

MATTHEW T. SIT

San Francisco Bay Area, CA | mattsit.github.io | linkedin.com/in/matthewsit

UNIVERSITY OF CALIFORNIA - BERKELEY

Berkeley, CA

B.S. Electrical Engineering & Computer Sciences; Minor in Bioengineering (GPA: 3.785)

Aug 2019

Deep Neural Networks, Machine Learning, Data Science, Computational Biology Algorithms, Algorithms.

Probability for Data Science, Multivariable Calculus, Discrete Mathematics, Linear Algebra & Differential Equations.

INDUSTRY

GOOGLE

San Bruno, CA

Software Engineer III (L4) - Engineering Productivity for YouTube Mobile UI Frameworks (SWE II prior)

Sep 2019 – present

- Replaced a decade-old testing strategy infeasible for modern-scale development. Unblocked key framework feature launch.
- Led design, implementation, and adoption of new tools, infrastructures, and best practices. Saved 125 years of developer time.
- Engaged in student outreach: manager, tech lead of 2 [STEP](#) interns; coached 4 summer [CSSI](#) instructors, reaching 120 freshmen.

CITADEL

Chicago, IL

Software Engineering Intern

Jun 2018 – Aug 2018

- Modularized market connector into dynamic-link libraries: improved build time, compiler independence, language extensibility.

RESEARCH APPRENTICESHIPS

SUSANA T. L. CHUNG – UC Berkeley School of Optometry

Jan 2017 – Sep 2019

- Developed a Matlab computer vision toolkit to extract retinal traces from videos using cross-correlation; paper in progress.
- Refined core algorithm from a 42 to 3 second runtime by downsampling, adaptively searching, and re-writing bottlenecks in C++.

KEVIN BENDER – UC San Francisco

Jan 2018 – May 2019

- Optimized neuronal model by exploring parameter sensitivity and evaluating model scoring functions using correlation analyses.

PAMELA J. YEHL – UC Los Angeles

Jun 2014 – Aug 2014, Jun 2015 – Jul 2015

CONFERENCE PRESENTATIONS

1. R Ben-Shalom, et al. [“Novel approaches to optimize neuronal computational models.”](#) Org. for Comp. Neurosciences (2018).
2. M Agaoglu, et al. [“ReVAS: An open-source tool for eye motion extraction from retinal videos obtained with scanning laser ophthalmoscopy.”](#) Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting Abstract (2018).

PUBLICATIONS

1. N Singh, et al. [“A Systematic Review of Differential Rate of Use of the Word “Evolve” Across Fields.”](#) PeerJ (2017).
2. N Singh, et al. [“How Often Are Antibiotic-Resistant Bacteria Said to “Evolve” in the News?”](#) PLOS One (2016).

TEACHING

EECS DEPARTMENT – UC Berkeley

Berkeley, CA

Lecturer (Data Structures, CS 61B) (Teaching Assistant / Graduate Student Instructor and Academic Intern prior)

Jun 2016 – Jul 2019

- 1300+ hours of experience teaching Java, data structures, and problem-solving strategies to classes as large as 1600 students.
- Spring 2018, Machine Learning course (CS 189): Led academic intern team, teaching monthly exam-prep sessions to 50 students.

BERKELEY ENGINEERS AND MENTORS (BEAM)

Berkeley, CA

Director of Curriculum (Curriculum Staff and Mentor prior)

Feb 2016 – May 2018

- Led 9 staff to design 10-week hands-on course for 100 mentors teaching 300 students across 17 local elementary/middle schools.
- Pioneered the organization’s first Chromebook lesson, guiding 300 students to control pianos of bananas using Snap and Arduino.

HONORS & AWARDS

- Google Performance Latency Q3 2021 (Gold)
- Google Code Health (2x) Q1 2021 (Platinum) & Q3 2021 (Platinum)
- YouTube Code Excellence (2x) H1 2020 & H2 2020
- Outstanding Graduate Student Instructor, UC Berkeley Graduate Division 2020
- Leadership Scholarship, Cal Alumni Association, UC Berkeley (2x) Aug 2017 & Aug 2018
- Eta Kappa Nu (HKN: Electrical and Computer Engineering Honor Society), UC Berkeley Feb 2017
- Bioengineering Honor Society, UC Berkeley Sep 2016