

## Associate Professor (Research) Yufeng Chen

Department of Engineering Science, Faculty of Innovation Engineering  
Macau Institute of Systems Engineering  
Macau University of Science and Technology



PhD. Supervisor

Tel.: 8615229035495

E-mail: yfchen@must.edu.mo

### Academic Qualification:

**Jan. 2016 Ph. D. degree in Computer Science, Conservatoire National des Arts et Metiers, Paris, France**

**June 2011 Ph. D. degree in Mechanical Engineering, Xidian University, Xi'an, China**

**June 2006 B. S. degree in Electrical Engineering and Its Automation, Xidian University, Xi'an, China**

### Teaching Area

Engineering Optimization

Optimization Methods

### Research Area

Discrete Event Systems; Petri Nets; Artificial Intelligence

### Working Experience

**July 2020 – Present Associated Professor at the Institute of Systems Engineering, Macau University of Science and Technology, Macau**

**Sep. 2016 – June 2020 Assistant Professor at the Institute of Systems Engineering, Macau University of Science and Technology, Macau**

**July 2013 – Aug. 2016 Associated Professor, Xidian University, China**

**July 2011 – June 2013 Lecture, Xidian University, China**

### Research Grants

“Optimal and Dynamic Control of Discrete Event Systems Modeled with Petri Nets,” the Science and Technology Development Fund, Aug. 2017 – Aug. 2020

### Representative publications (Complete publication refer to my webpage)

Yao Lu, Yufeng Chen, Zhiwu Li, and Naiqi Wu, "An Efficient Method of Deadlock Detection and Recovery for Flexible Manufacturing Systems by Resource Flow Graphs", IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, vol. 19 , no. 3, pp.1707-1718, 2022

Yuting Li, Li Yin, Yufeng Chen, Zhenhua Yu, and Naiqi Wu, “Optimal Petri Net Supervisor Synthesis for Forbidden State Problems Using Marking Mask,” Information Sciences, vol. 505, pp. 183-197, 2019.

Oussama Karoui, Yufeng Chen, Zhiwu Li, Naiqi Wu, and Mohamed Khalgui, “On Hierarchical Construction of the State Space of an Automated Manufacturing System Modeled with Petri Nets,” *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 50, no. 10, pp. 3613-3627, 2020.

Yufeng Chen, Zhiwu Li, Kamel Barkaoui, Naiqi Wu, and Mengchu Zhou, “Compact Supervisory Control of Discrete Event Systems by Petri Nets with Data Inhibitor Arcs” *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 47, no. 2, pp. 364–379, 2017.

Yufeng Chen, Zhiwu Li, Kamel Barkaoui, and Alessandro Giua, “On the enforcement of a class of nonlinear constraints on Petri nets,” *Automatica*, vol. 55, no. 5, pp. 116–124, 2015.

#### Professional Certification and Awards

2020 BOC (Bank of China) Excellent Research Award

The 2018 Science and Technology Award of Macau-The Third Prize of Natural Science Award

#### Journal Editorship

#### Personal Website