

Gau Ding Yu (Michael) Yau

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EDUCATION

University of Louisville

Expected: May 2027

Major: Electrical and Computer Science Engineering; Minor: Entrepreneurship

GPA: 3.5/4.0

Coursework: Network Analysis, Embedded Systems, Electromagnetic, Electronics, Signals & Linear Systems

Awards: Brown Forman Engineering Scholar, Forcht Center Pitch Competition – 1st Place, Dean's lists

PROFESSIONAL EXPERIENCE

GE Aerospace | Dayton, OH.

September 2025 – December 2025

Systems & Defense Engineering Intern

- Conducted system troubleshooting on 777x power systems via ATP, ESS, CT, & vibration tests to restore test readiness.
- Designed PWB in Altium and created schematic libraries via component research to support 777 RAT ESS test stands.
- Resolved F-18 E/F GVR data discrepancies with Excel and LTspice simulations, improving the pass rate by 26%.
- Programmed embedded firmware on UniFlash for GVR/ICB systems to improve signal response times.
- Created the new hybrid SCR testing procedure via technical reviews and gold unit testing, reducing annual costs by \$300k.

FirstBuild, GE Appliances | Louisville, KY.

August 2024 – August 2025

Student Technician

- Collaborated with engineering and design teams to prototype next-generation smart appliance innovations.
- Optimized production workflows by programming and operating shop floor machinery to manufacture appliance components.
- Managed Makerspace to instruct 50+ visitors weekly on safely using laser cutters, power tools, 3D, and resin printers.

UofL Undergraduate Research Assistant

May 2024 – July 2024

- Simulated PI control systems in Workbench software to analyze DC motor dynamics, improving speed efficiency by 80%.
- Integrated dynamometer hardware with data acquisition for real-time performance verification and troubleshooting.

Cybersecurity Lab Teaching Assistant

August 2023 – July 2024

- Documented lab procedures and created concise guides via Unity to cut setup errors and accelerate onboarding.
- Evaluated VR and racing simulator hardware to refine experimental setups and improve data consistency.

PROJECTS

ASEE Model Design Competition: Beaver Bot, Awarded 6th Place in American Society for Engineering Ed. (ASEE) **June 2024**
Robotics Innovation Competition for STEM | Portland, OR

- Designed an autonomous robot in Arduino to collect and transport targets, achieving 75% path completion accuracy.
- Led system integration of motor controls and collector gear modules, optimizing field navigation algorithms.
- Presented engineering documentation, design rationale, technical troubleshooting, and solutions to ASEE judges.

NASA USLI Rocketry Competition

August 2023 – January 2024

Louisville River City Rocketry: Payload Member

- Modeled payload capsule system in SolidWorks CAD for flight durability and mass constraints.
- Automated combustion chamber pressure & temperature analysis by compiling MATLAB data into Excel scripts.

LEADERSHIP & INVOLVEMENT

Engineering Academy Leader

July 2024 – July 2024

Brown Forman/GE Appliances Programs | Louisville, KY

- Organized a rigorous two-week summer program, preparing 48 students for college calculus & engaging in industry tours.
- Advised first-year students in group and one-to-eight settings to create an academic schedule and provide resources.

SKILLS & AWARDS

Software: SolidWorks (CAD/FEA), OnShape, KiCad, Altium, LTspice, Qspice, NI Multisim, Git

Hardware: CNC Machinery, Laser Cutter, Press Machine, 3D Printing, Arduino, Raspberry Pi, Oscilloscope, Wood Power Tools

Programming Language: Java, Python, G-code, Assembly, MATLAB