

ICHCII 2020 Program

(Dec. 18-19, 2020) China Standard Time, GMT+8

Keynote Speech

(Zoom ID: 526 108 1124; Password:123456)

Date	Time	Content	Chair
Dec. 18	8:00-9:00	Keynote Speech 1 Prof. Han Huang Title:从微搜索假设看进化计算方法	Prof. Zhun Fan Dr. Wenji Li
	9:00-10:00	Keynote Speech 2 Prof. Bin Xin Title: Aerial-Surface Cooperation of Heterogeneous Unmanned Vehicles in Complex Missions	
	10:00-10:10	Break	
	10:10-11:10	Keynote Speech 3 Prof. Xiaomin Zhu Title: Aggregation and emergence of swarm based on the evolution mechanism of organism	Prof. Zhun Fan Dr. Wenji Li
	11:10-12:10	Keynote Speech 4 Prof. Dunwei Gong Title: 进化优化与知识共融的软件变异测试	

12:10-14:00	Lunch & Break	
14:00-15:00 (Moscow time: 18 th ,9:00-10:00am)	Keynote Speech 5 Prof. Leonid Ivanov Title: To be confirmed	Prof. Zhun Fan Dr. Wenji Li
15:00-16:00	Keynote Speech 6 Prof. Qingfu Zhang Title: 启发性算法设计的几个问题	
16:00-16:10	Break	
16:10-17:10 (United Kingdom Time: 18 th ,8:10 – 9:10am)	Keynote Speech 7 Prof. Shane Xie Title: Innovative Robotic Technology and Artificial Intelligence for the Future of Healthcare	Prof. Zhun Fan Dr. Wenji Li
17:10-18:10 (United Kingdom Time: 18 th ,9:10-10:10am)	Keynote Speech 8 Prof. Shengxiang Yang Title: Swarm Intelligence for Dynamic Optimization Problems	
18:10-19:10 (United Kingdom Time: 18 th ,10:10-11:10am)	Keynote Speech 9 Prof. Yaochu Jin Title: Communication-efficient federated learning	

Invited Speech Venue one

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Date	Time	Content	Chair
Dec. 19	8:30-9:30 (Mountain Standard Time: 18 th ,17:30-18:30pm)	Prof. Weihua Sheng Title: ASCCBot: A Robotic Assistant for the Home Healthcare Industry	Jiajie Mo Dr. Wenji Li
	9:30-10:30 (Pacific Standard Time: 18 th ,17:30-18:30pm)	Prof. Yantao Shen Title: Adaptive Path Following of Underactuated Biomimetic Snake Robots	
	10:30-10:40	Break	
	10:40-11:20	Prof. Kangshun Li Title: 基于适应度景观的差分进化算法变异算子及参数选择研究	Jiajie Mo Dr. Wenji Li
	11:20-12:00 (Sydney Time: 19 th ,14:20-15:00pm)	Prof. Shiping Wen Title: Memristor-based Neuromorphic Computing Systems	
	12:00-14:00	Lunch & Break	

	14:00-14:40	Prof. Ke Tang Title: Scalable Evolutionary Search	Yutong Yuan Wenji Li
	14:40-15:20	Prof. Hailin Liu Title: Evolutionary Multi- and Many-objective Optimization Algorithm Using Region Decomposition	
	15:20-16:00	Prof. Hui Li Title: On the population strategies in MOEA/D	
	16:00-16:40	Prof. Xinye Cai Title: 面向航空领域的智能优化方法与应用	
	16:40-17:20 (United Kingdom Time: 19 th ,8:40-9:20am)	Prof. Lijie Li Title: Strain modulated nanomaterials with applications electronic and photonic systems	
	17:20-18:00	Prof. Menglun Tao Title: Smart materials and actuators for ultrasonic assisted machining and micro/nano positioning.	

Invited Speech Venue Two

(Zoom ID: 846 562 4744; Password:123456)

Date	Time	Content	Chair
Dec. 19	9:10-9:50 (Eastern Standard Time: 18 th ,20:10-20:50pm)	Prof. Haibin Zhu Title: From Group Role Assignment (GRA) to GRA with Constraints (GRA+) and GRA with Multiple Objectives (GRA++)	Prof. Liyang Lai Dr. Guijie Zhu
	9:50-10:30 (Mountain Standard Time: 18 th ,18:50-19:30pm)	Prof. Heping Chen Title: Intelligent Manufacturing Processes Using Industrial Robots	
	10:30-10:40	Break	
	10:40-11:20	Prof. Yiping Liu Title: Handling imbalance between convergence and diversity in the decision space in evolutionary multi-modal multi-objective optimization	Prof. Liyang Lai Dr. Guijie Zhu
	11:20-12:00	Prof. Zhenyuan Liu Title: A Simulation-based Method for Designing Parameters of Material Price Adjustment Model in Large-scale Hydropower Development in China	
	11:50-14:00	Lunch & Break	

14:00-14:40	<p>Prof. Kun Liu Title: Security and privacy of cyber-physical systems</p>	<p>Prof. Alex Noel Joseph Raj Dr. Guijie Zhu</p>
14:40-15:20	<p>Prof. Jie Mei Title: Simulation and experiment for Doubly-clamped Flexible Piezoelectric Energy Harvester</p>	
15:20-16:00	<p>Prof. Jiang Wu Title: Can functional materials enhance the practicality of ultrasonic motors? A trial investigation.</p>	
16:00-16:40	<p>Prof. Zhijun Zhang Title: Vary Parameter Recurrent Neural Network Applied to Intelligent Robots and Data Analysis</p>	
16:40-17:20 (Croatia Time:19 th ,9:40-10:20am)	<p>Prof. Miroslav Joler Title: Challenges Toward Design and Fabrication of Smart(er) Clothing</p>	
17:20-18:00 (New Delhi Time: 19 th , 14:50-15:30pm)	<p>Prof. Alex Noel Joseph Raj Title: Hybrid U-NET models for lesion segmentation in Medical Images</p>	