

# Liwen Tran

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## EDUCATION

<b>Johns Hopkins University</b> BS, Computer Engineering, Applied Mathematics & Statistics.	May 2024 GPA: 3.94
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## SKILLS

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

## WORK EXPERIENCE

<b>Amazon Web Services (AWS), Herndon, VA</b> <i>Cloud Consultant Intern</i>	May 2022 - Aug 2022
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- 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.

<b>CFR Engineering Consultants, Inc, Germantown, MD</b> <i>Electrical Engineering Intern</i>	Sep 2020 - Jul 2021
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- 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**.

<b>University of Maryland, MIND Lab: Building Analytics</b> <i>Research Assistant</i>	Mar 2021 - Jun 2021
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- 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.

<b>Montgomery County Government</b> <i>Recreation Department Tech Intern</i>	Jun 2020 - Aug 2021
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- Initiated and ran a tech support program for seniors in the county (population 1M), serving **8,804** clients in the first 3 quarters.
- Created and taught a curriculum about the internet and technology for classes of up to 25 seniors.
- Increased internet connectivity in rural and low-income households efficiently by analyzing census demographic data and broadband survey data to target high-impact areas efficiently.
- Won the 2021 [National Association of Counties Award](#) in Information Technology and Parks and Rec.

## PROJECTS

<b>Copycat: ML-Driven Mobile Game to improve Social Communication</b>	Sep 2022
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- 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.

<b>inJourna: ML-based Mental Health Improvement App for Inpatients</b>	Sep 2021
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- 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.