ASHTON TENG

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Education

Stanford University   *Sep 2018 - present*
- M.S. Biomedical Informatics, expected June 2020. GPA 4.0/4.0.
- Broad coursework in bioinformatics, clinical informatics, machine learning, statistics, immunology, patent law.

University of California, Berkeley   *Sep 2014 - May 2018*
- B.A. Computer Science, B.A. Cognitive Science (Neuroscience). GPA 3.9/4.0.
- Broad coursework in algorithm design, software engineering, machine learning, statistics, genomics, neuroscience.

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 bioinformatics pipelines to explore the genetic and proteomic basis of sleep disorders such as narcolepsy.

Software Engineer Intern, Pipeline Infrastructure, GRAIL   *Jul 2019 - Sep 2019*
- GRAIL's mission is to detect cancer early by combining high-intensity sequencing with 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 it's 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 web applications (Django, Elastic Beanstalk) for visualization of biological data. 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".

Projects

Multi-Hop Reasoning for the HotpotQA Dataset (CS224N: NLP with Deep Learning)
- HotpotQA tests QA over multiple paragraphs of information. Integrated BERT with Bi-Attentional RNN to produce 40% improvement over baseline. web.stanford.edu/class/archive/cs/cs224n/cs224n.1194/reports/custom/15743318.pdf

Better Inference Scores for Chemical-Disease Relationships (CS224W: Machine Learning with Graphs)
- Built Graph Auto-Encoder model for edge prediction in a Chemical-Gene-Disease tripartite graph from the Comparative Toxicogenomics Database. web.stanford.edu/class/cs224w/project/26424756.pdf

Leadership

Chinese Entrepreneurs Organization, Stanford University (Vice President) *ceoceo.org*   *Sep 2018 - present*
- Led 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.

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.