Miranda Lao

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EDUCATION

Olin College of Engineering, Needham, MA
Bachelor of Science in General Engineering with Concentration in Mathematics Candidate, June 2020
Cumulative Academic GPA: 3.84

- Past/present coursework includes: Design for Manufacture, Affordable Design and Entrepreneurship, Machine Learning, Discrete and Convex Geometry, Graph Theory, Elements of Analysis I, Abstract Algebra, User Oriented Collaborative Design, Number Theory

EXPERIENCE

SOUTHERN INSTITUE OF SCIENCE AND TECHNOLOGY, Shenzhen, China
Program Instructor June 2019 – August 2019
50 Hours per Week

- Lead groups of first-year undergraduate students through a project-based engineering course, covering user-oriented design, design thinking skills, basic Solidworks skills, and rapid prototyping
- Translate Chinese to English for international instructors, and translate instructions from English to Chinese for students.

ABERDEEN TEST CENTER, Aberdeen, MD
US Army Aberdeen Test Center, Engineering Design and Development Branch, Test Technologies Directorate
Student Trainee, June 2018-August 2018
40 Hours per Week

- Performed calculations, design work, and provided assistance to design engineers
- Participated in design reviews and attended briefings

OLIN COLLEGE OF ENGINEERING, Needham, MA
Teaching Assistant (Electricity and Magnetism) September 2018 – December 2018
6 Hours per Week

- Prepare weekly homework solutions, grade and provide feedback on homework
- Hold office hours three times weekly for homework and conceptual questions

Teaching Assistant (Quantum Mechanics) January 2018 – May 2018
4 Hours per Week

- Hold office hours once weekly for homework and conceptual questions
- Grade and provide feedback for student homework

Research with Professor Christopher Lee on Origami Structures in Fixed Wing Aircraft
Student Researcher, June 2017 – August 2017
40 Hours per Week

- Worked on a team to design, prototype, and test self-deploying, foldable, 3D-printable fixed-wing gliders using concepts from origami and flat-foldability.
- Documented process and collected data to write an academic paper on the 3D-printability of foldable wings.

SKILLS

- Software: SolidWorks (with FEA), Autodesk Fusion 360, Adobe Photoshop, InDesign, Microsoft Office Suite, LaTex (Overleaf)
- Programming Languages: Java, Python, MATLab, Arduino, Mathematica
- Fabrication: Manual Mill, Manual Lathe, 3D Printers
- Miscellaneous Skills: Fluent Spoken Chinese (Mandarin and Cantonese), Design and Illustration