

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: L^AT_EX

TEACHING

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

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