Timothy Chen

626-208-7238 | timothychen37@gmail.com | linkedin.com/in/timochen

Education

Pepperdine University

B.S. in Computer Science & Mathematics — *Summa Cum Laude*

- Cumulative GPA: 3.992 / 4.000
- Coursework: Data Structures, Computer Systems, Machine Learning, Image Analysis, Computer Networking
- Awards: Multiple competitive departmental scholarships, over $30k awarded in research grants (e.g. Northrop Grumman Endowed Scholarship, Keck Data Science Grant).

Experience

Amazon — June 2025 – Present

Data Engineer - Machine Learning — *Seattle, WA*

- Data engineer for a team of Applied Scientists owning next gen security tools
- Designed 100TB+ scale data migration architecture to support the merger of AWS and SDO security findings tools
- Owned and evolved core security issue data models that served 100+ internal security teams
- Built CI/CD for SageMaker ML workflows (CDK, Docker), standardizing training and inference environments
- Received "Exceeds High Bar" rating (top performance tier) in 2025 annual review

Amazon — May 2024 – Aug. 2024

Data Engineer Intern - Alexa — *Seattle, WA*

- Provisioned cloud infra and deployed distributed processing pipelines with AWS Glue, TypseScript, AWS CDK
- Metrics invented and delivered to directors led to a 20% boost in Alexa's B2B conversions MoM

Samsung — May 2023 – Aug. 2023

Software Engineer Intern — *Austin, TX*

- Redesigned Samsung Foundry's defect reporting tool for various in house equipment via Python on Streamlit
- Adopted by several core engineering teams, standardizing the defect reporting process

Pepperdine Information Technology — Aug. 2022 – May 2024

Software Engineer (Co-op) — *Malibu, CA*

- Built full stack applications for University administration, including esign.pepperdine.edu and sso.pepperdine.edu
- Featured in Pepperdine IT's 2024 Annual Review [Article]

Projects

Cell Detector | *Python, Roboflow, scikit-learn, Google Colab*

- YOLO-based CNN detecting 1k+ plant cells per image with .94 F1; automated annotation for biology faculty
- This project was later published at ISVC '23 and presented at the 2023 ESA conference

Intellectual Disability Balance Reference | *Applied Machine Learning*

- Built centile curves to track balance for people with intellectual disabilities, which were adopted in clinical practice
- Oral at the 2023 ISAPA conference in New Zealand was featured in Pepperdine's Newsletter [Article]

Skills

Languages: Python, TypeScript, C#, SQL, C++, Java, R, Assembly, JavaScript
Tools & Frameworks: IaC, CDK, AWS, .NET, MVC, ECS, PyTorch, Roboflow, Redshift, Postgres
Hackathons: Morgan Stanley CTG Hackathon Spring 2023, Alteryx Datathon 2023 Finalist
Leadership: TA - Formal Methods, Discrete Structures (5 semesters); Resident Life Advisor (4 semesters)