

Education

Bachelor of Engineering in Material Science and Engineering

Bachelor's degree program

Shanghai Jiao Tong University

Sep 2021 – Expected Jun 2025

Student of *International Class* in *School of Material Science and Engineering* (SMSE), taking lectures in English.

Current Grade: 87.94/100 and 3.76/4.3, ranked 14/117 in college and 3/17 in class.

Research and Project Experience

High-throughput Research on the Properties of O-PCM Thin Films

Member of Prof. Hong Wang's research group

Jun 2023 – Present

SMSE of Shanghai Jiao Tong Univ.

- Joined the research group for the interest in data-based research methods in materials science.
- Work on a project about Ge-Sb-Se-Te thin films. Have finished preparation, heat treatment, XRD, and ellipsometry characterization of thin film samples. Expected to finish the project for 1.5 year with a paper.
- Cooperate with a PhD student on a project about Ge-Sb-Se/Sn thin films. Have done high-throughput XRD data analysis and visualization. Currently writing an invited paper as co-first author. Expected to submit on 19th Sep.
- Submitted a [paper](#) as third author to *Chinese Chemical Letters*.

Machine Learning Accelerated Phase Field Simulation

A research project supervised by Prof. Hong Liu

Jul 2024 – Present

SMSE of Shanghai Jiao Tong Univ.

- Joined the project because of Professor Liu's warm invitation and my interest in numerical simulations of materials.
- Currently conducting GNN based phase field simulations of grain growth in laser-based additive manufacturing.
- Convert previous phase field simulation code from *Python* to *MATLAB* and run the simulation on HPCs.

Measurement of the Electron Conductivity of LLZTO

An undergraduate research project supervised by Prof. Huanan Duan

Feb 2022 – Feb 2023

SMSE of Shanghai Jiao Tong Univ.

- Prepared Ag|LLZTO|Ag samples by solid-state sintering, performed EIS measurements, and calculated the electron conductivity of samples under the guidance of Professor Duan and a PhD student.
- Completed the project with a detailed research report and a thesis defense. Got B+.

Intelligent Air Combat Modeling Based on Reinforcement Learning

An undergraduate research project

Dec 2022 – Sep 2023

SEIEE of Shanghai Jiao Tong Univ.

- Constructed a Double DQN model in cooperation with another group member majoring in AI. Coded a package in *Python* for data transport between RL network and the simulation environment *DCS World*.
- Published a conference paper and report it on *The Eleventh Chinese Information Fusion Conference*.
- Published a [paper](#) about this work on *Command Control and Simulation* as co-first authors.

Extracurricular Activities

2023 Zhi-Hong International Summer School of ISS-AM

Member of a summer school

Jun 2023 – Jul 2023

Shanghai Jiao Tong Univ.

Participated in a two-week international summer school held by SMSE of SJTU. Listened to several lectures given by professors from NU, KTH, SJTU, etc. Completed group works and the final presentation with foreign graduate students.

Debating

Core member of the college debate team

Sep 2021 – Present

Shanghai Jiao Tong Univ.

Participated in dozens of debate competitions. Won the champion in a university tournament. Huge amount of paper reading to prepare for each debate. Proficiency in improvisational expression and effective communication.

Technical Skills

Programming Languages

Proficiency in *MATLAB* and *Python* for data analysis, plotting, machine learning, and software development. Have learned and used *C++*, *C#*, *lua*, and *Latex*.

Softwares

Familiar with *Microsoft Office*, *MDI Jade*, *Blender*, *Zotero*, *VS Code*, *Git*, *Photoshop*, etc. Have used *Solidworks*, *ABAQUS*, *LAMMPS*. Have used *Linux* system.

Characterization Methods

XRD (0D, 2D, postprocess algorithms, powder sample preparation), SEM, electrochemical workstation (EIS, CV, cell assembly), nano hardness test, etc.

Language Proficiency

TOEFL: 110 (30/29/25/26).

Soft Skills

Cultural Competence

Have learned about the communication and socialization habits of several representative cultures in an intercultural communication course.

Volunteering

Have participated in over 30 hours of volunteering work in campus.

Love for Music

Have been playing the violin since 6. Passion for classical music.

Awards

Suzhou Industrial Park (SIP) Scholarship

Awarded by SIP Administrative Committee

2022

Huawei Scholarship

Awarded by Huawei Technologies Co. Ltd.

2023

The Third Prize Scholarship

Awarded by Shanghai Jiao Tong Univ.

2022, 2023