May Wang

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EDUCATION

Cornell University, College of Engineering

Ithaca, New York

Bachelor of Science in Mechanical Engineering

Expected May 2026

Coursework: System Dynamics, Fluid Mechanics, Dynamics, Mechanical Synthesis, Statics & Mechanics, Waves & Oscillations, Materials, Differential Equations, Linear Algebra, Thermodynamics, OOP & Data Structures

GPA: 3.53

PROFESSIONAL EXPERIENCE

SUMRIDGE PARTNERS AT RAYMOND JAMES

Jersey City, NJ

Data Engineer / Scientist

May 2024 - Aug 2024

- Developed and deployed real-time data processing framework to production that handles 2 million data points per hour
- Created in-house tooling and automated data ingest pipeline using pandas and SQL to process 800M historical data points
- Applied Iglewicz and Hoaglin outlier tests with time, spread, and source-specific tunings on multidimensional datasets
- Collaborated with traders to build tools using BeautifulSoup and Whisper for robust data parsing during live conferences

LEADERSHIP AND SCHOOL ACTIVITIES

CORNELL UNIVERSITY AUTONOMOUS UNDERWATER VEHICLE

Ithaca, NY

Mechanical Engineering Subteam

Oct 2022 - Present

- Designed a subaquatic manipulator in SOLIDWORKS, used FEA to ensure robustness, and drafted effective drawings
- Developed a novel hydroacoustic communication buoy; Was responsible for all mechanical, electrical, and software design
- Engaged in multiple semester-long four-stage design reviews, coordinating interdisciplinarity constraints and objectives
- Assessed and devised solutions around 50-feet of water pressure, varying outdoor lighting, and diverse aquatic environments
- Precision machined and anodized aluminum components using manual lathes and mills to team defined GD&T standards

Organic Robotics Lab

Ithaca, NY

Undergraduate Researcher

Oct 2023 – Present

- Published a paper on developing an ethanol histology sample dehydrator, cutting cost of equipment from \$30,000 to \$300.
- Prototyped a pneumatic-solenoid actuation system in a modular soft robotic worm to achieve agile underground movement
- Integrated force feedback and computer vision data to build accurate models that predicts soil conditions for agricultural use

CORNELL MAKER CLUB

Ithaca, NY

Training & Equipment Chair

Jan 2023 - Present

- Mentored new members on tool and software usage with laser cutters, FDM 3D printers, PCB mills, and CNC routers
- Procured, maintained, and repaired lab equipment and materials, maximizing the effectiveness of the club's allocated budget
- Undertook commission work for Cornell's engineering department for events, managed alumni interactions and relations
- Organized Cornell Make-a-thon and actively engaged in community outreach events within the broader engineering sphere
- Assisted grad students and faculty with rapid prototyping, ran workshops to aid undergraduate students on personal projects

COMPETITIONS AND PERSONAL PROJECTS

CORNELL MAKE-A-THON Ithaca, NY

Rookie Award - First Place

Mar 2023

- Designed and prototyped an automated nursery for an environmental hardware hackathon in 18 hours as a solo competitor
- Solved water dispensing problems with soft robotics; modified slicer settings while printing to create waterproof vessels
- Implemented PID control in C++ with 6 environmental sensors to maintain humidity, lighting, and temperature conditions

SSCS ARDUINO COMPETITION

San Jose, CA

Second Place

Jul 2023 - Sep 2023

- Constructed a synth/sequencer using limited supplies in a custom 3D-printed enclosure and laser-cut wood top panel
- Employed MATLAB Stateflow to design an intuitive musical workflow, complemented by original, cohesive iconography

SPECIALIZED SKILLS

Software: SOLIDWORKS (including FEA), Ansys, Python, JS, Java, C++, MATLAB, KiCAD, Photoshop and Illustrator **Skills:** Manual Lathe and Mill, Rapid Prototyping, PCB Design, DFMA, GD&T, Mandarin (Fluent), ASL (Conversational)