

# MAXWELL KAUNG

## CONTACT

 612-443-5911

 max.kaung@gmail.com

 Minnetonka, MN

 linkedin.com/in/max-kaung

 maxkaung.com

## SKILLS

Fluent in Mandarin, Gold Bilingual Seal

Proficient in Python, Java, C++, and MATLAB

Basic AI Development

Research Project Management

Excel Spreadsheets Data Analysis

SolidWorks CAD

Ansys FEA

OpenFOAM CFD

Complex Origami

## INTERESTS

Taekwondo, 2nd degree black belt, trained for ~14 years

Paper Making. Developed paper sheets for research at the Minnesota Center for Book Arts

Piano and Flute. Entered a Solo/Ensemble contest as a quartet and a quintet and earned the highest rating, SUPERIOR.

Folding origami, Founded the first Origami Club at Minnetonka High School

Tennis

Skiing

Fantasy Worldbuilding

## EDUCATION

### Northwestern University

Evanston, IL Anticipated graduation - June 2029

- B.S. in Mechanical Engineering, Aerospace Concentration, GPA: 3.94/4.00
- Projected to graduate with an M.S. in MatSci & MechEng via the BS/MS program.
- Relevant Coursework: Design, Thinking, and Communication – Developed a prototype powered extending walking stick for a client with muscular dystrophy
- Linear Algebra; Statics; Differential Equations; Machine Dynamics; Fluid Dynamics; Thermodynamics; Electronics

### Minnetonka High School

Minnetonka, MN September 2021 - June 2025

- Summa Cum Laude, Weighted GPA: 4.7/4.0
- National Merit Finalist, ACT Composite 36 (Top 0.1%)

### Artificial Intelligence Program

Harvard Virtual and Johns Hopkins In-Person March 2024 - June 2024

- Acquired AI development skills at Harvard Veritas AI Scholars Program & Johns Hopkins NSLC Artificial Intelligence Program

## PROJECT EXPERIENCE

### Liquid Propulsion Nozzle Team

Northwestern Aerospace Team (NUSTARS) October 2025 - Present

- Building, designing, and testing Northwestern's first fully liquid rocket engine
- Researching and assembling the rocket engine to be hot-fired in Fall 2026
- Focused on high-temp nozzle materials via MATLAB heat transfer and stress modeling
- Led the transition from copper 110 to aluminum 6061 with a graphite throat insert, resulting in a FoS increase from 1.27 to 1.66 and a cost decrease of 60%.
- Collaborated with analysis team to perform coupled thermal, fluid, and structural FEA

### Solar Car Suspension Team

Northwestern Solar Car Team (NU Solar) September 2025 - Present

- Designing and manufacturing the next generation of solar-powered electric vehicles
- Led the redesign of the suspension and brake systems through FEA optimization and fabrication of 17.2% lighter brake rotors
- Participated in the Formula Sun Grand Prix and attended scrutineering events
- Researching and designing a new 3-wheel suspension system for our 9th solar car.

### Minnesota State Science Fair

Minnesota State Science & Engineering Fair February 2025 - March 2025

- Quantified the effects of pulp additives on origami paper folding characteristics, resulting in a 13.8% increase in paper strength.
- Achieved ASM INTL award and Silver Grand Award, signifying top 10% of projects

## WORK EXPERIENCE

### UMN ME, Flow Field Imaging Lab

Research Volunteer June 2026 - September 2026

- Constructed a research-level fan wall with for wind tunnel experiments
- Designed and built a miniature city to create real-world wind conditions and validate wind-based route optimization in drones

### English Teaching Volunteer

Taiwan Education Program, Miaoli County, Taiwan July 2024 - August 2024

- Taught English to rural students grades 2-7 at Shinkaie Elementary

### Retail Merchandiser

Target Corporation, Ridgedale, MN May 2023 - June 2024

### Industrial Design Intern

Stratasys, Eden Prairie, MN June 2023 - August 2023