# **ASHTON TENG**

Machine Learning, Data Science, Computational Neuroscience

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## **Education**

University of California, Berkeley - Sep 2014-present

B.A. candidate in Computer Science, Cognitive Neuroscience, expected May 2018. GPA 3.9/4.0. Coursework:

- Machine Learning; Neural Computation; Artificial Intelligence; Data Science; Data Science in Neuroscience;
- Efficient Algorithms & Intractable Problems; Data Structures; Software Engineering; Structure & Interpretation of Computer Programs; Designing Information Devices & Systems;
- Cognitive Neuroscience; Circuit, Systems & Behavioral Neuroscience; Neurobiology; Mammalian Neuroanatomy Lab; Genetics, Genomics, & Cell Biology; Brain, Mind & Behavior; Cognitive Science;
- Linear Algebra and Differential Equations; Calculus; Concepts of Probability; Introduction to Statistics and Probability;
  Discrete Mathematics & Probability;

#### Work

Applied Scientist Intern, Microsoft (Bing Core Relevance) - May - Aug 2017 (Mentor: Yangyang Shi)

- · Conducted research in natural language processing (NLP), with a focus on question answering
- Built competitive combined CNN & RNN model on SQuAD question answering dataset

Data Engineer, Language Exchange Program UC Berkeley — Jan 2017 - present (Mentor: Jade Cho)

- Developed high-speed, novel graph-theoretic algorithm to match hundreds of language exchange participants
- Develops scripts to automate time consuming data manipulation tasks

Intern, Microsoft Research Asia (Cloud + Enterprise) — June - Aug 2015 (Mentor: Joanna Li)

- Core developer for C+E China internal website
- Developed web app based on Microsoft Cognitive Services Computer Vision API

#### Research

D'Esposito Lab – Jan 2016 - present (Mentors: Mark D'Esposito, Kai Hwang)

- Acquires data using transcranial magnetic stimulation (TMS) and functional magnetic resonance imaging (fMRI)
- Writes algorithms and analyzes data to discover connectivity patterns between subcortical structures and cortex
  - OHBM 2017 Poster "The Thalamus Mediates Interactions Between Large-Scale Cortical Functional Networks"
  - Honors thesis on the role of thalamus in autistic brain network connectivity

Gallant Lab — April 2016 - present (Mentors: Jack Gallant, Fatma Imamoglu)

- Uses NLP models to decode language semantics representation in the brain (ongoing multilingual project)
- Designs and develops experimental stimuli in vision-attention and language experiments

## **Skills**

- Python (tensorflow, scikit-learn, numpy, scipy, matplotlib, pandas, etc), Ruby on Rails, Java, SQL, Bash, HTML5, CSS3, Javascript, Jekyll, JQuery, Git. Linux, Unix, Windows.
- Adobe Photoshop, Adobe AfterEffects, Final Cut Pro, Microsoft Office, Apple iWork, Google Docs.

### **Leadership & Teaching**

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

Leads team that plans projects, workshops, hackathons and talks related to biosensing technology

Neurotechnology Research Review Decal (Instructor) neurotechberkeley.org/decal

Official student-led course - leads weekly lectures and primary research discussions on neuroscience methods

Association of Chinese Entrepreneurs (Vice President) ace.berkeley.edu

Organizes startup weekends, entrepreneurship talks, startup company visits, and socials

Cognitive Science Student Association (Secretarial Chair) cssa.berkeley.edu

Planned annual California Cognitive Science Conference (theme selection, speaker coordination, marketing)