

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, \LaTeX

Education

UC Berkeley (Berkeley, CA) *Graduation:* 05/2016
B.A. Computer Science, Mathematics, and Statistics *GPA:* 3.65 (cumulative), 3.91 (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. [Scala, Spark]
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** 09/2014 – 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/>)