

Alvin Wan

alvinwan.com / [linkedin.com/in/alvinwan](https://www.linkedin.com/in/alvinwan) / github.com/alvinwan

I am a first-year graduate student at UC Berkeley studying Electrical Engineering and Computer Science; my academic interests lie in deep reinforcement learning and computer vision, specifically perception for autonomous driving. I am a 4-time Head Student Instructor, 3 times for Discrete Mathematics and Probability Theory and currently for Machine Learning. I've been recognized internationally for social impact and design.

See Google Scholar scholar.google.com/citations?user=DwdjBUUAAAAJ for publications.

Machine Learning Research Intern

May 2017 - Aug 2017

DeepScale

- employed sensor fusion for higher-resolution point cloud prediction with focus on object detection tasks, metrics for point cloud prediction evaluation Wasserstein distance

Software Engineering Intern

May 2016 - Aug 2016

Facebook

- worked with selendroid, ADM, and IntelliJ for Tincan (encrypted threads) and Picheads (camera)
- updated internal GraphQL dex, halved photo gallery network requests, centralized Tincan media load

Head Undergraduate Student Instructor

Jan 2016 - May 2016, Aug 2016 - present

University of California, Berkeley - Discrete Mathematics and Probability Theory ([CS70 Staff](#)), ~750 students; Machine Learning (CS189), ~600 students 4.83 / 5.00 student rating (4.45 / 5.00 dpt. average)

- handle course logistics and manage 70+ uGSIs, interns, authored book Apr. 2016 ([aaalv.in/abcDMPT](#))
- reorganized course infrastructure and 20 years of materials, using a [LaTeX parser](#), Naïve Bayes classifier
- programmed queue used by ~3100 students across 4 courses ([github.com/alvinwan/quupod](#)) and staff management system for ~150 staff members across 2 courses ([github.com/alvinwan/piipod](#))

AWARDS

- **Samuel J. Silver Memorial Award** : May '18, EECS Dpt award for combining intellectual with humanistic pursuits
- **US Imagine Cup National Finalist**: May '18, medical adherence solution; ranked #1 of 1300+ teams across US
- **Adobe Design Achievement Awards Semifinalist** : July '17, international design competition, Social Impact category for a computer vision iOS app tailored to the visually-impaired
- **Rookies Co. Semifinalist** : July '17, [named one of top 16 designers internationally](#) in "Web & Mobile" category among ~9000 entries across 80+ countries, 600+ design schools
- **Leadership Award** : '16, demonstrated leadership excellence in community, at UC Berkeley
- **Dean's Honor List** : '16, Top 10% in College of Engineering
- **Regents' and Chancellor's Scholarship** : '14, Top 2% of entering undergraduates

PROJECTS

- **Bit by Bit**: (littlebitbybit.org) non-profit, fostering relationship between tech companies and neighboring family housing units, by building student-engineer mentorships; w/ Twitter, Box, TNDC, CCDC
- **TexSoup** : (github.com/alvinwan/texsoup) *PyPi*, parses valid LaTeX and provides a variety of BeautifulSoup-esque methods and Pythonic idioms for iterating over and searching the parse tree, 100% test coverage
- **Ok Autograder** : (okpy.org) *used by 1400+ students*; formerly one of two main developers, developed Search API, boosted test coverage from 37% to 90.1%, redesigned student-facing interface, reorganized backend infrastructure and improved security for logic tier