CHARMAINE GUO

Wayland, MA 01778 & Evanston, IL 60201

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EDUCATION

Northwestern University

B.S. in Materials Science & Engineering

Overall GPA: 3.25/4.00

June 2028

SKILLS

Computer Languages

Soft Skills **Hard Skills**

Organizational Tools

Python, Java, MATLAB, HTML, CSS

Project Management, Teamwork , Time-Management, Adaptability Lab Safety, Capillary Rheometer, SEM, Spectrometer, ICP

Microsoft Excel, Google Drive

EXPERIENCE

Undergraduate Researcher

Northwestern University

October 2024 - Present Evanston, IL

- Collaborating with a PhD candidate on cellulose crystalline research, focusing on color formation without dyes.
- Studying how UV light cures acrylic acid, solidifying cellulose crystals and creating structural colors
- Analyzing using MATLAB how varying cellulose concentrations affect crystal arrangements and resulting colors.

Swim Instructor

Northwestern University

October 2024 - Present Evanston, IL

- Coordinating and scheduling private swim lessons to accommodate individual needs and availability.
- Maintaining participant progress by offering regular feedback and technique suggestions.
- Leading 8 group swim classes per week for over 30 participants.

Swim Instructor British Swim School June 2024 - Present Wayland, MA

- · Customizing instruction strategies based on knowledgeable evaluations of students' abilities.
- Improving students' abilities by demonstrating techniques in an easily understood manner.
- Maintaining participant progress by offering regular feedback and technique suggestions.
- Leading 16 swim classes per week for over 60 total participants.

CERTIFICATIONS

StarGuard Lifeguard

Competency Assessment & Performance Record

Aug 2024-Aug 2025

ID: 189562

Trained up to 12 ft.

EXTRACURRICULAR ACTIVITIES

Power Distribution Management

Northwestern Formula SAE (NUFSAE)

October 2024 – Present

- · Working on the electrical systems team to design the back box harness and build the top hoop harness.
- Collaborating with the accumulator team to design the low voltage battery box.
- · Learning and applying software like Altium, SolidWorks, and RapidHarness.

Finance Lead

January 2025 - Present

Society of Asian Scientists and Engineers (SASE)

Organizing fundraisers and managing financial operations, budgeting, and expense tracking.

Writing grants and collaborating with the club to ensure efficient financial planning and resource allocation.