# Yang Li's Curriculum Vitae

### **Personal Information**

Name: Yang Li Gender: male

**Birthdate:** 09/1991 **Birthplace:** China

**Education:** Ph. D. **Institution:** Shanghai University

Major: Control Theory and Engineering Research area: Testability design and PHM

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## **Educational Experiences**

09/2017—09/2022 Control Theory and Engineering Ph. D.

Nanjing University of Aeronautics and Astronautics

09/2019—11/2021 Control Theory and Engineering Visiting Scholar

Politechnico di Milano

09/2014—07/2017 Control Theory and Engineering Master

Qufu Normal University

09/2010—07/2014 Electrical Engineering and Automation Bachelor

Qufu Normal University

## **Work Experiences**

09/2022—now Control Theory and Engineering Shanghai University

#### **Academic Activities**

- Member of IEEE (Reliability Society Membership / Systems, Man, and Cybernetics Society Membership / Control Systems Society Membership)
- 2. **Youth Editorial Board Member** of Instrumentation (English edition of a Chinese core/EI journal), AI and Autonomous Systems.
- 3. **Guest Editor** of Machines (SCI index).
- 4. **Co-Chair** of the Special Session of the 6<sup>th</sup> IEEE International Conference on Industrial Cyber-Physical Systems, the International Conference on 6<sup>th</sup> Robotics, Control and Automation Engineering.
- 5. Reviewer of several international journals, including IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Instrumentation and Measurement, IEEE Transactions on Systems, Man, and Cybernetics: Systems, Sustainable Energy Grids and Networks, Mechtronics, and Asian Journal of Control, among others.
- 6. **In 2018, presented a report** entitled "An islanding fault detection method with CFDF-SVM based RPV approach under pseudo islanding phenomenon" at the international conference IFAC Safeprocess on fault detection, monitoring and safety of technical processes of the International Federation of Automatic Control (IFAC) in Warsaw, Poland.
- 7. **In 2019, presented a report** entitled "Optimal test sequencing method with unreliable tests based on quasi-depth first search algorithm" at the IEEE China Academic Conference on Safeprocess on fault diagnosis and safety of technical processes in Xiamen, China.
- 8. **In 2020, presented a report** entitled "Mixed stochastic process modelling for accelerated degradation testing" at the IFAC World Congress on international automatic control in Berlin, Germany (virtual meeting).

9. **In 2023, presented a report** entitled "Test selection design with unreliable tests based on Bayesian network and SA-GA" at the 36<sup>th</sup> Chinese Control and Decision Conference on data-driven intelligent optimization and decision for industrial processes in Yichang, China.

## **Academic Papers (Selected)**

- 1. **Yang Li**, Xiuli Wang, Ningyun Lu, Bin Jiang. Conditional joint distribution-based test selection for fault detection and isolation. <u>IEEE Transactions on Cybernetics</u>, 2022, 52(12): 13168-13180.
- 2. **Yang Li**, Shuiqing Xu, Hongtian Chen, Li Jia, Kun Ma. A general degradation process of useful life analysis under unreliable signals for accelerated degradation testing. <u>IEEE Transactions on Industrial Informatics</u>, 2023, 19(6): 7742-7750.
- 3. **Yang Li**, Enrico Zio, Ningyun Lu, Xiuli Wang, Bing Jiang. Joint distribution-based test selection for fault detection and isolation under multiple faults condition. <u>IEEE Transactions on Instrumentation and Measurement</u>, 2020, 70: 20192231.
- 4. Yang Li, Hongtian Chen, Ningyun Lu, Bin Jiang, Enrico Zio. Data-driven optimal test selection design for fault detection and isolation based on CCVKL method and PSO. <u>IEEE Transactions on Instrumentation and Measurement</u>, 2022, 71: 3512310.
- Yang Li, Yan Shi, Zhiyao Zhang, Ningyun Lu, Xiuli Wang. Condition-based maintenance for performance degradation under non-periodic unreliable inspections. <u>IEEE Transactions on Artificial Intelligence</u>, 2023, 4(4): 709 - 721.
- 6. **Yang Li**, Bin Cai, Xiaoyu Song, Xiaoguang Chu, Baili Su. Modeling of maglev yaw system of wind turbines and its robust trajectory tracking control in the levitating and landing process based on NDOB. <u>Asian Journal of Control</u>, 2019, 21 (2), 770-782.
- 7. **Yang Li**, Ningyun Lu, Jiantao Shi, Bin Jiang. A quantitative causal diagram based optimal sensor allocation strategy considering the propagation of fault risk. <u>Journal of the Franklin Institute</u>, 2021, 358 (1), 1021-1043.
- 8. **Yang Li**, Ningyun Lu, Xiuli Wang, Bin Jiang. Islanding fault detection based on data-driven approach with active developed reactive power variation. <u>Neurocomputing</u>, 2019, 337: 97-109.
- 9. **Yang Li,** Linxing Xu, Xiuli Wang, Cunsong Wang. Adaptive output feedback control for nonholonomic chained systems with integral input state stability inverse dynamics. <u>Sensors</u>, 23(14): 6351.
- 10. Linxing Xu, **Yang Li\***. Distributed adaptive consensus tracking control for second-order nonlinear heterogeneous multi-agent systems with input quantization. Machines, 2023, 11(5): 524.
- 11. **Yang Li**, Ningyun Lu, Bin Jiang, Yajie Ma, Xiuli Wang. An islanding fault detection method with CFDF-SVM based RPV approach under pseudo islanding phenomenon. <u>IFAC Safeprocess</u> 2018, 2018, 51(24): 1349-1355.
- 12. **Yang Li**, Yue Liu, Enrico Zio, Ningyun Lu, Xiuli Wang, Bin Jiang. Mixed stochastic process modelling for accelerated degradation testing. <u>IFAC World Congress</u> 2020, 2020, 53(2): 796-801.
- 13. **Yang Li**, Nannan Wang, Ningyun Lu, Xiuli Wang, Bin Jiang. Research on a novel control method for effectively reducing slip loss applied to brushless doubly-fed machine. 6<sup>th</sup> International Symposium on Autonomous Systems (ISAS), 2023, DOI: 10.1109/ISAS59543.2023.10164528.
- 14. **Yang Li**, Dandan Huang Ningyun Lu, Li Jia, Bin Jiang. Test selection design with unreliable tests based on Bayesian network and SA-GA. <u>36<sup>th</sup> Chinese Control and Decision Conference</u>, 2023 (published).

### **Patents**

- 1. **Yang Li**, Xiuli Wang, Ningyun Lu, Bin Jiang. Data-driven electric power island detection technology based on active reactive power disturbance: CN201911189108.9 [P/OL], 2020-05-15.
- 2. **Yang Li**, Xiuli Wang, Ningyun Lu, Bin Jiang. Method for non-periodic condition-based maintenance considering inspection uncertainty: CN202110395374.8 [P/OL], 2021-07-30.
- 3. Bin Cai, Xiaoguang Chu, **Yang Li**. A control method for the levitation and landing process of a magnetic levitation system: CN201510986756.2 [P/OL], 2018-06-12.

## **Projects**

- 1. National Natural Science Foundation of China (NSFC)-Youth Program (Lead-In Progress)
- 2. China Postdoctoral Science Foundation (Lead-In Progress)
- 3. China Scholarship Council Foundation (Lead-Completed)
- 4. Postgraduate Research and Practice Innovation Program of Jiangsu Province (Lead-Completed)
- 5. Outstanding Doctoral Dissertation Foundation in the Nanjing University of Aeronautics and Astronautics (NUAA) (Lead-Completed)
- 6. International Cooperation and Exchanges of NSFC (Participate-In Progress)
- 7. National Key R&D Program of China (Participate-In Progress)
- 8. National Natural Science Foundation of China (NSFC)- Major Program (Participate-Completed)
- 9. National Natural Science Foundation of China (NSFC)- General Program (Participate-Completed)

## **Awards (Selected)**

- 1. Creative Video Presentation at 36th Chinese Control and Decision Conference (only 5 people awarded), 2023
- 2. Nanjing University of Aeronautics and Astronautics "All Star" Innovation Award, 2022
- 3. National Scholarship for Ph.D. Student, 2020
- 4. Nanjing University of Aeronautics and Astronautics "Xinsong" Scholarship, 2019
- 5. Advanced Individual in Research and Innovation at Nanjing University of Aeronautics and Astronautics, 2018
- 6. Merit Student of Nanjing University of Aeronautics and Astronautics, 2018
- 7. National Scholarship for Master Student, 2016