

# Curriculum Vitae

**Jianping Dou, Ph.D**  
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## Research Interests

*Intelligent manufacturing*: Application of computational intelligence to manufacturing systems

- Intelligent optimization of assembly line balancing\design
- Intelligent scheduling of hybrid/flexible flow shops\lines
- Intelligent optimization of process planning

*Reconfigurable manufacturing systems (RMSs) and their enabling technology*

- Configuration (path) design of reconfigurable flow lines (RFLs)
- Integrated optimization of configuration design and scheduling of RFLs
- Configuration selection methodology of RMS

## Education

9/2016-9/2017 Visiting Scholar, Department of Mechanical Engineering. **University of Michigan**,  
Ann Arbor, MI, USA

4/2005-4/2009 Ph.D, Control Theory and Control Engineering. School of Automation, **Southeast University**, Nanjing, China

Dissertation:

*Research on optimal configuration selection for reconfigurable manufacturing systems*

Advisor: Prof. Xianzhong Dai

9/2002-3/2005 M.S, Simulation & Control of Aeroengines. College of Energy and Power  
Engineering, **Nanjing University of Aeronautics and Astronautics**, Nanjing, China

Thesis: *Object-oriented modeling & simulation of aeroengines*

Advisor: Prof. Jinquang Huang

9/1998-6/2002 B.S, Aircraft Propulsion Engineering. **Nanjing University of Aeronautics and Astronautics**, Nanjing, China

## Professional Experience

5/2014-Current. Associate Professor, School of Mechanical Engineering, Southeast University,  
Nanjing, China

5/2009-4/2014. Lecturer, School of Mechanical Engineering, Southeast University, Nanjing, China

## Teaching Experience

*Undergraduate courses*: Electrical Engineering Principals and Applications, Programming

Language C++, Programming with MFC

*Postgraduate courses*: Modern Control Theory

## Selected Journal Articles

- Jianping Dou**, Jun Li, Chun Su. (2018). A discrete particle swarm optimisation for operation sequencing in CAPP. *International Journal of Production Research*, 56(11): 3795-3814.
- Meng X, Li J, Dai X, **Dou J.** (2018) Variable Neighborhood Search for a Colored Traveling Salesman Problem. *IEEE Transactions on Intelligent Transportation Systems*, 19(4): 1018-1026.
- Jianping Dou**, Jun Li, Xia Zhao. (2017). A novel discrete particle swarm algorithm for assembly line balancing problems. *Assembly Automation*, 37(4): 452-463.
- Su C, Shi Y, **Dou J.** (2017) Multi-objective optimization of buffer allocation for remanufacturing system based on TS-NSGAI hybrid algorithm. *Journal of Cleaner Production*, 166: 756-770
- Jianping Dou**, Jun Li, Chun Su. (2016). Bi-objective optimization of integrating configuration generation and scheduling for reconfigurable flow lines using NSGA-II[J]. *The International Journal of Advanced Manufacturing Technology*, 86(5): 1945–1962.
- Jianping Dou**, Jun Li, Chun Su. (2015) Integrated optimization of configuration selection and job scheduling for reconfigurable flow lines. *Journal of Southeast University(Natural Science edition)*, 45(5): 886-896. (in Chinese)
- Jianping Dou**, Jun Li, Chun Su. (2013). A novel feasible task sequence-oriented discrete particle swarm algorithm for simple assembly line balancing problem of type 1. *The International Journal of Advanced Manufacturing Technology*, 69 (9-12):2445–2457.
- Jianping Dou**, Xingsong Wang and Lei Wang. (2012). Machining Fixture Layout Optimisation under Dynamic Conditions Based on Evolutionary Techniques. *International Journal of Production Research*, 50(15): 4294-4315.
- Jianping Dou**, Chun Su, Jun Li. (2012). Discrete Particle Swarm Optimization Algorithms for Assembly Line Balancing Problems of Type 1. *Computer Integrated Manufacturing Systems*, 2012,18(5):1021-1030. (in Chinese)
- Jianping Dou**, Xianzhong Dai & Zhengda Meng. (2011) A GA-based approach for optimizing single-part flow-line configurations of RMS. *Journal of Intelligent Manufacturing*, 22(2): 301-317.
- Jianping Dou**, Xianzhong Dai & Zhengda Meng. (2010) Optimisation for multi-part flow-line configuration of reconfigurable manufacturing system using GA. *International Journal of Production Research*, 48(14): 4071–4100.
- Jianping Dou**, Xianzhong Dai & Zhengda Meng. (2009) Precedence graph oriented approach to optimise single-product flow-line configurations of reconfigurable manufacturing system. *International Journal of Computer Integrated Manufacturing*, 22(10): 923-940.
- Jianping Dou**, Xianzhong Dai, Zhengda Meng. (2009) Graph theory-based approach to optimize single-product flow-line configurations of RMS. *The International Journal of Advanced Manufacturing Technology*, 41(9):916-931.

## Grants

- Jianping Dou**; Chun Su; Yifan, Zhou (2015/9-2019/12). *Research on integrated robust optimization of process planning, configuration design and job scheduling for reconfigurable flow lines*. National Science Foundation of China (No. 51575108), in research.
- Jun Li; **Jianping Dou**; Yangyang, Xu (2013/9-2017/12). *Optimal Scheduling and Coordination*

*Control of Multi-Machine Engineering Systems with Partially Overlapping Workspaces.*  
National Science Foundation of China (No. 61374069), in research.

**Jianping Dou**; Jun Li; Chibin, Zhang (2012-2014). *Research on integrated optimization problem of configuration selection and dynamic scheduling for reconfigurable flow lines.* National Science Foundation of China (No.51105076), completed.

Jun Li; Xianzhong Dai; **Jianping Dou** (2011-2013). *Method for discrete event system supervisory control reconfiguration and its optimization.* National Science Foundation of China (No. 61004035), completed.

**Jianping Dou**; Xingsong Wang. (2010/12-2011/12) *Optimal design of mixed assembly line in make-to-order environment.* Open Foundation of MOE Key Laboratory of Measurement and Control of CSE (No. 2010B002), completed.

Xingsong Wang ;**Jianping Dou**; Yuliang Mao. (2009/12-2011/3). *Error compensation for highspeed and high-precision CNC machine tools.* Ministry of industry and information technology of PR China (No. 2009ZX04014-023), completed.

### **Academic Activities**

Government Grant Reviewer:

The National Science Foundation of China (NSFC) (2013-present)

Journal Reviewer:

International Journal of Production Research (2011- present)

Scholar membership:

IEEE, Mechanical Engineering Society of Nanjing

### **Honors and Awards**

12/2011 the second prize of National Defense Science and Technology Progress Award (#7)

3/2011 honorable mention at the 18<sup>th</sup> Teaching Contest for Young Teachers in Southeast University

8/2007 Best Paper Award and Best Presentation Award at 2007 National Doctoral forum of Mechanical Engineering, Management and Control Engineering Division.

### **Work in Progress**

*Research on integrated robust optimization of process planning, configuration design and job scheduling for reconfigurable flow lines.* NSFC (No. 51575108), PI.

*Optimal Scheduling and Coordination Control of Multi-Machine Engineering Systems with Partially Overlapping Workspaces.* NSFC (No. 61374069), 2<sup>nd</sup> Co-PI.