

RONALD KWAN

Email ronaldskwan@gmail.com **Website** <http://rkwan.me>
Main Tools Python, JavaScript, SQL

EDUCATION

University of Chicago (Chicago, IL) *Expected Graduation: 06/2021*
M.S. Computational Analysis and Public Policy
Select Coursework
Public Policy Microeconomics I, Analytical Politics, Urban Economics and Policy

UC Berkeley (Berkeley, CA) *Graduated: 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 EXPERIENCE

PrepScholar (Cambridge, MA) **Senior Full Stack Engineer** 09/2016 – *present*
Advancing educational web tools with Django (backend), Backbone (frontend), and MySQL. Python, JS, SQL
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

MATH TOURNAMENTS

ASDAN Math Tournament (AMT) **Technology Consultant** 09/2012 – 08/2018
Berkeley Math Tournament (BMT)
Software developer for K-12 math contests attracting 1000+ students/year.

Projects

Atomic Grader <http://atomicgrader.com> 12/2015 – 08/2018
Parallelizes exam grading by splitting scanned exams into “atomic” problem answers. Python, JS (React)
BMT Web App Suite <http://bmt.berkeley.edu> 09/2012 – 05/2018
Tools for math contests: registration (public) and problem writing/grading (staff). Python (Django)

DATA JOURNALISM

Grade Viz (Daily Cal) <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

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)