# ASHTON TENG

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## Education

**Stanford University** *Sep 2018 - present*
- M.S. Biomedical Informatics, expected June 2020.

**University of California, Berkeley** *Sep 2014 - May 2018*
- B.A. Computer Science, B.A. Cognitive Science. GPA 3.9/4.0.
- Coursework in data science, machine learning, algorithms, data structures, machine structures, software engineering, genetics, genomics, cell biology, neurobiology, neuroscience, linear algebra, statistics, probability.

## Skills

- Python (numpy, scipy, matplotlib, seaborn, pandas, tensorflow, scikit-learn, etc), Java, C, Bash, SQL.
- Django, Ruby on Rails, PostgreSQL, HTML5, CSS3, Javascript, Docker, AWS Elastic Beanstalk | Linux, Unix, Windows, Git.
- Adobe Photoshop, Adobe AfterEffects, Final Cut Pro | Native in Mandarin Chinese, English. Intermediate French.

## Relevant Experience

**Software Engineering and Computational Modeling Intern, Koniku** *Berkeley CA, Jun - Sep 2018*
- Koniku merges silicon chips with synthetic neurobiology to create sensing devices far superior to electronic noses.
- Built 3 data ingestion, processing, visualization and analysis pipelines for calcium imaging and neuroelectric data on AWS.
- Built 3 full-stack web applications (Django, PostgreSQL, Elastic Beanstalk) for storage and visualization of biological data.
- *ashtonteng.com/docs/AshtonTengKonikuFinalPresentation.pdf*

**Research Software Development Intern, Microsoft (Bing Core Relevance)** *Sunnyvale CA, May 2017 - Aug 2017*
- Researched NLP models for question answering, used in Bing search engine to deliver concise and accurate answers directly to the user via answer boxes. *ashtonteng.com/docs/AshtonTengMicrosoftFinalPresentation.pdf*
- Built competitive combined CNN & RNN attention model using Tensorflow for SQuAD question answering dataset, with 171% accuracy improvement over logistic regression baseline (EM=68.69%, F1=77.99%).

**Full-Stack Developer, BerkeleyMarketPlace** *github.com/ashtonteng/BerkeleyMarketPlace* *Aug - Dec 2017*
- Built a C2C trading platform exclusive to the UC Berkeley community with Ruby on Rails+Cucumber+Capybara. Team won 1st Place and Best UX Design awards in 150-person Software Engineering class.
- Rigorous Agile methodology: bi-weekly customer meetings, design, implementation, unit & integration testing.

**Data Engineer, Language Exchange Program, UC Berkeley** *Jan 2017 - Jan 2018*
- Developed high-speed, maximal matching graph algorithm to match ~500 language exchange participants. Shortened 30+ hours manual process to <1 second. *github.com/ashtonteng/MaxMatch*

**Research Assistant, Mark D'Esposito Cognitive Neuroscience Lab, UC Berkeley** *Jan 2016 - Jan 2018*
- Developed algorithms to analyze data from TMS+fMRI experiments to discover connectivity patterns between brain areas. OHBM2017 Poster "The Thalamus Mediates Interactions Between Large-Scale Cortical Functional Networks".

**Research Assistant, Jack Gallant Computational Neuroscience Lab, UC Berkeley** *Apr 2016 - Sep 2017*
- Used NLP models from fMRI data to decode language semantics representation in the brain across languages.

## Leadership & Teaching

**Neurotechnology at Berkeley (co-Founder, President)** *facebook.com/neurotechberkeley*
- Led 10-person team that plans projects, workshops, hackathons and talks related to biosensing technology for 100+ general members. Past speakers include CEO of Neurosky, CEO of OpenBCI, Neural Dust researcher.

**Neurotechnology Research Review Decal (Instructor)** *decal.berkeley.edu/courses/4068*
- Led weekly lectures on neuroscience data collection methods + journal club discussion of research papers.

**Association of Chinese Entrepreneurs (Vice President)** *ace.berkeley.edu*
- Organized monthly entrepreneurship talks, startup company visits, socials.
- Led 2017 Winter China Startup Trip to Shenzhen and Beijing, featuring in-depth conversations with founders of 20 influential startups including DJI, Didi Chuxing, Zhihu, ofo, SenseTime, KLOOK, Keep.