

Special Issue - Call for Papers

Journal title: *Mechatronic Systems and Control*

Theme title of the special issue:

Neural networks and fuzzy logic in mechatronics and robotics

Summary of special issue:

The main focus of this proposal is to presents research and development results of lasting significance in the theory, design, implementation, analysis, and application of machine learning in the intelligent machine. It will also provide a forum for ideas about the meaning and implications of modeling and control of mechatronics systems, industrial automation, process control, and networked control systems.

Topics of interest include, but are not limited to, the following:

- Ambient Intelligence
- Artificial Intelligence
- Automated Reasoning
- Deep Learning
- Evolutionary Computing
- Expert Systems
- Fuzzy Sets and Systems
- Healthcare robotics
- Human-Robot Interaction
- Kinematics and dynamics analysis
- Manufacturing robotics
- Modeling of Complex Systems
- Optimal Control
- Linear Systems
- Discrete Event Systems
- Adaptive Control
- Nonlinear Systems and Control
- Learning Systems
- Fuzzy and Neural Systems
- Intelligent and AI-Based Control

Proposed date of submission:

Notification to the Selected Authors: July 22, 2022

Submission deadline: August 22, 2022

First Round of Reviews: September 26, 2022

First revision deadline: October 10, 2022

Second Round of Reviews: October 31, 2022

Second revision deadline: November 15, 2022

Accept/Reject notification: December 20, 2022

Proposers contact details including email: 11697@hut.edu.cn

Proposed Guest Editor: Prof. Shengqing Li

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Submission Information:

- Paper must follow the journal's general requirements and should be submitted directly to the Mechatronic System and Control at MSC Editorial Manager. Learn more about ACTA Press submission requirements at <https://www.actapress.com/submissioninfo.aspx>
- Submission should be classified as "Full Article for a special issue". **Please kindly comment on your submission, indicating that you are referring to the Special Issue of Neural networks and fuzzy logic in mechatronics and robotics, recommended by Dr. Li and Dr. Khoshnoud**
- Accepted paper will be published as a special issue in the Journal of Mechatronic Systems and Control of ACTA Press.

A Brief Bio of the Proposed Guest Editor:

Interests: electricity and engineering; power quality control strategy for distribution network; new energy grid-connected system power; electrical energy-saving technology

Shengqing Li is a Doctor of Engineering, professor, doctoral supervisor, and expert entitled to government special allowance (GSA). Professor Li is the dean in the School of Electrical and Information Engineering at Hunan University of Technology. Meanwhile, he is serving as the Chairman of Hunan Engineering Research Center, the academic leader of provincial key discipline as well as the permanent member of Hunan Electrotechnical Society and Hunan Electrical Engineering Society.

Professor Li's extensive experiences with electricity and engineering lead to his broader interest in Power Quality Control Strategy for Distribution Network, New Energy Grid-Connected System Power and Electrical Energy-saving Technology. He currently hosted and participated in 20

important research projects of the Provincial Natural Science Foundation, the National Natural Science Foundation and National Key R&D Program of China, etc. He received 9 ministerial Second Prizes and honored prizes of Progress in Science and Technology, Science and Technology Award of China Electrotechnical Society, etc. with his papers, researches, 14 Authorized Patents and Software Copyright.

Part of Publications

- [1] Shengqing Li, Yao Ming, Yuwen Zhang, Wengfeng Wu. Crowbar resistance setting and its influence on DFIG low voltage ride through[J]. International Journal of Robotics & Automation, 2017, 32(6): 649-655.
- [2] Shengqing Li, Wengfeng Wu, and Dinghuan Ma. MPPT of Photovoltaic System Variable Acceleration Disturbance Method Based on Genetic Algorithm[J]. International Journal of Robotics & Automation, 2018, 33(2):179-185.
- [3] Shengqing Li, Yu Jiang, Baling Fang, Chenyang Wang. Characteristics Analysis of Inertia Damping of Grid-Connected System of Direct-Drive Wind Power Generation[J]. IEEE Access, 2020, (8): 189802-189810.
- [4] Shengqing Li, Donghui Zhang, Zheng Lan, Wen Chen. Modeling and mechanism analysis of inertia and damping issues for wind turbines PMSG grid-connected system[J]. Soft Computing, 2020, 24:15681–15691.
- [5] Shengqing Li, Yuwen Zhang, Yao Ming, Wengfeng Wu. An Improved Control Method Of Phase Compensation For Photovoltaic Grid-Connected Inverter[J]. International Journal of Robotics & Automation, 2020, 35(5): 401-407.
- [6] Shengqing Li, Wen Chen A strategy of PI + repetitive control for LCL-type photovoltaic inverters. Soft Computing, 2020, 24:15681–15691.
- [7] Shengqing Li, Li Fujun. An improved MPPT control strategy based on incremental conductance method. Soft Computing, 2020, 24:24:6039–6046.
- [8] Shengqing Li, Xinluo Li, Xiaobao Lee. Weighted average current method for active damping control based on grid voltage feed-forward. Li et al. Journal of Cloud Computing: Advances, Systems and Applications, 2021, 14(10):1-12.