

Liwen Tran

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EDUCATION

Johns Hopkins University

BS, Computer Engineering, Applied Mathematics & Statistics.

May 2025

GPA: 3.8

SKILLS

Languages	Python, Java, C, C++, MATLAB, SQL, Assembly
Technologies	Git, AWS Cloud Development Kit, Unix/Linux
Software	SolidWorks, Simulink, Revit, AutoCAD, Adobe Suite, PowerBI, Figma
Certifications	AWS Developer Associate, AWS Certified Solutions Architect, AWS Certified Cloud Practitioner
Other	Agile Methodology, Mandarin Chinese, Spanish, Photography, Video Editing

WORK EXPERIENCE

Citadel, New York, NY

Incoming Software Engineering Launch Intern

June 2023 - Aug 2023

- Equity Quantitative Research Engineering team.

Amazon Web Services (AWS), Herndon, VA

Cloud Consultant Intern

May 2022 - Aug 2022

- Developed an automated **DevSecOps** pipeline that hardens configurable **machine images** for **National Security** customers.
- Architected and coded a distributable, serverless cloud solution with **AWS Cloud Development Kit**, **Python**, and **AWS Cloud Services**, specializing in Lambda, S3, EC2, CloudWatch, Step Functions, DynamoDB, and more.
- Committed **950+** lines of code and presented **7** demos to stakeholders while incorporating their feedback.
- Facilitated and participated in daily stand-ups and weekly sprints in an **agile** environment.

CFR Engineering Consultants, Inc, Germantown, MD

Electrical Engineering Intern

Sep 2020 - Jul 2021

- Designed electrical distribution and lighting systems for new and renovation construction projects using **Revit** and **AutoCAD**. Performed power load calculations and designed fire alarm systems.
- Constructed flexible 3D models of electrical components for **Building Information Modeling** projects to increase consistency and reduce review time through programmatic settings.
- Built a [database management system](#) with **MS Access**, using **VBA+SQL**, that supports CRUD operations on **2000+** projects.
- Performed data analytics and created a dashboard to visualize working hours of teams and employees using **MS PowerBI**.

University of Maryland, MIND Lab: Building Analytics

Research Assistant

Mar 2021 - Jun 2021

- Optimized energy and functionality by modeling **IoT** data from building sensors and actuators with **Python** and **Pandas**.

Montgomery County Government

Recreation Department Tech Intern

Jun 2020 - Aug 2021

- Initiated and ran a tech support program for seniors in the county (population 1M), serving **8,804** clients in the first 3 quarters.
- Increased internet connectivity by analyzing census demographic data and broadband survey data to target high-impact areas.
- Won the 2021 [National Association of Counties Award](#) in Information Technology and Parks and Rec.

PROJECTS

Optiver: Women in Tech & Trading Fellow

Apr 2023

- Chosen as 1 of 20 women across the US to gain insight into innovative trading systems and high-performing technologies.

Copycat: ML-Driven Mobile Game to improve Social Communication

Sep 2022

- Won **1st Place** and **Bloomberg's Philanthropic Award** at HopHacks (40 teams). Architected and built the entire **AWS cloud backend** to process images with **deepface**, a facial attribute analysis framework, integrated with React and JavaScript.

inJourna: ML-based Mental Health Improvement App for Inpatients

Sep 2021

- Placed **"Runner Up"** and won the **"Most Innovative Venture Award"** at HopHacks (184 participants). Designed the **UI/UX** in **Figma**, devised the branding (visual identity, consistent theme, and logo), and built an engaging landing page.