

# RONALD KWAN

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

## EDUCATION

**UC Berkeley** (Berkeley, CA) *Graduation:* 05/2016  
**B.A. Computer Science, Mathematics, and Statistics** *GPA:* 3.63 (cumulative), 3.91 (CS)  
**Select Technical Coursework** (*Current coursework in italics.*) 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

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

### Student Organization Roles (*Projects discussed below.*)

<b>The Daily Californian (DC)</b>	<b>Projects Developer</b>	09/2015 – <i>present</i>
Data analysis and web application development for the UC Berkeley student newspaper.		Python, JS
<b>Berkeley Math Tournament (BMT)</b>	<b>Chief Technology Officer</b>	09/2012 – <i>present</i>
Lead web developer and occasional logistical organizer for biannual K-12 math contests.		Python, JS

### Math Tournament Projects

<b>Atomic Grader</b>	<a href="http://atomicgrader.com">http://atomicgrader.com</a>	12/2015 – <i>present</i>
Parallelizes exam grading by splitting scanned exams into “atomic” problem answers.		JS (Meteor, React)
<b>BMT Web App Suite</b>	<a href="http://bmt.berkeley.edu">http://bmt.berkeley.edu</a>	09/2012 – <i>present</i>
Tools for running math contests, including registration, problem writing, and grading.		Python (Django)

### Data Blogging & Journalism

<b>Grade Distributions (DC)</b>	<a href="http://projects.dailycal.org/grades">http://projects.dailycal.org/grades</a>	09/2015 – 11/2015
Data visualization for comparing average grades between departments and disciplines.		Python (Django), JS
<b>Admissions Trends (Blog)</b>	<a href="http://rkwan.me/blog/ucb-eeecs-lscs-admissions">http://rkwan.me/blog/ucb-eeecs-lscs-admissions</a>	07/2015
Investigation of admissions trends for EECS and CS freshman applicants to UC Berkeley.		Python, R
<b>Grade Distributions (Blog)</b>	<a href="http://rkwan.me/blog/ucb-grade-distributions">http://rkwan.me/blog/ucb-grade-distributions</a>	06/2014
Analysis comparing average grades between departments and lower/upper division classes.		Python, R

## ACADEMIC RESEARCH & SERVICE

### Research Assistantships

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

### University Service

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