

# Mo Yang

Undergraduate, University of Michigan, Ann Arbor, USA

sprkyang@umich.edu — +1 (734) 496-4258 — [nephren17.github.io/](https://github.com/nephren17) — [www.linkedin.com/in/mo-yang/](https://www.linkedin.com/in/mo-yang/)

## RESEARCH INTERESTS

---

Control Theory, Swarm Robotics, Dynamical System, Bipedal Control, Stochastic Process, Optimization

## EDUCATION

---

**University of Michigan**, Ann Arbor, USA

Bachelor of Science in Engineering in Data Science, Minor in Mathematics

Aug. 2023 — May. 2025

Cumulative GPA: 3.76/4.00

**Shanghai Jiao Tong University**, Shanghai, China

Bachelor of Science in Electrical and Computer Engineering

Sep. 2021 — Aug. 2025

Cumulative GPA: 3.60/4.00

## RESEARCH EXPERIENCE

---

### AtomBot Project Team

Ann Arbor, USA. Jan. 2024 — Present

- Collaborated with Professor Y Z at Umich to construct swarm robots' hardware, find patterns of swarm intelligence, and explore potential applications for swarm robots.

### Control Study in Biological Sensorimotor System

Ann Arbor, USA. Sep. 2023 — Present

- Collaborated with Professor Jingshuang Li at Umich to find applications of control theory explanation and models in biological sensorimotor system.

### Combustion Studies Related to Machine Learning

Shanghai, China. Sep. 2022 — Aug. 2023

- Collaborated with Professor Dezhi Zhou at SJTU to explore a transfer learning method aimed at predicting ignition delay for various fuels.
- **Thesis: Ignition Delay Prediction for Fuels with Different Molecule Structures via A Transfer Learning Approach (Under Review)**

## TEACHING EXPERIENCE

---

### Teacher's Assistant for MATH2860 (Honor Mathematics IV)

SJTU, Shanghai, China. Sep. 2023 — Dec. 2023

- Focused on Differential Equations and Linear Algebra with similar responsibility to MATH2850.

### Teacher's Assistant for MATH2850 (Honor Mathematics III)

SJTU, Shanghai, China. May. 2023 — Aug. 2023

- Worked with Professor Horst Hohberger as a course assistant of a 150+ student course covering Linear algebra and Multivariable calculus. Hold recitation classes and office hours weekly.

## SELECTED COURSES

---

### Graduate Courses

- MATH 658 Nonlinear Dynamics and Geometric Mechanics
- MATH 526 Discrete Stochastic Processes
- EECS 498/598 Control Theory and Bio-Sensorimotor System

### Undergraduate Courses

- MATH 471 Intro to Numerical Methods
- MATH 445 Introduction to Information Theory
- STATS 413 Applied Regression
- MATH 451 Advanced Calculus
- PSY 3620 Research Methods in Psychology
- PHYSICS 360 Honors Physics III

## HONORS & AWARDS

---

**Summer Undergraduate Research in Engineering (SURE) Stipend**

**UM-SJTU JI Student Development Scholarship**

Ann Arbor, USA. Mar. 2024

Shanghai, China. Apr. 2023

**Silver Medal in The University Physics Competition**

Shanghai, China. Dec. 2022

**SJTU Undergraduate Excellent Scholarship**

Shanghai, China. Oct. 2022

**Second Prize in the Chinese National Physics Contest for Middle School Students**

Shanghai, China. Oct. 2019

## **SKILLS**

---

- **Programming:** Python, MATLAB, C/C++, R, Mathematica, Verilog, LaTeX