

Yuxuan Fang

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Education

University of Michigan - Ann Arbor

MSE in Electrical Engineering

Ann Arbor, USA

Sept 2022 - Present

- Major in Control Systems Track
- **Courses:** EECS 460: Control Systems Analysis and Design, EECS 560: Linear Systems Theory, EECS 566: Discrete Event Systems (FA 2022); EECS 562: Nonlinear Systems and Control, EECS 565: Linear Feedback Control Systems (WN 2023); AEROSP 590: Directed Study (Advisor: Prof. Max Z. Li, SP-SM 2023); EECS 562: Hybrid Control, EECS 501: Probability and Random Process. (FA 2023)
- Current GPA 4.0/4.0.

Huazhong University of Science and Technology

B.Eng. in Electrical Engineering

Wuhan, China

Sept 2018 - Jun 2022

- Major in Electrical Engineering and its Automation - Power Electronics and Electric Drive.
- Graduated with GPA 3.81/4.0.

Publications

[1] H. Huang, **Y. Fang**, B. Mazotti, J. Kim, K. X. Fa, M. Z. Li[†]. Privacy-Aware Design and Analysis of Drone Identification System, IEEE Transactions on Intelligent Transportation Systems (*Submit Soon*).

[2] **Y. Fang**. The Optimization of Control Logic Based on Abrasion-Averaging Model. Techniques of Automation and Applications 40.11(2021):9-12. doi:CNKI:SUN:ZDHJ.0.2021-11-002.

[3] **Y. Fang**. Brief Talk about Application of Matrix Control in Industrial Automation. Techniques of Automation and Applications 40.03(2021):129-132. doi:CNKI:SUN:ZDHJ.0.2021-03-028.

Projects

Plausible Deniability and Privacy Analysis in the Drone Package Delivery Systems

University of Michigan - Ann Arbor

Master's Directed Study

May 2023 - Aug 2023

- Continued the previous plausible deniability analysis. The trajectory is only partially observable.
- Designed a spline-based Bézier curve approximation and a privacy scoring method for plausible deniability quantification.
- Submitted a corresponding journal paper on IEEE T-ITS (In review).

Communication of a Magnetic Bearing Control System and its Upper System Design

Huazhong University of Science and Technology

Bachelor's Thesis

Dec 2021 - May 2022

- Designed a customized communication protocol including package data paradigm upon a DSP-based magnetic bearing system, necessary data processing operations, details to utilize UDP protocols, etc.
- Composed a GUI and its APIs with Python, which smoothly controls the system and visualizes the communications information.

Work Experience

Nanjing Electrical Engineering & Technology Co., Ltd HTC

Intern at Department of Engineering

Nanjing, China

Jul 2020 - Aug 2020

- Designed a PLC-SCADA system for the pump station with STEP-7 and WinCC, which organizes the system well.
- Published a paper based on the design in Nov. 2021.

Miscellaneous

Computer Skills Python, MATLAB, C/C++, SQL, Mathematica, Mark Down, \LaTeX , Microsoft Office.

Honor Society Active Member of Tau Beta Pi and Eta Kappa Nu since Dec 2023.

Scholarships Scholarship for Extracurricular Activities (endorsed by HUST in Dec. 2019);

Scholarship for Self-improvement (endorsed by HUST in Dec. 2020).

Awards Best Creativity Award for the Makers' Summer Camp (endorsed by HUST-SEEE in Sep. 2019); Successful Participants of MCM/ICM 2020 Section II; Excellent Ranking granted by HUST in the College Student Entrepreneurship Competition (2020-2021).

Leadership The Host Team Leader of HUST-SEEE Student Union (Sep. 2020 - Jun. 2021)