Alexander Chin

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Education

University of Washington *Sept 2023 - June 2027*
BS in Computer Science, Minor in Mathematics and Philosophy

○ **GPA::** 3.87/4.0
○ **Coursework:** Machine Learning, Linear Algebra, Software Design and Implementation, Data Structures and Algorithms, Probability and Statistics, Discrete Mathematics

Selected Technical Skills

Languages: Python, Java, JavaScript, TypeScript, HTML, CSS, SQL

Technologies: Node.js, React.js, React Native, Next.js, SQLite, JUnit, Conda, PyAutoGUI, TKinter, Node/NVM, Bash/ZSH, Express, Pandas, Selenium, NumPy, Pandas, Matplotlib, PyTorch, Jupyter

Experience

Computer Science Teaching Assistant (CSE 122, 143, 311) *Dec 2023 – Feb 2025*
Allen School

○ Taught 3 classes with topics ranging from data structures to discrete mathematics to complexity theory.
○ Taught large classes ranging from **600 students** to CSE 143X, a **13-person cohort**. Bought snacks for morale.
○ Led **weekly classes**, held office hours, and gave indivdualized student help in the **Intro Programming Lab.**
○ Assessed and graded **300 assignments** on a weekly basis, ensuring prompt feedback for academic improvement.
○ Collaborated closely with the professor every week as the **sole TA** of 143X to drive student growth.

Software Engineer Intern *June 2023 – Sept 2023*
Synthesis

○ Designed an interactive, adaptable digital tutor to teach mathematics via **immersive simulations**.
○ Developed the web interface for **Synthesis Tutor** and programmed multiple math simulations focusing on multiplication using **React** and **Next.js**.
○ Iterated rapidly on UI, refining it through **5+ rounds of real customer testing**, and pushed new content to **1,000+ students**.
○ Led stand-ups, collaborated with education professionals and developers, and evolved the tutor from prototype to a fully functional product, now boasting a **4.7-star rating** with 3,000+ reviews on the App Store.

Software Engineer *Jan 2024 – Apr 2024*
Amethyst

○ Engineered an LLM-integrated Chrome extension as part of a small startup team, leveraging advanced **natural language processing** capabilities to automatically generate spaced-repetition flashcards on internet information.
○ Developed the front-end using React and Chrome Storage API, while building a robust backend with **Supabase and PostgreSQL** to handle data storage and authentication seamlessly.
○ Conducted user research and studies, iterating on product features, leading to a **profitable service** with measurable user growth.

Projects

Face-Value *2024*

○ Used **PyTorch, NumPy, Jupyter, and Pandas** to engineer an automated, customizable face rating system using a dual **variational autoencoder** (VAE) and feed-forward network system, driven by curiosity to explore **personalized AI.**
○ Built a prediction model to profile individuals tastes (much like Instagram or Tinder) and determine individual preferences, analyzing **latent traits** from **encoded facial data** to generate new faces.

Constellation Game *2022*

○ Built and shipped an indie strategy game **from scratch** in Python called Constellation 🔗 over four months.
○ Implemented multiple game-modes, including one with AI opponents based on custom **look-ahead algorithms**.
○ Learned how to bundle and distribute my game to players all over the internet.