

RONALD KWAN

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Tools Python, JavaScript, Java, MATLAB, R, SQL, L^AT_EX

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

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

Math Tournament Projects

Atomic Grader	http://atomicgrader.com	12/2015 – <i>present</i>
Parallelizes exam grading by splitting scanned exams into “atomic” problem answers.		JS (Meteor, React)
BMT Web App Suite	http://bmt.berkeley.edu	09/2012 – <i>present</i>
Tools for running math contests, including registration, problem writing, and grading.		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-eeecs-lscs-admissions	07/2015
Investigation of admissions trends for EECS and CS freshman applicants to UC Berkeley.		Python, R
Grade Distributions (Blog)	http://rkwan.me/blog/ucb-grade-distributions	06/2014
Analysis comparing average grades between departments and lower/upper division classes.		Python, R

ACADEMIC RESEARCH & SERVICE

Research Assistantships

UC Berkeley (Berkeley, CA)	<i>Supervisor: Tom Griffiths</i>	01/2015 – 12/2015
Models/simulations of optimistic & pessimistic agents in Markov decision processes.		Python (NumPy)
Carnegie Mellon University (Pittsburgh, PA)	<i>Supervisor: Cosma Shalizi</i>	05/2015 – 07/2015
Detecting activity clusters in brain images, using machine learning for network analysis.		Python (NumPy)
Georgia State University (Atlanta, GA)	<i>Supervisor: Robert Harrison</i>	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 with Berkeley’s CS/EECS programs.		N/A
UC Berkeley (Berkeley, CA)	Reader/Tutor/Lab Assistant	02/2014 – 12/2015
Grading/tutoring for CS 61A (introductory CS), 70 (discrete math), and 161 (security).		N/A