Junyan Su

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https://sujunyan.github.io/

EDUCATION

Sept.2015-Jun.2019 **ShanghaiTech University** **Shanghai, China**
B.E. in Computer Science and Technology
GPA: **3.84 /4.0** Ranking : **3/95**

Aug.2018-May 2019 **University of California at Berkeley** **CA, USA**
Concurrent Enrollment Student at College of Engineering

RESEARCH INTERESTS

Control Theory
Optimal Control
Optimization

PUBLICATIONS

- **J. Su**, Y. Zha, K. Wang, M.E. Villanueva, R. Paulen, B. Houska.
  Interval Superposition Arithmetic for Guaranteed Parameter Estimation
  Dynamics and Control of Process Systems, including Biosystems,2019. [pdf]
- **J. Su**, Y. Jiang, A. Bitlislioglu, C.N. Jones, B. Houska.
  Distributed multi-building coordination for demand response
  In Proceedings of the 21st IFAC World Congress
  Berlin, Germany, July, 2020. (accepted) [pdf]
- Y. Jiang, **J. Su**, Y. Shi, B. Houska
  Distributed optimization for massive connectivity
  IEEE Wireless Communication Letters, 2020. (accepted)
- L. Gao, **J. Su**, J. Cui, X. Zeng, X. Peng, and L. Kneip
  Efficient Globally-Optimal Correspondence-Less
  Visual Odometry for Planar Ground Vehicles
  International Conference on Robotics and Automation (ICRA), IEEE, 2020. (accepted)
- **J. Su**, M. E. Villanueva, B. Houska
  A Tutorial on Koopman Operator Based Optimal Control
  59th IEEE Conference on Decision and Control, 2020 (submitted)

HONORS & AWARDS

2016,2017 Scholarship for Academic Excellence, ShanghaiTech University

Oct.13 2017 Most Innovative Robot in Rescue Robot Competition,
IEEE International Symposium on Safety, Security and Rescue Robotics

2019 Outstanding Graduate of Shanghai University

EXPERIENCE

Jun.2018-Aug.2018 **Carnegie Mellon University** **Pittsburgh, PA, USA**
Robotics Institute Summer Scholars Program
Advisors: Prof. Howie Choset & Lu Li
To design one logic-circuit-level layout with Verilog to fetch data from multiple sensors and reduce CPU intervention time. The report can be found in pp.129-132 of [pdf]

Sept.2017-May 2018 **Robomasters 2018** **Nanjing,China**
Advisor: Prof. Andre Rosendo
RoboMaster is one international robotics competition. The competition is like multiplayer online battle arena (MOBA) video game. Each team will build their own robots that serve different functionality.

COURSE PROJECTS

- Lego Pick & Place Assembler [website].
- Turtlebot with Robotic Arm Delivery [website].
- A Don't-Touch-Me Robot [website]
- Completed and passed all the points in the [Pintos project]
- Optimal 800MHz 6-Bit "Absolute-value Detector"
  In this project, I and my teammate implemented a CMOS level circuit "Absolute-value Detector" with Cadence Virtuoso. We achieved the minimum delay compared with other teams in the course.

TECHNICAL SKILLS

Programming Languages: C/C++, Python
Scientific Tools: MATLAB, Mathematica, Julia, ROS
Hardware Design:pSoC, STM32xx,Verilog,Cadence Virtuoso
Office Applications: LaTeX

TEACHING

Feb.2017-Jun.2017 Teaching Assistant of *Introduction to Information Science and Technology*

Sept.2017-Jan.2018 Teaching Assistant of *Electric Circuits*