# **Edward Wei**

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## **EDUCATION**

## University of Virginia • Charlottesville, VA

May 2025

BS Computer Science, BA Mathematics

- Cumulative GPA: 3.9/4.0
- Relevant Courses: Alg. Coding Theory, Digital Signal Processing, Software Analysis, Compilers, Math. of Derivative Securities, Algorithms II, Software II, Comp. Org. II, Stochastic Processes, Linear Alg., Statistics, Probability
- Involvement: Board member of Chinese Student Association, Taiwanese Volleyball Club, Rodman scholar

## **WORK EXPERIENCE**

#### Amazon Web Services • Seattle, WA

May 2023 – Aug 2023

Cloud Engineer Intern

- Enabled delivery of Cloud application to Sales Team though one-click, automated, AWS environment-agnostic deployments by refactoring 20 components to Infrastructure as Code in TypeScript Cloud Development Kit (CDK).
- Improved CI/CD, eliminating 7 manual steps by automating uploads and build stages using Lambda and SigV4.
- Expanded user experience by integrating Lex chatbot in React UI using Lambda, Anthropic API, and API Gateway.
- Awarded accolade by skip manager to recognize impact preparing team for demo at Chicago GenAI summit.

## Human-Centric Data Mining Lab • Charlottesville, VA

Sept 2021 – May 2023

Undergraduate Research Assistant

- Primary author of research paper on gradient-based defense for GNN-targeted inference attack developed in PyTorch.
- Supported PhD student research by conducting and analyzing diffusion model experiments in Bash, Python, and R.
- Awarded UVA Dean's Undergraduate Research Fellowship to recognize and support research accomplishments.

#### Amazon Web Services • Herndon, VA

May 2022 – Aug 2022

Cloud Engineer Intern

- Reduced monthly costs by 40% by proposing and implementing refactor of form storage from S3 to DynamoDB.
- Decreased web client load time by 75% by initiating and developing server-side filtering using Typescript Lambda.
- Increased developer-friendliness by refactoring existing infrastructure to Typescript CDK for language universality.
- Enabled 25% faster builds and eliminated hardcoded URLs by creating CloudFront self-proxy for React frontend.

#### Food For Lane County • Eugene, OR

Feb 2022 - Jun 2022

Software Engineering Lead

- Enabled 9 organizations to track 1000s of lbs. of donation movement by leading team to develop analytics app.
- Thoroughly understood client requirements by conducting 10 biweekly stakeholder interviews and demos.
- Created accessible web app using React, Node.js, MongoDB, Typescript, and deployed on Salesforce Heroku.

#### **PUBLICATIONS**

Privacy Protection from GCN on a Per-Node Basis: Selective Learnability Lock (SLL). Wei, E., Lin, L., & Wang, H. (2022). ACM SIGKDD-UC 2022 Conference on Knowledge Discovery and Data Mining Undergraduate Consortium

Examining the Effects of the Covid-19 Lockdowns on Reducing Pollutant Concentrations in US Urban Areas: Evidence from Los Angeles, Seattle, and New York City. Wei, E. (2021). WIT Transactions on Ecology and the Env., 253, 565-575

## **SKILLS**

- Languages: TypeScript (3 yrs.), Python (3 yrs.), Java (2 yrs.), R (2 yrs.), C/C++ (1 yr.), HTML (4 yrs.), CSS (4 yrs.)
- Other: AWS Cloud (2 yrs.), React (3 yrs.), Node.js (3 yrs.), PyTorch (2 yrs.), Git (4 yrs.), Linux (2 yrs.)

### **AWARDS**

- 1st Place, UVA Darden Entrepreneurship Cup-Concept Stage: Pitched Sella, an AI-based re-commerce platform, and won startup competition against 30 teams of MBA and undergraduate students.
- UVA Clement Song Bicentennial Scholarship: Awarded to recognize academic and professional achievement.