 103A

Generative Models and Multi-objective Innovations for Industrial and Medical Applications

391. Multi-Start Optimization Method via Scalarization based on Target Point-based Tchebycheff Distance for Multi-objective Optimization
Kota Nagakane, Masahiro Nomura, Isao Ono

77. Multitree GP-Based Feature Learning for Multimodal Medical Image Classification
Zhicheng Wu, Bing Xue, Mengjie Zhang

390. Controlling an Exploration in Unbounded Search Space by Novelty-Based Multi-Objectivization
Ryuki Ishizawa, Hiroyuki Sato, Keiki Takadama

78. Generative Model-Driven Large-Scale Dynamic Multi-objective Evolutionary Optimization
Chenyang Li, Gary Yen, Zhenan He

392. Multi-objective Optimization of Flight Schedules Considering Constraint Tolerance based on Local Search and Two Archives
Tomoki Ishizuka, Hiroyuki Sato, Keiki Takadama

SS-03 — Kaizhou Gao; Ponnuthurai Nagaratnam Suganthan — 1F, 102B

Learning Guided Swarm Intelligence and Evolutionary Algorithms with Applications
Organizers: *Kaizhou Gao, Yaping Fu, Ponnuthurai Nagaratnam Suganthan*

58. Improved Jaya Algorithm for Solving No-wait Distributed Scheduling Problems
Yuxia Pan

107. An Evolutionary Multitasking-based Unsupervised Learning Framework for Learning to Optimize
Wang Wei, Yindong Shen

135. Q-Learning Driven Multi-objective Hybrid PSO for Distributed Heterogeneous Hybrid Flow-shop Scheduling Problem
Wenqiang Zhang, Xuan Bao, Mingzhe Li, Xixi Li

249. FLFSI: Feature-Level Image Fusion and Improved Swarm Intelligence Optimization Algorithm for Endometrial Detection in Contrast-Enhanced Ultrasound Imaging
Zihao Zhang, Yongjun Liu, Zhengyu Li

250. Learning-Aided Evolutionary Algorithm to Solve Energy-Efficient Dynamic Task Scheduling Problems
Hao Shi, Haoran Zhou, Zhiwen Mao, Chengran Lin

Time	Session	Chair	Content	Room
10:20-12:20	Regular Session 03	Cheng He	**High-Efficiency Computing in Multi-objective Optimization: GPU Acceleration and Adaptive Initialization** 322. GPU-Accelerated Evolutionary Many-Objective Optimization Using Tensorized NSGA-III *Hao Li, Zhenyu Liang, Ran Cheng* **Effects of Unbounded External Archive on the Performance of Constrained Multiobjective Evolutionary Algorithms** 330. *Yanyu Chen, Linfeng Zhu, Lie Meng Pang, Hisao Ishibuchi* 334. Evolutionary Asynchronous Optimization-A Novel Optimization Paradigm for Non-contact Voltage Measurement *Ye Tian, Cheng He, Endi Cao, Yonglin He, Xingyi Zhang* 336. An Evolutionary Neural Architecture Search-Based Approach for Time Series Forecasting *Trung Hieu Vu, Eyad Elyan, Tien Thanh Nguyen* 360. Coevolutionary Optimization for Multi-UAV Path-Planning *Mitali Sil, Pratyusha Rakshit, Sayan Chatterjee, Archana Chowdhury*	1F, 102C
	Regular Session 04	Yaqing Hou	**Foundations of Evolutionary Computation: Global Convergence, Chaotic Landscapes, and Granular Optimization** 87. A Simple and Comprehensive Method Based on Measure Comparison for Global Convergence Analysis in Evolutionary Computation *Liuyue Luo, Zhihui Zhan* 144. Improving Controllability of Chaotic Landscape Generators by Property Evolution *Bo Zhang, Fengyang Sun, Lin Wang, Bo Yang* 168. A Biogeography-based Dual-strategy Particle Swarm Algorithm for Numerical and Engineering Design Optimization *Xia Wang, Hongwei Ge, Yaqing Hou, Mengyue Wang* 169. MGO: A Multi-Granularity Optimization Algorithm Based on Granular-balls *Hou Bin, Degang Chen, Guoyin Wang, Shuyin Xia* 87. A Simple and Comprehensive Method Based on Measure Comparison for Global Convergence Analysis in Evolutionary Computation	1F, 103B
	(SS-27, SS-11)	Peng Yang; Josu Ceberio	**Large Language Models: Catalyzing Evolutionary Algorithms and Optimization Learning** **SS-27: Large Language Model-Enhanced Evolutionary Algorithms for Industrial Optimization** *Organizers: Shulei Liu, Fei Liu, Qingfu Zhang* 41. LLM-Driven Customizable Fireworks Algorithm for Diverse Optimization Tasks *Shipeng Cen, Ying Tan* 251. Relation Learning with Large Language Models for Multi-objective Expensive Optimization *Hao Hao, Aimn Zhou* 353. LLM-Driven Neighborhood Search for Efficient Heuristic Design *Zhuoliang Xie, Fei Liu, Zhenkun Wang* **SS-11: Evolutionary Learning and Learning to Optimize** *Organizers: Peng Yang, Josu Ceberio, Chao Qian* 164. Diverse Prompts: Illuminating the Prompt Space of Large Language Models with MAP-Elites *Gabriel Santos, Marcelo Zanchetta do Nascimento, Rita Maria Silva Julia*	1F, 103C
12:20-14:00			Lunch Break	2F, Press Conference Room
12:20-18:00	MP	/	**Mentoring Program (MP)** *Organizers: Iván Mauricio Amaya Contreras*	1F, 103A
	Regular Session 05	Zhihui Zhan	**Automation, Natural Selection, and Collective Intelligence in Evolutionary Computation** 400. From Manual to Automated Prompt Engineering: Evolving LLM Prompts with Genetic Algorithms *Leandro A. Loss, Pratikkumar Dhuvad* 50. Gradient Descent Emerges via Natural Selection *Ailun Shen* 80. Behavior Allocations in Robotic Collective Herding Behavior Evolution *Ameel Valjee, Bilal Aslan, Geoff S. Nitschke* 82. Bi-Velocity Coevolutionary Multiswarm Particle Swarm Optimization for Many-Objective Gateway Placement Optimization *Zhouzhi Lu, Qite Yang, Qingrui Zhou, Zhihui Zhan* 121. A Two-Layer Task Allocation Algorithm for Search and Rescue under Communication Constraints *Yutong Jiang, Lu Hui, Ping Zhou, Xuehao Deng*	1F, 102B

Session	Chair / Organizer	Room	Program
Regular Session 06	Jing Liu	1F, 102C	**Model-Driven Benchmarks and Cross-Domain Surrogate Learning for Evolutionary Systems** 285. Large Language Model-Based Benchmarking Experiment Settings for Evolutionary Multi-objective Optimization — *Lie Meng Pang, Hisao Ishibuchi* 290. Community-Aware Role-Based Graph Embedding — *He Yu, Jing Liu* 296. Finding Multiple Alternate Solutions Using Evolutionary Multi-objective Optimization — *Kalyanmoy Deb, Ritam Guha* 309. Extreme Learning Machine with Learnable Activation Functions for Machine Control — *Victor Parque, Alaa Khalifa* 319. A Multi-Granularity Fireworks Algorithm with Collaboration and Competition for Solving the Influence Maximization Problem — *Hou Bin, Guoyin Wang, Shuyin Xia, De-Gang Chen*
(SS-43, SS-17, SS-25)	Carlos Artemlo Coello Coello; Wenhua Li	1F, 103B	**Frontier Explorations of Evolutionary Computation in Multi-objective Optimization across Diverse Fields** **SS-43: Evolutionary Computation in Healthcare Industry** *Organizers: Ye Tian, Cheng He, Zhichao Lu, Rong Qu, Yaochu Jin* 91. A Dual-Resolution Cooperative Evolutionary Algorithm for Multi-objective IMRT Inverse Planning — *Yuan Yao, Chen Li, Jun Wu, Zhang Yi, Ying Song, Guangjun Li, Junjie Hu* 43. The Dual-Focus Dynamic Multiple Imputation Approach For MNAR Missing Values In Medical Data — *Yuejing Zhai, Yiping Li, Huijie Li, Wuman Luo* 200. Optimizing Blood Plasma Distribution in Blood Banks through Evolutionary Computation — *Mokgadi G. Makgopo, Olumuyiw a Otegbeye, Absalom E-Shamir Ezugw u, Diego Oliva* **SS-17: Advances in Decomposition-Based Evolutionary Multi-objective Optimization (ADEMO)** *Organizers: Saúl Zapotecas-Martínez, Bilel Derbel, Ke Li, Qingfu Zhang* 122. Masked Genetic Operators with Causal Grouping for Constrained Multi-objective Optimization — *Zhaojun Wang, Jiachun Huang, Wenji Li, Shunge Wang, Yifeng Qiu, Biao Xu, Jiafan Zhuang, Zhifeng Hao, Zhun Fan* **SS-25: Evolutionary Many-objective Optimization** *Organizers: Rui Wang, Wenhua Li, Hisao Ishibuch* 303. A Preference-Guided Multi-objective Recommendation Algorithm with an Adaptive Tchebycheff Environmental Selection — *Xiaoge Li, Xiaotong Liu, Chaoli Sun*
(SS-31, SS-39)	Yi Mei; Yaqing Hou	1F, 103C	**Innovative Computational Approaches: Evolutionary, Memetic and Quantum in Diverse Applications** **SS-31: Evolutionary Computation for Service and Cloud Computing** *Organizers: Hui Ma, Gang (Aaron) Chen, Yi Mei* 95. Fairness-Constrained Multiple-Workflow Scheduling Through Stochastic Ranking — *Jiafan Yang, Jingyuan Xu, Changw u Huang, Xin Yao* **SS-39: Memetic Computing** *Organizers: Yaqing Hou, Zexuan Zhu, Ferrante Neri, Chuan-Kang Ting, Maoguo Gong* 196. Cross-Project Code Smell Detection as a Dynamic Optimization Problem: An Evolutionary Memetic Approach — *Sofien Boutaib, Maha Barbi, Slim Bechikh, Carlos A. Coello Coello, Lamjed Ben Said* 211. Robust Optimization Over Time by Integrating Reinforcement Learning and Particle Swarm Optimization — *Chingchi Lee, Yiruei Chen, Chuankang Ting*

Time		
16:00-16:20	Coffee Break	

	Chair / Organizer	Room	Program
Tutorial 11	/	1F, 102B	**Automated Algorithm Design: Data-Driven Algorithms** *Organizer: Mustafa Misir*
Tutorial 12	/	1F, 102C	**Leaving the Trees (The Evolution of Alternative Representations in GP)** *Organizer: Giovanni Squillero*
Tutorial 13	/	1F, 103B	**Meta-Evolution: Biological Backgrounds, Design Principles, Meta-Diversity, and Distributed Implementations** *Organizers: Yuhui Shi, Qiqi Duan, Qi Zhao, Lijun Sun*

16:20-18:20

Session	Chair	Content	Time	Location
Tutorial 14	/	**Benchmarking Single- and Multi-objective Optimization Algorithms via the (MO-)IOH-Profiler** *Organizers: Heike Trautmann, Anna V. Kononova, Jeroen Rook, Thomas Bäck*		1F, 103C
Tutorial 15	/	**Explainable Artificial Intelligence: A Genetic Programming Approach** *Organizers: Yi Mei, Qi Chen, Andrew Lensen, Bing Xue, Mengjie Zhang*		1F, 102A
WCI-DEI-YP Joint-Reception	/	**WCI-DEI-YP Joint-Reception** *Organizers: IEEE CS Young Professionals SubCommittee* *IEEE CS Women in Computational Intelligence SubCommittee* *IEEE CS Diversity Equity, and Inclusion SubCommittee*	18:30-20:00	5F, ChengShan Hall North Star Hangzhou International Expo Center Hotel

Tuesday, June 10

Session	Chair	Content	Time	Location
		Registration	08:30-18:00	
Plenary Speech 02	Thomas Bäck	**Title: Theory of Evolutionary Computation: Impacts and Prospects** Günter Rudolph, TU Dortmund, Germany	09:00-10:00	1F, Multi-Function Hall
		Coffee Break	10:00-10:20	
Competition	Cheng He; Ye Tian	**Competition Summary**		1F, 103C
Tutorial 16	/	**Adversarial Deep Learning by Using Coevolutionary Computation** *Organizers: Jamal Toutouh, Una-May O'Reilly*		1F, 102A
Tutorial 17	/	**Machine Learning Assisted Evolutionary Multi- and Many-Objective Optimization (Online)** *Organizers: Kalyanmoy Deb, Dhish Kumar Saxena*		1F, 102B
Regular Session 07	Bing Xue	**Knowledge Transfer and Diversity Enhancement in Evolutionary Algorithm Design** 201. AutoKT: Accelerating Knowledge Tracing Model Adaptation with Evolutionary Transfer Optimization *Longhui Li, Xiaobo Zhang, Hezhen Lu, Jie Zhang, Chenyang Bu* 205. Improved Differential Evolution with Mahalanobis Distance: IMPDE *Angel Casas-Ordaz, Jorge Ramos Frutos, Mario A. Navarro, Arturo Valdivia Glez, Diego Oliva* 206. Addressing Limitations and Inaccuracy of Diversity Metrics in Evolutionary Algorithms with an Accurate Dimension-wise Diversity *Erick Rodríguez-Esparza, Bernardo Morales-Castañed, Itzel Aranguren, Arturo Valdivia Glez, Mario A. Navarro, Diego Oliva* 231. A General Feature-Informed Crossover for Two-Stage Feature Selection in Symbolic Regression *Hengzhe Zhang, Qi Chen, Bing Xue, Wolfgang Banzhaf, Mengjie Zhang* 259. Shape of Feasible Regions of Real-World Multi-objective Problems *Yang Nan, Miao Ishibuchi, Tomoo Shu*		1F, 102C
Regular Session 08	Changhe Li	**Constrained Optimization in Real-World Problems: Feasibility Identification, Routing, and Swarm Coordination** 174. Feasible Regions Identification Based on Historical Solutions for Constrained Optimization Problems *Mengli Shan, Changhe Li, Xiaobo Liu, Mai Peng, Michalis Mavrovouniotis, Shengxiang Yang* 178. A Dynamic Breathing Surrogate-Assisted Particle Swarm Optimization Algorithm for Expensive Multi-objective Optimization Problems *Jingzhe Wang, Yajing Wang, Liang Zhang, Zongwei Luo* 180. A Hybrid Granular Ball-Ant Colony Optimization for the Multi-Depot Half-Open Time-Dependent Electric Vehicle Routing Problem *Yingkai Xu, Anikó Kopacz, Camelia Chira* 191. Transfer Learning of Surrogate Models via Domain Affine Transformation Across Synthetic and Real-World Benchmarks *Shuaiqun Pan, Diederick Vermetten, Manuel López-Ibáñez, Thomas Bäck, Hao Wang* 198. Evaluation of a Coordination Model for Swarms of Robots in Collective Environment Mapping *Claudiney R. Tinoco, Bruno Augusto Nassif Travençolo, Luiz G. A. Martins*	10:20-12:20	1F, 103A

Time	Session	Chair	Content	Room
	(SS-09, SS-15)	Xueming Yan; Chaoli Sun	**Symposium on Diverse Expansion and Cross-disciplinary Innovative Applications of Evolutionary Computation** **SS-09: Multimodal Data-Driven Optimization** *Organizers: Xueming Yan, Qiqi Liu, Lifang He, Yaochu Jin* 112. Data-Driven Calibration for Wearable Brain Functional Imaging Devices *Beiyin Pang, Yunyi Zhao, Shufan Yang* 338. Adaptive Surrogate-Assisted Evolutionary Multi-objective Community Detection Algorithm with Core Node Learning *Siying Lv, Shuwei Zhu, Fang Wei* **SS-15: Data-Driven Evolutionary Optimization of Computationally Expensive Problems** *Organizers: Chaoli Sun, Jonathan Fieldsend, Yew-Soon Ong* 18. A Performance Study of Surrogate-Assisted Large-scale Multi-objective Evolutionary Algorithms on GLSMOP Test Suite *Haoran Gu, Cheng He, Handing Wang* 67. A Parallel Surrogate-Assisted Multi-Penalty Function Search for Simulation-Driven Antenna Design *Jin Wang, Qingbin Guo, Haoran Gu, Handing Wang* 123. Surrogate Models are not Necessary for Black-Box Expensive Optimization *Hongxiang Geng, Ye Tian, Shangshang Yang, Xingyi Zhang, Cheng He*	1F, 103B
12:20-14:00			Lunch Break	2F, Press Conference Room
14:00-18:20	Workshop 03	/	**Quantum Optimization Algorithms and Applications** *Organizers: Tao Yue, Paolo Arcaini, Yuan Feng*	1F, 103C
	Tutorial 18	/	**Evolutionary Computation for Dynamic Optimization Problems** *Organizer: Shengxiang Yang*	1F, 102A
	Tutorial 19	/	**Decomposition Evolutionary Multi-objective Optimization: What We Know from the Literature and What We are not Clear from a Data Science Perspective** *Organizer: Ke Li*	1F, 102B
	Regular Session 09	Xilu Wang	**Federated Learning and Constrained Optimization for Smart Systems and Behavioral Modelling** 406. Cellular Automata-Based Model for Simulation of Collective Pedestrian Dynamics in Open-air Environments with Stochastic Transitions and Traffic Signs *Eduardo Cassiano da Silva, Gabriela Santos Damazo, Luiz G. A.* 92. Design of Mutation Operators in Fireworks Algorithm Assisted by Large Language Models *Yifan Liu, Ying Tan* 94. A Dual-Population and Three-Stage Constrained Multi-objective Evolutionary Algorithm Based on Alternative Evolution and Degeneration *Xinyu Zhou, Yanjun Zhu, Weifeng Lin* 138. Efficient Federated Bayesian Optimization with Symbolic Regression Model *Xilu Wang, Kaifeng Yang, Peng Liao, Mengxuan Zhang, Yaochu Jin* 155. Dynamic Threshold Selection in Genetic Programming for Imbalanced Fault Diagnosis *Ke Chen, Tianning Wu, Ying Bi, Jing Liang, Kunjie Yu*	1F, 102C
14:00-16:00	Regular Session 10	Lie Meng Pang	**Diversity-Aware Strategies and Initialization in Evolutionary Multi-objective Search** 372. Population Initialization for Evolutionary Multi-objective Optimization: A Short Review *Cheng Gong, Ping Guo, Lie Meng Pang, Qingfu Zhang, Hisao Ishibuchi* 374. Weighted-Scenario Optimisation for the Chance Constrained Travelling Thief Problem *Thilina Pathirage Don, Aneta Neumann, Frank Neumann* 380. Optimal Distribution of Solutions for Crowding Distance on Linear Pareto Fronts of Two-Objective Optimization Problems *Hisao Ishibuchi, Lie Meng Pang* 381. Exploring Parameter Influence on Empirical Drift Behavior for Variable-Metric Evolution Strategies *Stephan Frank, Tobias Glasmachers* 172. An Enhanced Multi-objective Evolutionary Algorithm for Adaptive-Formation Multi-UAV Task Allocation with Load-Dependent Constraints *Hu Tuo, Xiaoying Yang, Fuhua Jia, Hang Xu, Kai Yang, Tianxiang Cui*	1F, 103A

| (SS-34, SS-16, SS-06) | Gjorgjina Cenikj; Yi Chen | **Advancing Evolutionary and Computational Intelligence: From Fundamentals to Sustainable Multidisciplinary Applications**

SS-34: Automating Computational Intelligence Systems: Trends, Challenges, and Real-World Applications
Organizers: Anja Jankovic, Jorge Cruz, Tome Eftimov, Nelishia Pillay
85. ClustOpt: A Clustering-based Approach for Representing and Visualizing the Search Dynamics of Numerical Metaheuristic Optimization Algorithms
Gjorgjina Cenikj, Gasper Petelin, Tome Eftimov
258. Tracing the Interactions of Modular CMA-ES Configurations Across Problem Landscapes
Ana Nikolikj, Mario Andrés Muñoz, Eva Tuba, Tome Eftimov

SS-16: Evolutionary Computation in Multidisciplinary Applications for Sustainable Future (ECMASF)
Organizers: Yi Chen, Dehong Huo, Xiangrong Su
362. A Genetic Programming Approach for High-Level Multi-Spectral Data Fusion in Fish Biochemical Analysis
Yun Zhou, Bing Xue, Gang Chen, Mengjie Zhang

SS-06: Evolutionary Computation for Symbolic Regression and Applications
Organizers: Qi Chen, Bing Xue, Mengjie Zhang
104. Adaptive L1 Regularization for Neural Network-Based Symbolic Regression
Xavier Leresche, Valeriu Vrabie, Alban Goupil, Loïc Kolodziejczak
257. Node Importance-Based Multi-objective Genetic Programming for Enhanced Model Interpretability in Symbolic Regression
Rimas Mohamad, Qi Chen, Mengjie Zhang | 1F, 103B |
| 16:00-16:20 | | Coffee Break | |

Time	Session	Chair	Content	Location
16:20-18:20	Posters	Zhenkun Wang	9. Constrained Multi-objective Algorithm Based on Multi-Staging and Random Restart Strategy Lingyu Wu, Zenglin Qiao, Xinchao Zhao 20. Evolutionary Adjustment of Probabilistic Models Based on Cellular Automata Applied to Fire Propagation Lucas Vieira Murilo, Luiz G. A. Martins 22. LW-MSTCNN: An Optimization Study on Integrating Multiscale Attention Mechanism with Deep Separable Convolutional Networks Yunjie Li, Pengfei Liu, Haitao Zhao, Haifeng Tang, Minxian Shen, Lingyao Wang 29. Leveraging Inter-Generational Knowledge Transfer for Accelerating Large-Scale Global Optimization Yuefeng Xu, Rui Zhong, Chong Zhou, Chao Zhang, Jun Yu 34. Solving Multimodal Multi-objective Optimization Problems in Limited Time Fei Ming, Bing Xue, Wenyin Gong, Mengjie Zhang 36. An Efficient Multi-objective Shuffled Frog Leaping Algorithm-Based Method for Metabolic Pathway Design Xin Zhao, Haotong Li, Tao Zhang, Jiajing Q, Yahui Cao, Ming Yang, Weijie Liu 42. An Evolutionary Reinforcement Learning Method for Multi-energy Microgrid Energy Management Qiuting Cai, Yiwen Zhang, Kaitong Zheng, Yahui Jia, Huaiguang Jiang 66. Hyper-Heuristic with Learning-Based Agent for Distributed Hybrid Flow Shop with Worker Factor Lin Luo, Zhengchen Zhou 68. Large Language Models as Particle Swarm Optimizers Yamato Shinohara, Jinglue Xu, Tianshui Li, Hitoshi Iba 71. A Multi-objective Genetic Programming with Size Diversity for Symbolic Regression Problem Yujie Zhang, Guoquan Li, Zhengwen Huang, Jia Jinshuo, Xiang Li, Donghui Peng 74. On the Quality of Large Non-dominated Archives Ke Shang, Tianye Shu, Yang Nan, Liemeng Pang, Hisao Ishibuchi 84. A Dynamic Multi-Method Evolutionary Algorithm for Multi-objective Optimization with Learning Strategy Le Yan 96. Brain-inspired Modular Reservoir based on Spiking Neurons for Multi-task Learning Yan Zhou, Yaochu Jin, Jinliang Ding 97. Learning the Evaluation System for Chinese Traditional Music by Evolution Strategies Haolian Zhang, Xiaohong Guan, Nan Nan, Yixin Wang 101. Meta-MOGA: Meta-learning Multi-objective Genetic Algorithm Tianyu Li, Kai Wu, Xiaobin Li, Xiangyi Teng, Jing Liu 111. An Improved Evolutionary Multitasking Algorithm for Multitasking Berth Allocation Problem Rong Wang, XinXin Xu, Jun Hong, Si-Cheng Wang, Zhi-Hui Zhan 113. A Dual-Encoding-based Genetic Algorithm for Multi-objective Multi-UAV Scheduling in Firefighting Scenarios Gao Meng, Xiao-Fang Liu, Zhi-Hui Zhan 131. Variable Range-based Interaction Preference Multi-objective Optimization Algorithm through Objective Decomposition	Hall
18:30-20:00	/	/	Buffet Dinner	2F, Press Conference Room

Wednesday, June 11

Time	Session	Chair	Content	Location
08:30-18:00			Registration	1F, Multi-Function Hall
09:00-10:00	Plenary Speech 03	Carlos Artemio Coello Coello	Title: The Role of Neutrality in Genetic Programming, Machine Learning and Problem Solving Wolfgang Banzhaf, Michigan State University, USA	1F, Multi-Function Hall
10:00-10:20			Coffee Break	

Time	Session	Chair	Content	Room
	(SS-07, SS-12, SS-13, SS-28, SS-26)	Ponnuthurai Nagaratnam Suganthan; Ruwang Jiao	**Frontiers of Computational Intelligence: Evolutionary, Creative, and Optimized Approaches** SS-07: Evolutionary Computation for Feature Selection, Extraction and Dimensionality Reduction *Organizers: Bach (Hoai) Nguyen, Ruwang Jiao, Bing Xue, Mengjie Zhang* 31. Semantic-aware Surrogate-assisted Genetic Programming for Feature Construction in Classification *Jiayi Li, Jianbin Ma* SS-12: Computational Intelligence for Music, Art, and Creativity *Organizers: Chuan-Kang Ting, Francisco Fernández de Vega, Yu-Wei Wen, Rolando Miragaia* 276. Multi-Level Representation of Long MIDI Sequences: Integrating Bar-Level Encoding with Music-Level Context *Yuelang Sun, Guan Wang, Weihua Li, Matthew M.Y. Kuo, Quan Bai, Jianhua Jiang* SS-13: Computational Intelligence with Human Factors *Organizers: Yan Pei, Qing Liu, Kei Ohnishi* 44. Interactive Evolutionary Computation in the Latent Space of Deep Learning Models for Creative Game Content Generation *Yu-Cheng Cheng, Yanan Wang, Yan Pei* SS-28: Machine Learning Multi-objective Optimization *Organizers: Carlos A. Coello Coello, Amir Nakib, Kaoutar Senhaji* 313. Outperforming the Best with Minimal Effort: Algorithm Selection for Constrained Multi-objective Optimization *Mustafa Misir, Aldy Gunawan* SS-26: Competitions on Numerical Optimization *Organizers: Ponnuthurai Nagaratnam Suganthan, Kenneth V. Price, Jing Liang, Caitong Yue*	1F, 102A
	(SS-19, SS-01)	Jun Yu; Jian-Yu Li	**Learning-aided Evolutionary Computation: Principles, Algorithms, and Applications** SS-19: Fundamental and Applied Research on Large-Scale Evolutionary Algorithms for Artificial Intelligence *Organizers: Jun Yu, Rui Zhong, Chao Zhang* 23. Improved Competitive Swarm Optimizer with Linear Population Reduction for Large-scale Optimization *Rui Zhong, Jun Yu, Xingbang Du, Enzhi Zhang, AbdelazimHussien* SS-01: Learning-aided Evolutionary Computation: Principles, Algorithms, and Applications *Organizers: Jian-Yu Li, Xin-Xin Xu, Yi Jiang, Zhi-Hui Zhan* 17. MMEATC: A Multimodal Multiobjective Evolutionary Algorithm with Three Clustering Mechanisms *Wei Zheng, Zhifang Wei, Yang Chen, Mingming Yang* 136. A Nested Genetic Algorithm for Modeling Self-Organizing Rules in Collective Behaviors *Tong Liu, Wu Yapei, Tao Wang, Xingguang Peng* 223. Memory-Enhanced Evolutionary Algorithm for Fast Multi- and Many-Objective Optimization *Yicun Hua, Yang Jiang, Yuan Cao, Yan Xiao* 341. Experience-Driven Offline Knowledge Learning Framework for Evolutionary Algorithms *Yu Tang Hsu, Jia-He Tee, Chuan-Kang Ting*	1F, 103A
10:20-12:20	J2C-01	Ye Tian; Azam Asilian Bidgoll	**Theoretical Foundations and Diversity-Driven Design in Evolutionary Multi-objective Optimization** 10. Mathematical Runtime Analysis for the Non-Dominated Sorting Genetic Algorithm II (NSGA-II) *Weijie Zheng, Benjamin Doerr* 12. Runtime Analysis for the NSGA-II: Proving, Quantifying, and Explaining the Inefficiency for Many Objectives *Weijie Zheng, Benjamin Doerr* 14. From Understanding Genetic Drift to a Smart-Restart Mechanism for Estimation-of-Distribution Algorithms *Weijie Zheng, Benjamin Doerr*	1F, 102B

SS-10	Ying Bi; Harith Al-Sahaf	**Evolutionary Computer Vision and Image Processing (ECVIP)** *Organizers: Harith Al-Sahaf, Ying Bi, Pablo Mesejo* 157. U-Shaped Network Based on Particle Swarm Optimization for Retinal Vessel Segmentation *Junjie Yao, Gulje Zhu, Jiafan Zhuang, Zhifeng Hao, Wenji Li, Zhun Fan* 241. Automatic Feature Learning via Genetic Programming with Flexible Filtering for Skin Cancer Image Classification *Kunjie Yu, Jintao Lian, Ying Bi, Jing Liang* 248. Evaluating Color Spaces for Evolutionary Image Contrast Enhancement: An Empirical Study *Rafael Solar-Hernández, Saul Zapotecas-Martínez, Leopoldo Altamirano Robles, Diego Oliva, Seyed Jalaleddin Mousavirad* 268. Multimodal Image Classification Using Genetic Programming for Alzheimer's Disease Diagnosis *Yuye Zhang, Fangfang Zhang, Bing Xue, Mengjie Zhang* 291. Flexible Region Detection-based Genetic Programming for Fish Classification With Low-Quality Images *Jigang Fan, Ying Bi, Bing Xue, Mengjie Zhang* 300. A Two-Stage Approach Combining Feature Selection and Construction for Hyperspectral Crop Classification *Jing Liang, Zexuan Yang, Ying Bi* 332. A Convolutional Sparse Representations Integration Strategy Based on Self-Attention Genetic Programming for Multimodal Image Fusion *Yi Luo, Chang Liu, Dong Ji, Lixin Tang*	1F, 102C
J2C-03	Antonio LaTorre; Handing Wang	**Fitness Landscape Analysis and Cross-Domain Algorithm Selection for Continuous Optimization** 6. Nearest-Better Network for Fitness Landscape Analysis of Continuous Optimization Problems *Yiya Diao, Changhe Li, Sanyou Zeng, Shengxiang Yang, Carlos A. Coello Coello* 8. A Cross-Benchmark Examination of Feature-Based Algorithm Selector Generalization in Single-Objective Numerical Optimization *Gjorgjina Cenikj, Gasper Petelin, Tome Eftimov* 13. Random Filter Mappings as Optimization Problem Feature Extractors *Gasper Petelin, Gjorgjina Cenikj* 21. Games for Artificial Intelligence Research: A Review and Perspectives *Yunlong Zhao, Chengpeng Hu, Chengqi Wang, Zidi Wang, Haocheng Du, Jialin Liu*	1F, 103B
J2C-04	Ke Li; Guo Yu	**Meta-Learning Frameworks and Industrial Applications of Evolutionary Computation** 9. PyPop7: A Pure-Python Library for Population-Based Black-Box Optimization *Yajing Tan, Qiqi Duan, Guochen Zhou, Yuhui Shi* 19. Multiform Differential Evolution with Elite-Guided Knowledge Transfer for Coal Mine Integrated Energy Systems Constrained Dispatch *Canyun Dai* 20. Learning-Aided Iterated Local Search Algorithm for Integrated Order Batching, Picker Assignment, Batch Sequencing, and Picker Routing Problem *ZhengCai Cao, Xinsai Lv, Chengran Lin* 37. A Meta-Learning-based Optimization Framework for Expensive Optimization Problems in Dynamic Environments *Huan Zhang, Jinliang Ding, Liang Feng, KC Tan, Ke Li*	1F, 103C
12:20-14:00		Lunch Break	2F, Press Conference Room
SS-38	Jing Liang; Ponnuthurai Nagaratnam Suganthan	**Multimodal Multi-objective Optimization: Real-world Applications and Methods** *Organizers: Jing Liang, Caitong Yue, Kunjie Yu, Boyang Qu, Ying Bi* 38. Adaptive Transfer Learning Assisted Multimodal Multi-objective Optimization Algorithm Based on Zoning Search *Shaojie Chen, Jingjing Wang, Jun Yu, Qingchao Jiang, Qinqin Fan* 52. Distance-Based Weak Convergence Strategy for Multimodal Multi-objective Optimization *Zhiyang Zhang, Qianlong Dang, Tingting Wang* 158. Using the Local Auxiliary Population to Balance the Convergence and Constraints in Constrained Multimodal Multi-objective Optimization *Zhipan Li, Hugui Rong* 274. Multimodal Multiobjective Optimization in the Charging Station Site Selection *Caitong Yue, Lihong Cheng, Jing Liang, Kunjie Yu, Mengmeng Li*	1F, 102A

14:00-16:00	SS-05 Yanan Sun; Chuan-Kang Ting	**Evolutionary Deep Learning and Applications** *Organizers: Yanan Sun, Bing Xue, Chuan-Kang Ting, Mengjie Zhang* 154. Homogeneous Architecture Augmentation and Confidence Prediction for Evolutionary Neural Architecture Search *Pengcheng Jiang, Yu Xue, Ferrante Neri* 163. Multi-objective Evolutionary Neural Architecture Search for Material Microstructure Segmentation *Kaihan Zhang, Chang Liu* 277. Temporal Image Sequence Fusion with PSO-Optimised CNN Transfer Learning for Plant Temporal State Categorisation *Seyed Jalaleddin Mousavirad, Frida Shaliari, Matias ONlis* 294. A Novel Hybrid System for ASD Diagnosis: Integrating EEG Image Analysis, Deep Learning, and Swarm Intelligence *Jordana Leandro Seixas, Flávio Secco Fonseca, Maíra Araújo de Santana, Cecília Cordeiro da Silva, Clarisse Lins de Lima, Arianne Sarmento Torcate, Giselle Machado Magalhães Moreno, Juliana Carneiro Gomes, Wellington Pinheiro dos Santos*	1F, 102B
	SS-20 Changhe Li; Diego Oliva	**Evolutionary Computation in Dynamic and Uncertain Environments (ECIDUE)** *Organizers: Changhe Li, Michalis Mavrovouniotis, Shengxiang Yang* 19. A Centroid Guided Cluster Transformation for Dynamic Multi-objective Optimization Algorithm *Yi Zeng, Xuewen Xia, Fenglin Lin, Yuehui Zhang, Meitong Lu* 90. Dual-Tree Genetic Programming for Automated Discovery of Computing Power Network Scheduling Heuristics *Benje Zhao, Ruwang Jiao, Meng Xu, Shuaishuai Liu, Chao Guo, Shaolin Wang, Jin Wang* 321. Benchmarking Streaming Evolutionary Ensemble Learning under Shifting Imbalanced Data *Ziyu Qiu, Malcolm Lan Heywood* 373. A Bio-Inspired Goal-Directed Cognitive Map Approach to Robot Navigation and Mapping *Matthew A. Hicks, Tingjun Lei, Chaomin Luo, Lantao Liu, Zhuming Bi*	1F, 102C
	SS-04 Hiroyuki Sato; Yi Mei	**Evolutionary Computation for Scheduling and Combinatorial Optimization** *Organizers: Yi Mei, Su Nguyen, Gang (Aaron) Chen, Fangfang Zhang* 151. Diverse Counterfactual Explanations by Differential Evolution with Ablation Strategies for Uncertain Capacitated Arc Routing Problem *Shaolin Wang, Haoyang che, He Jiang, Yi Mei, Yi Liu, Ying Gu* 156. A Multi-station Electric Vehicle Charging Scheduling Problem with Non-identical Chargers *Abdennour Azerine, Mahmoud Golabi, Ammar OULAMARA, idoumghar* 184. Evolutionary Strategies with Dual Graph Reinforcement Learning for Flexible Job Shop Scheduling Problem *Junwen Yang, Haoyu Wang, Jian Xiong* 224. Real-World Cardboard Production Optimization Using Multi-objective Evolutionary Algorithms *Iori Mnakawa, Shio Kawakami, Hiroyuki Miyashita, Tsutomu Ida, Hiroyuki Sato* 244. Genetic Programming Hyper-Heuristic for Dynamic Electric Dial-a-Ride Problem *William Huang, Yi Mei, Günther Raidl, Fangfang Zhang, Laurenz Tomandl, Steffen Limmer, Mengjie Zhang, Tobias Rodemann* 253. Preference-Based Multi-objective Genetic Programming for Energy-efficient Dynamic Flexible Job Shop Scheduling *Zhuo-Yin Qao, Fangfang Zhang, Yi Mei, Mengjie Zhang* 306. Investigation of Decision Making with Scheduling Rules Learned via Genetic Programming for Dynamic Flexible Job Shop Scheduling *Luyao Zhu, Fangfang Zhang, Yi Mei, Mengjie Zhang*	1F, 103A
	SS-33 Lhassane Idoumghar; Amir H. Gandoml	**Integrating Machine Learning Methods Into Evolutionary Optimization** *Organizers: Lhassane Idoumghar, Amir H. Gandomi, Mahmoud Golabi, Abdennour Azerine* 81. Dynamic Graph Neural Evolution: An Evolutionary Framework Integrating Graph Neural Networks with Adaptive Filtering *Kaichen Ouyang, Shengwei Fu, Yi Chen, Huiling Chen* 159. Bi-Level Optimization of Electric Vehicle Charging Scheduling Using Hybrid Genetic Algorithm and Reinforcement Learning *Abdennour Azerine, Mahmoud Golabi, Lhassane Idoumghar* 183. Integrating Active Learning for Improved Preference Modeling in Tree-Based Interactive Evolutionary Multi-objective Learning Algorithms *Seyed Mahdi Shavarani, Mahmoud Golabi, Lhassane Idoumghar* 368. A Hybrid Reinforcement Learning BRKGA with Local Branching for a Sensor Allocation Problem *Rafael Schneider, Cláudio André da Silva Alves, Israel Mendonca dos Santos, Pedro Henrique González*	1F, 103B
16:00-16:20		*Coffee Break*	

Time	Session	Chair	Location	Content
16:20-18:20	Posters	Zhenkun Wang	Hall	**239. A GAN-Assisted Bi-Stage Bayesian Co-Evolution Optimization Algorithm for High-dimensional Expensive Many-Objective Problems** *Jie Tian, Hongli Bian, Yuyao Zhang, Xiaoxu Zhang, Nevena Majalovic* **255. A Neural-assisted Combinatorial Optimizer with Adaptive Neighborhood Search** *Weile Xu, Anqi Pan* **256. Task Representation in Optimization: Utilizing Image Modalities for Effective Comparison** *Zijian Jiang, Qiqi Liu, Yaochu Jin, Jiaqiang Li* **260. Quantile Normalization of Optimization Functions** *Yunpeng Jing* **273. Cooperative Coevolutionary Probability-Based Binary Particle Swarm Optimization for High-Dimensional Feature Selection** *An-Da Li, Bing Xue, Mengjie Zhang, XiongMin Lin, Guodong Wang* **280. Optimizing Neural Network Loss Function with Surrogate-assisted Differential Evolution** *Eduard Morozov, Sergei Gorbunov, Vladimr Stanovov* **288. Multitask Knapsack Problems with Scalable Objective and Constraint Similarities: Behavioral Analysis of Evolutionary Multi-Factorial Algorithms** *Shio Kawakami, Keiki Takadama, Hiroyuki Sato* **307. Deep Learning-Assisted Numerical Simulation of Laser Cladding for Cold-Rolled Rolls** *Zhanqi Liu, Chang Lu* **312. Comparing the Performance of Domain Transform-based Differential Evolution with Recent CEC Competition Winners on the CEC2025 Numerical Optimization** *Xinrou Hu, Junting Luo, Sheng Xin Zhang* **315. Modified BBO-Based Graph Convolutional Recurrent Neural Network for Emotion Recognition** *Yiwen Wang, Meiling Xu* **318. A First Approach to Refine Semantic Spaces in Zero-Shot Learning with a Genetic Algorithm** *J. Herrera, Francisco Herrera, Isaac Triguero* **328. Multi-objective Quantum-inspired Tabu Search Algorithm for Weighted Portfolio Model in Financial Optimization** *Yao-Hsin Chou, Yu-Chi Jiang, Ping-I Lin, Ru-Wei Tseng, Shu-Yu Kuo, Sy-Yen Kuo* **337. An Enhanced Search Direction-Based Knowledge Transfer for Multiobjective Many-Tasking Evolutionary Optimization** *Wu Lin, Songbai Liu, Qingling Zhu, Quzhen Lin* **342. Adaptive Strategy for Optimizing Latency-Energy Tradeoffs in Edge Computing Task Offloading** *Yingying Sun, Zhiming Dong, Gongshu Wang, Ren Zhao* **345. Physics-Informed Optimization via Ising Spin System Evolution** *Wuje Fu, Anupam Trivedi, Dpti Srinivasan, Aaron Danner* **348. Multi-objective Clustering-Guided Multitasking for Diversified Sequential Recommendation** *Ruxin Wu, Wei Zhou, Junkai Ji, Siqin Peng, Sijun Peng, Zexuan Zhu* **352. Progressive Surrogate Modeling for a Multi-objective Competitive Co-evolutionary (MoCCoEv) Wargame Strategy**
18:30-20:00	Banquet		**1F, Multi-Function Hall, Hangzhou International Expo Center**	

Thursday, June 12

Time	Session	Chair	Location
08:30-12:00	Registration		
09:00-10:00	Plenary Speech 04	Menglie Zhang	**Title: Learnware: Small Models Do Big** Zhi-Hua Zhou, Nanjing University, China — 1F, Multi-Function Hall
10:00-10:20	Coffee Break		

(SS-44, SS-40)	Ye Tian; Jia Guo	**Frontiers of Evolutionary Computation: Large-Scale Multi-objective Optimization Algorithms and Their Safety Applications** **SS-44: Evolutionary Large-scale Multi-objective optimization** *Organizers: Yajie Zhang, Shangshang Yang, Ye Tian, Ian Kropp, Xingyi Zhang, Yaochu Jin* 26. An Adaptive Multi-Granular Pareto-Optimal Subspace Learning Algorithm for Sparse Large-Scale Multi-objective Optimization *Chengze Sun, Ye Tian, Shuai Shao, Shangshang Yang, Xingyi Zhang* 62. A Dual-population Evolutionary Algorithm for Multi-objective Vehicle Routing Problems with Three Dimensional Loading Constraints *Quan Zhou, Jinqiong Gao, Hao Jiang* 220. An Elite-Guided Large-Scale Multi-objective Evolutionary Algorithm Driven by Denoising Diffusion Probabilistic Models *Tingting Dang, Wenxuan Fang, Jiaqiang Li, Qiqi Liu, Junhua Gu, Yaochu Jin* 320. An Evolutionary Algorithm with Dynamic Grouping-Based Reproduction for Sparse Multi-objective Optimization *Junpeng Cheng, Xuming Han, YaLi Chu, Ting Zhou* 375. An Expensive Large-scale Multi-objective Optimization Algorithm with Random Resampling *Yanke Zhang, Xiaotong Liu, Ying Tan, Chaoli Sun* **SS-40: Evolutionary Computation for Safety: Data, Methods and Applications** *Organizers: Jia Guo, Jiacheng Li, Yuji Sato, Zhiwei Ye* 129. Q-ADE2: A Novel Approach for Solving Federated Learning Incentive Mechanisms Based on Stackelberg Game *Chenyang Guo, Shengnan Zhao, Shiyue Qin*	1F, 102A
SS-29	Jiao Liu; Haofeng Wu	**Physics-Informed Evolutionary Learning and Optimization** *Organizers: Yew-Soon Ong, Jiao Liu, Chinchun Ooi, Abhishek Gupta, Stefan Menzel, Kalyanmoy Deb* 93. A Physics-Informed Evolutionary Transfer Optimization Framework for Material Design *Cheng Chen, Haokai Hong, Wanyu Lin, KC Tan* 120. NetGP: A Hybrid Framework Combining Genetic Programming and Deep Reinforcement Learning for PDE Solutions *Lulu Cao, Yingjian Feng, IMn Jiang, KC Tan* 128. AI Assisted Fluid-Structure Modeling and Optimization of Pump-Jet Propulsor *Yichen Hao, Linsheng Xia, Chao Bian, Zhendong Guo, Xiaofang Wang, Haitao Liu* 141. Convergence of Expensive Multi-objective Optimizers: From ParEGO to ExTrEMO *Haofeng Wu, Tingyang Wei, Jiao Liu, Meng Xu, Yew-Soon Ong*	1F, 102B
J2C-02	Ke Shang; Qiqi Liu	**Fairness-Driven Multi-objective Optimization and Scalable Data-Centric Decision Systems** 15. Fairness-aware Multi-objective Evolutionary Learning *Qingquan Zhang, Jialin Liu, Xin Yao* 26. Targeted Pareto Optimization for Subset Selection with Monotone Objective Function and Cardinality Constraint *Ke Shang, Guotong Wu, Lie Meng Pang, Hisao Ishibuchi* 27. Gradient-Guided Local Search for Large-Scale Hypervolume Subset Selection *Yang Nan, Tianye Shu, Hsao Ishibuchi, Ke Shang* 35. Predicting Unattained Pareto-Optimal Solutions Using Machine Learning *Kalyanmoy Deb, Anirudh Suresh*	1F, 102C

10:20 - 12:40			
SS-45	Chang Liu; Mustafa MISIR	**Evolutionary Intelligent Decision-making Method and Application** *Organizers: Chang Liu, Bing Yan, Rui Wang, Fengzhen Tang, Yaochu Jin* 16. Hierarchical Reinforcement Learning-Based Decision Generation for Beyond Visual Range Air Combat *Peng Li, Chen Lang, Xiaoshuo Jia, Jingyu Ru, Hongli Xu* 40. PGFormer: Prompt Guide Network for Underwater Image Enhancement *Xin Luan, Huijie Fan, Qiang Wang, Yu Guan, Yandong Tang* 55. Joint Attention Mechanism and Multi-task Learning for Weakly Supervised Skin Image Segmentation *Yujianing Wang, Qiang Wang, Huijie Fan* 165. Research on Bearing Fault Diagnosis Based on Secondary Decomposition and Stochastic Configuration Network *Jialong Hu* 246. Improved Genetic Algorithm Using Reinforcement Learning to Solve the Re-entrant Flexible Flow Shop Scheduling Problem *Xinzhuo Wang, Chang Liu, Rui Wang, Zhenghao Yu, Shengxiang Yang* 335. A Many-objective Hybrid Recommendation Algorithm Based on User Grouping *Lin Tang, Zhang Guochen, Chaoli Sun* 339. Application of Evolutionary Computation to Decision-Making in Production Processes	1F, 103A
SS-02	Zhi-Hui Zhan; Jian-Yu Li	**Neural Architecture Search: A Deep Evolutionary Optimization Perspective** *Organizers: Yi Jiang, Nan Li, Jian-Yu Li, Zhi-Hui Zhan* 70. Neural Architecture Search-based BP Neural Network for Underwater Glider Motion Parameter Generation *Hao Hu, Tao Wang, Yanan Li, Zhao Zhang, Xingguang Peng* 117. Surrogate-Assisted Evolutionary Neural Architecture Search with Architecture Knowledge Transfer *Peng Liao, Xiu Wang, Yaochu Jin, Chaoli Sun, Wenli Du* 153. Embedding Comparator for Evolutionary Neural Architecture Search via Contrastive Learning *Xiaolei Zhang, Yu Xue, Ferrante Neri* 240. Evolutionary Graph Fusion Architecture Search *Aohan Mei, Nan Li, Tian Zhang, Lianbo Ma* 310. DE-KAN: A Differential Evolution-Based Optimization Framework for Enhancing Kolmogorov-Arnold Networks in Complex Nonlinear Modeling *Danlin Li, Bo Yan, Quan Long, Bin Wang*	1F, 103B
SS-24	Liang Feng; Jinghui Zhong	**Evolutionary Multitasking** *Organizers: Liang Feng, Jinghui Zhong, Kai Qin* 59. Matrix-Driven Adaptive Dual-Space Evolutionary Algorithm for Many-Task Optimization *Yaxue Liu, Jingchuan Zhang, Xianpeng Wang* 124. Enhancing Knowledge Transfer in EMTO with Manifold Learning and Reinforcement Learning *Lei Wang* 210. Effective Computational Resource Allocation in Evolutionary Multi-objective Multi-Task Optimization *Zhiming Dong, Xianpeng Wang, Lixin Tang* 266. Research on Multi-objective Multitasking Algorithm Based on Dimensional Importance Assessment and Knowledge Transfer *Jing Yang, Chenyu Wang, Xingjuan Cai* 298. Semantics-Driven Task Similarity in Multi-Task Genetic Programming for Multi-Output Symbolic Regression *Chunyu Wang, Qi Chen, Bing Xue, Mengjie Zhang*	1F, 103C
12:40-14:00	Lunch Break		2F, Press Conference Room