Giang Anh Vu

1931 Duffield St, Ann Arbor, MI 48109 • contact@gianganhvu.com • 240 756 1062 • www.gianganhvu.com

Education

University of Michigan — Ann Arbor, MI
Bachelor of Science, Computer Engineering | GPA: 4.0/4.0 — May 2028

Montgomery College — Rockville, MD
Associate of Science, General Engineering | GPA: 3.7/4.0 — May 2025
Relevant Coursework: Statics; Mechanics of Materials

Experience

University of Michigan Magnetometer Laboratory — Ann Arbor, MI
Research Assistant — Aug 2025 – Present

- Develop ML models achieving >90% recall for geomagnetic storm prediction using Random Forest classifiers on 10+ years of magnetometer data, enabling early warning systems for satellite infrastructure.
- Author research manuscript documenting ML methodology and results for peer-reviewed publication.
- Analyze 10+ years of magnetometer data to correlate 50+ solar events with geomagnetic fluctuations; research material properties for optimal sensor selection on NASA missions.
- Calibrate and maintain Helmholtz Coil apparatus for RM3100 sensor testing, ensuring $\pm0.1\%$ accuracy.

Mathnasium — Clarksville, MD
Math Instructor — May 2024 – June 2025

- Instructed K-12 students in Calculus I–III for AP exam preparation over 10+ hours/week; developed personalized learning plans and increasing STEM interest.

Leadership & Activities

Phi Theta Kappa College Honor Society — Rockville, MD
Montgomery College Vice President — Aug 2024 – June 2025

- Coordinated 5+ events engaging 400+ honor society members; represented chapter at regional meetings.

Montgomery College Student Government Association — Rockville, MD
Treasurer — Dec 2023 – June 2024

- Managed $40,000 budget, overseeing financial allocations for 40+ student organizations; approved $28,000+ in resources through bi-weekly meetings.

Projects

Lucentia | *TypeScript, Next.js, React, PostgreSQL* — Sep 2025 – Present

- Developed full-stack financial intelligence platform using Next.js, React, and PostgreSQL that classifies spending, detects anomalies, and reduces manual accounting time by 90%.

UM Electric Boat | *SolidWorks, Siemens NX* — Sep 2025 – Present

- Design and manufacture electric boat hull targeting 125+ mph (world record attempt), optimizing for efficiency.

AWS Powered Autonomous Robot Car | *Python, AWS, Creo Parametric* — Feb 2023 – June 2023

- Programmed reward functions in Python for autonomous navigation achieving 85%+ success rate across 10+ test scenarios; designed collision-resistant outer shell using Creo Parametric.

Skills & Languages

Technical Skills: Python, JavaScript, C++, MATLAB, Machine Learning, PostgreSQL, CAD (SolidWorks, Creo Parametric, Siemens NX)

Languages: English (Fluent), Vietnamese (Fluent), Spanish (Conversational)