

Jonathan Fung

jonfung@berkeley.edu • (408) 680 3399
jonfung.me • linkedin.com/in/jonfung1 • github.com/jonfung

Education

University of California, Berkeley

5/2020 (exp)

- B.S. Electrical Engineering and Computer Sciences
- Overall GPA: 3.88/4.0 (Dean's Honors List)
- Regents and Chancellors Scholarship Recipient – Top 2% of Incoming Class
- HKN EECS Honor Society – Top 25% of Junior Class
- Relevant CS Coursework: Machine Learning, Algorithms, Data Structures, Computer Architecture, Discrete Math and Probability Theory, Computational Photography, Linear Algebra, Multivariable Calc
- Relevant EE Coursework: Convex Optimization, Digital Signal Processing, Signals and Systems

Experience

Pinterest – Kleiner Perkins Fellows Program + Software Engineering Intern

5/19

- Starting Summer 2019
- Selected out of over 4,000 applicants to participate in the Kleiner Perkins fellowship program in technology and entrepreneurship.

Stripe – Software Engineering Intern

5/18 - 8/18

- Worked on the **Developer Productivity** team. Focused on large-scale code refactors, product infrastructure, developer tools, and maintaining scalability of Stripe's code.
- Implemented **Ruby enums** in Stripe's code as part of a long-term project to increase code quality via building a Ruby Typechecker (Sorbet). Rewriting ~2,000 existing modules to a new enum format.
- Working on VSCode IDE **integration** with Sorbet. Features include Jump-to-Definition, Type-on-Hover

UC Berkeley EECS Department – EE120 (Signals and Systems) Teaching Assistant

7/18 - present

- Responsible for leading weekly discussion section, office hours, grading homework and exams as well as creating new content material and administrative duties.
- Topics covered include Fourier series/transforms, time series analysis, communications techniques, control systems, and filter designs.

Computational Imaging Lab – Undergraduate Researcher under Laura Waller

8/18 - present

- Working with optimization models and optics to perform lensless imaging, allowing for the reconstruction of 3-D images from a single shot with the aid of a diffuser.

Berkeley CodeBase – Vice President of Operations

8/17- present

- Overseeing budget and logistics for Codebase, a software consulting club at Berkeley.
- Student organization developing software products for high-growth start-ups around the Bay Area

Projects

mp3-fft – Headphone recommender using fourier transform on music

- Application that takes mp3 files and recommends 100+ headphones based on price, form factor, and music sound signature (bass-heavy, neutral, mid-forward, v-shaped). 7/17
- Uses the **Fourier Transform and Welch's method** to generate a power spectral density estimation of the song and classify sound signature. site: jonfung.me/mp3-fft

Ethos – Chrome extension that reports bias in articles via IBM Watson

9/16

- Winner of CalHacks 3.0 Best Social Impact Hack
- Analyzes articles for their level of objectivity and bias using NLP from the IBM Watson API. Aggregates author data to display bias profiles. **Real-time Facebook overlay** that analyzes newfeed articles while scrolling through a news feed. src: jonfung.me/ethos

Publications

Synthesis, Characterization and Biomedical Applications of a Targeted Dual-Modal NIR-II Fluorescence and Photoacoustic Imaging Nanoprobe.

(Pub. with Kai Cheng, ACS Nano)

7/17

Dual-Modal NIR-II Fluorescence and Photoacoustic Imaging of Thyroid Carcinoma Using EGFR-targeted Donor-Acceptor Chromophore Based Nanoprobes

(Pub. with Kai Cheng, ACS Nano)

5/16

Surface Specific Rationally Self-Assembling Au-Fe Oxide Nanoparticles: A Potential Multi-Modal Imaging Agent Platform for Early Tumor Diagnosis

(posters: bit.ly/2o4W9CW)

5/14-8/16

Awards

- Jane Street ETC 2018 – First Place (Electronic Stock Trading Competition)
- Accel Scholars, 2018-2019 Cohort – 25 recipients. (Accel Venture Capital)
- Kleiner Perkins Engineering Fellow, Summer 2019 Cohort – 50 recipients. (Kleiner Perkins Venture Capital)

Skills

- Languages: Java, Python, Ruby, Javascript, C, C++, Matlab
- Hobbies: Gardening, Marathons, Disney Pin Collecting