

# Yunting Catherine Guo

Basking Ridge, NJ | (609) 865-0301 | yuntingguo1319@gmail.com | linkedin.com/in/yunting-catherine-guo/

## EDUCATION

---

### Cornell University, Sibley School of Mechanical and Aerospace Engineering

*Candidate for Bachelor of Science in Mechanical Engineering  
Minor in Electrical & Computer Engineering*

Ithaca, NY

Expected Graduation: May 2027  
Cumulative GPA: 3.84

**Relevant Coursework:** Introductory Fluid Mechanics, Mechanics of Engineering Materials, System Dynamics, Foundation of Robotics, Thermodynamics, Dynamics, Introduction to Mechanical Design, Embedded Systems

## PROFESSIONAL EXPERIENCE

---

### Erickson Lab@Cornell University

*Undergraduate Researcher*

Ithaca, NY

June 2025 – Present

- Designed and iteratively prototyped over 300 single- and triple-strip Lateral Flow Assay cassettes in resin printing
- Validated cassette designs with colorimetric (EBOV, MARV, LASV) and fluorophore (PR, ER, HER2) assays
- Generated engineering drawings and technical figures in Fusion 360 to support graduate research documentation

### CU Solar Boat Project Team

*Hull Subteam Lead*

Ithaca, NY

August 2024 – Present

- Designed and fabricated hull for hydrodynamic efficiency and structural integrity to excel in annual competition
- Built prototype hull with plywood, resin, and fiberglass to assess and refine its strength and surface finish
- Collaborated with Drivetrain and Solar subteams for successful steering system and solar panel integrations

### JNY RE LLC

*Backend Development Intern*

Remote

June 2024 – August 2024

- Developed a web application with interactive widgets to enhance landlords' usability and streamline UX
- Implemented live tracking of 110+ tenants' rent balances and payment schedules to maximize company efficiency
- Applied Pandas and Piecash libraries to GnuCash data for optimized processing of individual tenants' data

### Cornell University School of Electrical and Computer Engineering

*Teaching Assistant for Introduction to Circuits for Electrical and Computer Engineers*

Ithaca, NY

January 2025 – Present

- Spearheaded weekly lab sessions with self-drafted teaching material for 30+ students to foster course mastery
- Held office hours to provide supplementary assistance, clarify on lecture topics, and address student questions
- Evaluated and provided constructive feedback on 100+ students' homework assignments, lab reports, and exams

## EXTRACURRICULAR INVOLVEMENT

---

### Cornell Archery Club

*Treasurer*

Ithaca, NY

September 2023 – Present

- Engaged in weekly 2-hour practices on a 20-yard lane to enhance precision, focus, and archery techniques
- Instructed 30+ new members on proper stance and release techniques to increase member engagement and safety
- Led outreach initiatives and promoted club activities to increase campus visibility and new member engagement

## ADDITIONAL INFORMATION

---

**Languages:** English (Native Proficiency), Chinese (Native Proficiency), Spanish (Limited Working Proficiency)

**Skills:** Fusion 360, SolidWorks, 3D printing, Machining, MATLAB, Java, Python, LTspice, Wet Lab Techniques

**Interests:** Archery, Cuisine, Hands-on Projects, Rubik's Cube, 2048, Anime, FPS games, Detective Dramas, K-Pop