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, JavaScript, MATLAB, R, SQL, LaTeX

Education

UC Berkeley (Berkeley, CA)   *Graduation*: 05/2016
B.A. Computer Science, Mathematics, and Statistics   *GPA*: 3.65 (cumulative), 3.90 (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
Improved cross-platform compatibility for OS libraries, replacing hardcoded settings with configuration files. [C]
Sandia National Labs (Livermore, CA)   **Technical Intern**   06/2012 – 08/2012
Ensured data integrity and authenticity, by integrating digital signatures into 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/)