

Alvin Wan

alvinwan.com/summary . github.com/alvinwan

I am a rising fourth-year 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.

University of California, Berkeley

2014-2018

Electrical Engineering and Computer Science Major . GPA: 3.7/4.0

Combinatorial Algorithms*, Deep Learning*, Data Structures, Computer Architecture, Artificial Intelligence, Machine Learning, Real Analysis, Abstract Algebra, Convex Optimization, Probability Theory

(*Graduate coursework)

- **DeepScale Research Intern (Summer 2017)**: employed sensor fusion for higher-resolution point cloud prediction with focus on object detection tasks, Wasserstein distance
- **ASPIRE Undergraduate Researcher (Spring 2017)**: focused on neural network model reduction and efficiency, optimizing accuracy in a field with computation, memory constraints
- **Facebook Software Engineering Intern (Summer 2016)**: used selendroid, ADM, and IntelliJ for MyDay (Messenger media-focused redesign), Tincan (encrypted threads) and Picheads (camera integration)

4-Time Head Student Instructor

Aug 2015 - present

Discrete Mathematics and Probability Theory; Machine Learning

4.83 / 5.00 student rating (4.45 / 5.00 department average) handled staffs of 70+ graduate, undergraduate TAs, tutors, and academic interns teaching 800+ students; organized over two dozen course events + 9 exams; published two 60-page booklets for math (aalv.in/abcDMPT), probability theory (aalv.in/abcPTRP) Service: TEDxBerkeley Director of Technology (tedxberkeley.org), Bit by Bit Instructor (littlebitbybit.org)

Publications

- [SqueezeDet: Unified, Small, Low Power Fully Convolutional Neural Networks for Real-Time Object Detection for Autonomous Driving](#)
Bichen Wu, **Alvin Wan**, Forrest Iandola, Peter Jin, Kurt Keutzer
CVPR 2017 . **Winner of Best Paper Award** at Embedded Vision Workshop
- [SqueezeSeg: Real-Time Road-Object Segmentation using 3D LiDAR Point Clouds](#)
Bichen Wu, **Alvin Wan**, Xiangyu Yue, Kurt Keutzer (Under review)

Awards

Recognized internationally for social impact and design, by UC Berkeley for leadership

- **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
- **Honors to Date** : May '17, Top 20% in College of Engineering
- **SURF Fellowship** : May '17, 90 recipients at UC Berkeley per year
- **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