# Liwen Tran

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#### **EDUCATION**

Johns Hopkins University
BS, Computer Engineering, Applied Mathematics & Statistics.

May 2025
GPA: 3.94

### **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

### Warner Bros. Discovery, New York, NY

Starting May 2023

Incoming Software Engineering Intern

# Amazon Web Services (AWS), Herndon, VA

May 2022 - Aug 2022

Cloud Consultant Intern

- · 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

Sep 2020 - Jul 2021

Electrical Engineering Intern

- · 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

 ${
m Mar}\ 2021$  -  ${
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Research Assistant

- · Optimized energy and building functionality by modeling **IoT** data from building sensors and actuators with **Python** and **Pandas** to find relationships between data variables.
- · Assembled notes for the lab after learning from expert guest speakers.

### **Montgomery County Government**

Jun 2020 - Aug 2021

Recreation Department Tech Intern

- · 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**

### 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.