

Junyan Su

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<https://sujunyan.github.io/>

EDUCATION

Sept.2015-Jun.2019	ShanghaiTech University B.E. Candidate in Computer Science and Technology GPA: 3.83 /4.0 Ranking : 3/95	Shanghai, China
Aug.2018-May 2019	University of California at Berkeley Concurrent Enrollment Student at College of Engineering	CA, USA
Aug.2019-present	Washington University in St. Louis PH.D. student in Systems Science and Mathematics	MO, USA

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](#)]

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

RESEARCH EXPERIENCE

Jun.2018-Aug.2018	Carnegie Mellon University 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.	Pittsburgh, PA, USA
Sept.2017-May 2018	Robomasters 2018 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.	Nanjing, China
May 2018-Jan.2019	A Software for Interval Superposition Model Advisor: Prof. Boris Houska Our software package provides a tool to construct enclosures of the image set of nonlinear functions easily and efficiently, which is needed by a wide variety of numerical computing and control algorithms.	Shanghai, China

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*