

# RONALD KWAN

**Email** rkwan@berkeley.edu **Phone** (510) 552-7837 **Website** <http://rkwan.me/>  
**Interests** Machine learning/computational statistics, especially applied to the biological and social sciences.  
**Skills** Python, Java, C, HTML, CSS, JavaScript, MATLAB, R, SQL,  $\text{\LaTeX}$

## Education

**UC Berkeley** (Berkeley, CA) *Graduation:* 05/2016  
**B.A. Computer Science, Mathematics, and Statistics** *GPA:* 3.65 (cumulative), 3.90 (CS)  
Coursework includes AI/machine learning, algorithms, systems, linear algebra, analysis, probability, and statistics.

## Research

**UC Berkeley** (Berkeley, CA) *Supervisor:* Thomas L. Griffiths 02/2015 – *present*  
Modeling and simulations of wishful thinking of agents in Markov decision processes. [Python, SciPy stack]  
**UC Berkeley** (Berkeley, CA) *Supervisor:* Rasmus Nielsen 02/2014 – *present*  
Efficient implementation of the chi-squared test, comparing  $k$ -mer distributions in genomic datasets.  
**Carnegie Mellon University** (Pittsburgh, PA) *Supervisor:* Cosma Shalizi 05/2015 – 07/2015  
Network analysis of functional connectivity in fMRI with a novel measure of coordination. [Python, SciPy stack]  
**Georgia State University** (Atlanta, GA) *Supervisor:* Robert Harrison 05/2014 – 07/2014  
Developed an ensemble method for data classification using multiobjective optimization. [Python, SciPy stack]  
**UC Berkeley** (Berkeley, CA) *Supervisor:* Laurent El Ghaoui 09/2013 – 12/2013  
Automated processing and analysis of PDF news articles using optical character recognition (OCR). [bash]

## Employment

**Qualcomm Inc.** (Boulder, CO) **Engineering Intern** 06/2013 – 08/2013  
Integrated an XML store for configuration settings in mobile Linux, enabling cross-platform compatibility. [C]  
**Sandia National Labs** (Livermore, CA) **Technical Intern** 06/2012 – 08/2012  
Implementation of digital signatures to ensure authenticity and integrity of data in simulation software. [Java]

## Teaching

**UC Berkeley (Department of EECS)** **CS 70 Reader/Tutor** 09/2015 – *present*  
Grading assignments and tutoring students in CS 70, *Discrete Mathematics and Probability Theory*.  
**UC Berkeley (Department of EECS)** **CS 61A Group Tutor** 01/2015 – 05/2015  
Tutoring and giving coding feedback for students in CS 61A, *Structure and Interpretation of Computer Programs*.  
**UC Berkeley (Department of EECS)** **CS 61A Tutor/Lab Assistant** 09/2014 – 12/2014  
Teaching students concepts of introductory computer science, in both labs and individual tutoring sessions.  
**UC Berkeley (Department of EECS)** **CS 161 Reader** 02/2014 – 05/2014  
Grading assignments for CS 161, *Computer Security*.

## Other Experience

**UC Berkeley (Department of EECS)** **Computer Science Peer Advisor** 09/2014 – *present*  
Advising students on academic and logistical issues related to the computer science program at UC Berkeley.  
**Berkeley Math Tournament** **Chief Technology Officer** 09/2012 – *present*  
Leading development of web apps used in K-12 math contests. [Python, Django] (<http://bmt.berkeley.edu>)  
**Personal Technical Projects** 09/2012 – *present*  
Adventures in data analysis and web development. [Python, R, JavaScript] (<http://rkwan.me/projects/>)