RONALD KWAN

Email	ronaldskwan@gmail.com	**Phone** (510) 552-7837	**Website** http://rkwan.me
Tools	Python, JavaScript, Java, MATLAB, R, SQL, LaTeX		

EDUCATION

UC Berkeley (Berkeley, CA) — *Graduation*: 05/2016
B.A. Computer Science, Mathematics, and Statistics — *GPA*: 3.66 (cumulative), 3.91 (CS)
Select Technical Coursework — 1xx: upper division, 2xx: graduate.

CS Core	Data Structures & Algorithms (CS 61B/170/270), Operating Systems (CS 162), Databases (CS 186)
AI & ML	Artificial Intelligence (CS 188), Machine Learning (CS 189, Stat C241A), Optimization (EE 127)
Statistics	Statistical Computing (Stat 133), Probability & Statistics (Stat 134/135), Linear Models (Stat 151A)

WORK & EXTRACURRICULAR EXPERIENCE

Internships

Qualcomm Inc. (Boulder, CO)	**Engineering Intern**	06/2013 – 08/2013
Furthered adoption of OS libraries by replacing hardcoded settings with configuration files.		C
Sandia National Labs (Livermore, CA)	**Technical Intern**	06/2012 – 08/2012
Ensured data integrity and authenticity by adding digital signatures to simulation software.		Java

Student Organization Roles *(Projects discussed below.)*

The Daily Californian (DC)	**Projects Developer**	09/2015 – *present*
Data analysis/visualization and web development for the UC Berkeley student newspaper.		Python, JS
Berkeley Math Tournament (BMT)	**Chief Technology Officer**	09/2012 – *present*
Lead software developer for biannual K-12 math contests attracting 350-500+ students/year.		Python, JS

Math Tournament Projects

Atomic Grader	http://atomicgrader.com	12/2015 – *present*
Parallelizes exam grading by splitting scanned exams into "atomic" problem answers.		JS (Meteor, React)
BMT Web App Suite	http://bmt.berkeley.edu	09/2012 – *present*
Tools for math contests: registration (public) and problem writing/grading (staff).		Python (Django)

Data Blogging & Journalism

Grade Distributions (DC)	http://projects.dailycal.org/grades	09/2015 – 11/2015
Data visualization for comparing average grades between departments and disciplines.		Python, JS
Admissions Trends (Blog)	http://rkwan.me/blog/ucb-eecs-lscs-admissions	07/2015
Investigation of admissions trends for EECS and CS freshman applicants to UC Berkeley.		Python, R

ACADEMIC RESEARCH & SERVICE

Research Assistantships

UC Berkeley (Berkeley, CA)	*Supervisor*: Tom Griffiths	01/2015 – 12/2015
Models & simulations of optimistic/pessimistic AI agents in Markov decision processes.		Python (NumPy)
Carnegie Mellon University (Pittsburgh, PA)	*Supervisor*: Cosma Shalizi	05/2015 – 07/2015
Detecting activity clusters in fMRI brain images with machine learning & network analysis.		Python (NumPy)
Georgia State University (Atlanta, GA)	*Supervisor*: Robert Harrison	05/2014 – 07/2014
Development of an ensemble classification algorithm with multiobjective optimization.		Python (NumPy)

University Service

UC Berkeley (Berkeley, CA)	**Computer Science Peer Advisor**	09/2014 – 12/2015
Advising students on academic and logistical issues related to Berkeley's CS/EECS programs.		
UC Berkeley (Berkeley, CA)	**Reader/Tutor/Lab Assistant**	02/2014 – 12/2015
Grading and tutoring for CS 61A (introductory CS), 70 (discrete math), and 161 (security).		