Allen Eric Chang

functionallydefined.com
achang35@gmail.com | 209-747-4040

Education

Boston University | PhD Candidate | Psychological and Brain Sciences

Expected December 2018, Boston, MA

Boston University | Master of Arts | Psychological and Brain Sciences

May 2015, Boston, MA

Johns Hopkins University | Bachelor of Arts | Behavioral Biology

December 2012, Baltimore, MD

Experience

Boston University | Ph.D. Candidate

Boston, MA   September 2013 - Present

- Developed logistic regression models to predict rule learning success using over 1.5 million measurements of human brain activity. Gained skills in data wrangling and visualization.
- Collaborated with scientists across multiple universities to analyze behavioral differences in human learning using Bayesian inference
- Mentored and managed a team of 3 research assistants, 2 of which are now in Ph.D. programs
- Languages used: R

MediaMath | Data Science Intern

New York, NY   June 2018 - August 2018

- Enhanced prediction of ad response probabilities by developing Bayesian logistic regression models in TensorFlow, TensorFlow Probability, and Stan
- Worked with ad campaign data ranging from 4 to 17 million impressions
- Communicated project results and publicly released code on MediaMath's data science blog
- Languages used: Python

Johns Hopkins University | Research Assistant

Baltimore, MD   January 2013 - August 2013

- Published research demonstrating that caffeine consumption enhances memory consolidation over a 24 hour period in humans.
- Languages used: MATLAB

Johns Hopkins University | Undergraduate Research Assistant

Baltimore, MD   January 2011 - December 2012

- Independently coded and published experiments quantifying a non-linear relationship between cultural expertise and cross-race face recognition
- Languages used: MATLAB

Skills

Programming Languages: R (expert), Python (proficient), MATLAB (prior experience)
Machine Learning: Classification, Regression, Bayesian Inference
Systems: TensorFlow, TensorFlow Probability
Databases: PostgreSQL

Selected Publications

Chang, A., Johnson, A., Whiteman, A. & Stern, C. (Under review at Cognition). "The paths to rule learning: a probabilistic account of human behavior"

Chang, A., Murray, E., & Yassa, M. A. (2015). "Mnemonic discrimination of similar face stimuli and a potential mechanism for the 'other race' effect." Behavioral Neuroscience. https://doi.org/10.1037/bne0000090

Borota, D., Murray, E., Keceli, G., **Chang, A.**, Watabe, J. M., Ly, M., Toscano, J. P., & Yassa, M. A. (2014). "Post-study caffeine administration enhances memory consolidation in humans." Nature Neuroscience. https://doi.org/10.1038/nn.3623