

Education

Stanford University

Sep 2018 - present

- M.S. Biomedical Informatics, expected June 2020. GPA 4.0/4.0.
- Coursework in computational biology, bioinformatics, clinical informatics, statistical inference, data mining, data systems, natural language processing with deep learning, machine learning with graphs, patent law.

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, algorithm design and analysis, data structures, machine structures, software engineering, genetics, genomics, cell biology, neurobiology, neuroscience, linear algebra, statistics, probability.

Skills

- Python (all popular data science libraries), Go/Golang, C++, C, SQL, R, Bash, Ruby, Java, Javascript.
- Django, Ruby on Rails, HTML5, CSS3, Docker, AWS (S3, DynamoDB, Elastic Beanstalk, etc) | Linux, Unix, Windows, Git.
- Adobe Photoshop, Adobe AfterEffects, Final Cut Pro | Native in Mandarin Chinese, English. Intermediate French.

Relevant Experience

Bioinformatics Research Assistant, Mignot Lab, Stanford Center for Sleep Science and Medicine *Sep 2019 - present*

- Builds large-scale bioinformatics pipelines to explore the genetic and proteomic basis of sleep disorders.

Software Engineer Intern, Pipeline Infrastructure, GRAIL

Jul 2019 - Sep 2019

- GRAIL is a Series C startup that raised 1.6B with a mission to detect cancer early, when it can be cured. Detect cancer early by combining high-intensity sequencing of unprecedented breadth and depth with the techniques of modern data science.
- Built resource tracker for NGS flow cell runs. Deployed as default tool installed for all engineers. Long-running service that maintains updated catalogue with fast query of all sequencing data at GRAIL, including two cloud providers (AWS, BackBlaze), a local database and a local 20+ machine cluster. Golang, AWS S3, AWS DynamoDB Go APIs.

Data Science Research Assistant, Williams PanLab, Stanford University

Feb 2019 - Jul 2019

- Analyzed large Optum Clinformatics health datasets to address questions around the distribution of depression and its impact on work and health. Collaboration with Prof. Leanne Williams (Neuroscience) and Prof. Jeffrey Pfeffer (Business).

Software Engineering and Computational Modeling Intern, Koniku

Jun - Sep 2018

- Koniku merges silicon chips with synthetic neurobiology to create sensing devices far superior to electronic noses.
- Built data ingestion, processing, visualization and analysis pipelines for calcium imaging and neuroelectric data on AWS.
- Built full-stack web applications (Django, PostgreSQL, Elastic Beanstalk) for storage and visualization of biological data.
- Filed patent related to Koniku's sensing device. ashtonteng.com/docs/koniku.pdf

Research Software Development Intern, Microsoft

May 2017 - Aug 2017

- Built NLP models in Tensorflow for question answering, used in Bing search engine to deliver concise and accurate answers directly to the user via answer boxes. ashtonteng.com/docs/microsoft.pdf

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. OHBM 2017 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

Chinese Entrepreneur Organization, Stanford University (Vice President) ceoceo.org

Sep 2018 - present

- Leads team in planning 10-week incubator program for 20 selected teams to develop User Research, PMF, Business Models, Growth Strategy, and a final BP that culminates in a Pitch Day with a panel of distinguished VC judges.
- Led 10-week discussion group to identify various industry pain points and big trends, with a focus on entrepreneurship.

Neurotechnology at Berkeley (co-Founder, President) facebook.com/neurotechberkeley

Aug 2016 - May 2018

- Led 10-person team that plans workshops, hackathons, talks about biosensing technology for 100+ general members.