

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

**Special Session on**

**“System modelling, analysis and control for Automobile systems”**

## **Organized by**

Principal Organizer(s): (Fei Meng, Department of System Science, University of Shanghai for Science and Technology, China Email: [feimeng@usst.edu.cn](mailto:feimeng@usst.edu.cn);  
Zhiyang Ju, School of Transportation Science and Engineering, Beihang University, China, Email: [zhiyangju@gmail.com](mailto:zhiyangju@gmail.com).)

## **Call for Papers**

Automobile is one of the precursors of industrial cyber-physical systems (ICPS) as the percentage of cyber components keeps increasing and currently an important application of CPS. The cyber components including the information processing units and networking in the vehicles closely interact with the physical components, such as powertrain, engine, motors, suspension, braking system,.etc. Considering this characteristic, improved and/or new methodologies should be proposed to address the performance and safety issues of automobiles from the perspective of CPS. Thus, this special issue aims at control design and safety analysis and ensurance for automobiles as CPS.

Topics of interest include, but are not limited to:

1. Control of electromechanical systems in automobiles.
2. Analysis of impact of cyber components on the performance of automobile control.
3. Connected and autonomous vehicles as CPS.
4. Safety and cyber security of autonomous and\or connected vehicles.
5. Control and safety of connected vehicle systems.

6. Dynamic control of automobiles with addressing the influence from cyber components.
7. Control of connected vehicles with addressing the inter-vehicle communication.