

# RONALD KWAN

Email [ronaldskwan@gmail.com](mailto:ronaldskwan@gmail.com)

Main Tools Python, JavaScript, SQL

## EDUCATION

University of Chicago (Chicago, IL)

Completed: 08/2021

M.S. Computational Analysis and Public Policy

UC Berkeley (Berkeley, CA)

Completed: 05/2016

B.A. Computer Science, Mathematics, Statistics

## WORK EXPERIENCE

PrepScholar (Cambridge, MA)

Senior Full Stack Engineer

09/2016 – present

Advancing educational web tools with **Django** (backend), **Backbone.js** (frontend), and **MySQL**.

Minimized customer service load by building admin and student self-service tools

Launched admissions & textbook solutions products, working closely with product managers

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)

Software Engineer

09/2012 – 08/2018

Berkeley Math Tournament (BMT)

Software engineer 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)