Jonathan Fung

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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, Operating Systems, Algorithms, Data Structures, Computer Architecture, Discrete Math and Probability Theory, Computational Photography, Linear Algebra
- Relevant EE Coursework: Convex Optimization, Digital Signal Processing, Signals and Systems, Principles of Magnetic Resonance Imaging (grad class)

Experience

Pinterest – *Kleiner Perkins Fellows Program + Software Engineering Intern* — 5/19

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

UC Berkeley EECS Department – *CS189/289A (Machine Learning) Course Staff* — 1/19 - present

- Responsible for grading homeworks and exams. Topics covered include support vector machines, gaussian discriminant analysis, various regressions, and dimensionality reduction techniques.

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.

Stripe – *Software Engineering Intern* — 5/18 - 8/18

- Worked on the **Developer Productivity** team. **Implemented Ruby enums** in Stripe's code for the Ruby Typechecker project (Sorbet). Automatically transformed ~2,000 modules to a new enum format.
- **Integrated VSCode IDE** with Sorbet. Some features include Jump-to-Definition, Type-on-Hover.

UC Berkeley EECS Department – *EE120 (Signals and Systems) Teaching Assistant* — 7/18 - 1/19

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

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* — 7/17

- 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).
- 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