

# THE 4<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL CYBER- PHYSICAL SYSTEMS ICPS 2021 MAY 10-13, 2021, VICTORIA, CANADA

**Special Session on**

**“Fuzzy Systems for Industrial Cyber Physical System (ICPS)”**

**Organized by**

College of Mechatronics and Control Engineering, Shenzhen  
University, Shenzhen, China.

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## **Call for Papers**

*Theme:* One of the major part of industrial cyber-physical systems (ICPS) is the application of advanced approaches in the design, modelling, and analysis of large-scale complex systems. Fuzzy logic has been well-known as the powerful and yet effective approach that serves as a means of approximate description of phenomena and systems which are too complex to admit of analysis in conventional quantitative terms. Thus, this special session aims at various applications of fuzzy logic in ICPS with the focus on the modelling and analysis of large-scale complex systems.

Topics of interest include, but are not limited to:

1. The application of fractional fuzzy inference systems (as the new generation of FISs) in modelling, design and analysis of complex systems.
2. The role of typical fuzzy inference systems in ICPS.
3. The potential applications of fuzzy mathematics (particularly fuzzy differential equations) in ICPS and modelling complex systems.
4. The role of computing with words in ICPS.
5. Modelling and analysis of complex systems by the use of artificial neural network fuzzy systems.
6. The role of perception based computing in ICPS.
7. The application of fuzzy probability theory in ICPS.