

Special Session 10: Advances in Heuristic and Bio-inspired

Computing: From Theory to Real-world Applications

Chairs: Zhen Wang, Huizhou University, China; Zexiao Liang, Guangdong University of Technology, China

Brief Description of the Session

This track seeks cutting-edge research on the development, analysis, and practical implementation of heuristic and bio-inspired algorithms. We invite contributions that push the boundaries of metaheuristic optimization, nature-inspired computing, and their hybridization with modern machine learning techniques to solve complex real-world problems.

Topics

- Algorithmic Foundations
- Emerging Methodologies
- Performance Enhancement
- Domain Applications

Brief Introduction of Chair and Co-chairs with Photo



Zhen Wang received the Ph.D. degree in computer technology and application from the Faculty of Information Technology, Macau University of Science and Technology (MUST), China, in 2017. He joined the School of Computer Science and Engineering, Huizhou University (HZU), China as a lecturer in October 2017. Currently, he is an associate professor and Dean of School of Computer Science and Engineering at HZU. His research interests focus on vehicular networks and intelligent transportation system.

Dr. Wang has made outstanding contributions in his professional field, publishing over 30 high-level papers and leading or participating in more than 20 projects. In the field of applied research, Dr. Wang has received a total of approximately 7 million yuan in research project funding for artificial intelligence and the Internet of Things.



Dr. Zexiao Liang received his Ph.D. in Engineering from Guangdong University of Technology in 2022. He currently serves as a Lecturer at the School of Computer Science and Engineering, Huizhou University. His primary research focuses on machine learning algorithms and their applications in pattern recognition. Dr. Liang has published 5 SCI-indexed papers in academic journals including *Pattern Recognition Letters* and *Physical Chemistry Chemical Physics*, and has participated in one General Program of the National Natural

Science Foundation of China.