

# Alex Tsun

## Contact

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 Sunnyvale, CA

 linkedin.com/in/alextsun

## Education

Sep 2018 - Jun 2020

### Stanford University

Stanford, CA

M.S. Computer Science  
Specializing in Artificial  
Intelligence and Theoretical  
Computer Science

Sep 2014 - Jun 2018

### University of Washington

Seattle, WA

B.S. Computer Science  
B.S. Statistics  
B.S. Mathematics

## Key Skills

Python

SQL

Machine Learning

MLOps

Statistics

## Professional Experience

Oct 2020 – Present

Mountain View, CA

### Staff Software Engineer, Machine Learning at LinkedIn (Sep 2023 - Present)

Senior Software Engineer, Machine Learning (Mar 2022 - Sep 2023)  
Software Engineer, Machine Learning (Oct 2020 - Mar 2022)

- Technical lead for the Premium AI team, driving initiatives totalling in the tens of millions of dollars in annualized revenue, mentoring junior engineers, and working with cross-functional (XFN) Eng, Data Science, Product, and Design partners. Published work externally: 2 blog posts, 2 patents, and 1 paper.
- Improved job recommendation quality by developing Graph Neural Network (GNN) embeddings for key entities in the LinkedIn economic graph (e.g., members, jobs) to add to the overall ranking model. Proposed modeling (nodes, edges, algorithm/model) and serving decisions, and became the first productionized use of GNN's at the company. Resulted in improved "hearing back rate" from applicants and a few million dollars annualized.
- Design the systems for two of the first Generative AI products (drafting outreach messages and profile summaries/headlines) at LinkedIn, online, at scale, resulting in a 65% user acceptance rate. Led a team of five engineers to develop "dynamic prompt models" for better personalization, iterate on prompt quality, define success metrics, and expand the product scope.
- Co-develop horizontal machine-learned activity embeddings for use in LinkedIn Talent Solutions recommendation models (Job Recommendations, Candidate Recommendations for Recruiters), leading to overall 7%+ Predicted Confirmed Hires across 6 iterations. Experimented with multiple techniques in sequence modeling, increasing in complexity. Published engineering blog post on efforts.

Dec 2021 – Mar 2022

Jun 2020 – Aug 2020

Seattle, WA

### Lecturer at University of Washington Paul G. Allen School

- Taught CSE312: Probability & Statistics with Applications to Computing Winter 2022 and Summer 2020 to 270ish and 70ish students respectively. Course site: <https://courses.cs.washington.edu/courses/cse312/22wi/>
- Redesigned the course to include the fundamentals of statistics (e.g., estimators, confidence intervals, and hypothesis testing) and several applications to computer science in Python (e.g., Naive Bayes, bloom filters, distinct elements, MCMC, bootstrapping, multi-armed bandits), which were typically not included in previous iterations.
- Developed new materials: a textbook, clear and concise slides, problem sets, autograders for nine new coding problems, concept checks, publicly available YouTube short lectures, and section materials.
- Interviewed, hired, and managed a staff of 20 TAs to ensure high-quality quiz sections, office hours, and materials.

Jun 2021 – Aug 2021

Stanford, CA

### Lecturer at Stanford University Department of Computer Science

- Taught CS109: Probability & Statistics with Applications to Computing Summer 2021 to 80ish students. Course site: <https://web.stanford.edu/class/archive/cs/cs109/cs109.1218/>