RONALD KWAN

BASIC INFORMATION

Email rkwan@berkeley.edu **Phone** (510) 552-7837 **Website** http://rkwan.me/

Objective Seeking an full-time position in software engineering or data science starting in the summer of 2016.

Skills Python, Java, C, HTML, CSS, JavaScript, MATLAB, R, SQL, LaTeX

EDUCATION

UC Berkeley (Berkeley, CA) *Graduation (expected)*: 05/2016

B.A. Computer Science, Mathematics, and Statistics *GPA*: 3.65 (cumulative), 3.91 (CS)

Technical Coursework (Current coursework in *italics*. 1xx: upper division, 2xx: graduate.)

EECS (Engineering)	**EECS (Theoretical)**	**Mathematics and Statistics**
Data Structures (CS 61B)	Algorithms (CS 170, 270)	Probability and Statistics (Stat 134, 135)
Operating Systems (CS 162)	Artificial Intelligence (CS 188)	Stochastic Processes (Stat 150)
Compilers (CS 164)	Machine Learning (CS 189, Stat 241A)	*Linear Modelling (Stat 151A)*
Database Systems (CS 186)	*Deep Reinforcement Learning (CS 294)*	Linear Algebra (Math H110)
Signals and Systems (EE 120)	Convex Optimization (EE 127)	Analysis and Topology (Math 104, 202A)

EXPERIENCE

Research

UC Berkeley (Berkeley, CA) 02/2014 – *present*

Modeling and simulations of optimism in Markov decision processes. [Python, NumPy] (*Supervisor*: Tom Griffiths)

Efficient chi-squared test for comparison of genomic datasets. [Scala, Spark] (*Supervisor*: Rasmus Nielsen)

Carnegie Mellon University (Pittsburgh, PA) 05/2015 – 07/2015

Detecting activity clusters in fMRI with machine learning for network analysis. [Python] (*Supervisor*: Cosma Shalizi)

Georgia State University (Atlanta, GA) 05/2014 – 07/2014

Development of a classification algorithm using multiobjective optimization. [Python] (*Supervisor*: Robert Harrison)

Industry

Qualcomm Inc. (Boulder, CO) **Engineering Intern** 06/2013 – 08/2013

Integrated an XML store for configuration settings in mobile Linux, enabling cross-platform compatibility. [C]

Sandia National Labs (Livermore, CA) **Technical Intern** 06/2012 – 08/2012

Implementation of digital signatures to ensure authenticity/integrity of data in simulation software. [Java]

Other

UC Berkeley (Department of EECS) **Computer Science Peer Advisor** 09/2014 – *present*

Advising students on academic and logistical issues related to the computer science program at UC Berkeley.

UC Berkeley (Department of EECS) **Reader/Tutor/Lab Assistant** 02/2014 – *present*

Grading and tutoring for CS 61A (introductory CS), CS 70 (discrete math and probability), and CS 161 (security).

Berkeley Math Tournament **Chief Technology Officer** 09/2012 – *present*

Leading development of web apps used in K-12 math contests. [Python, Django] (bmt.berkeley.edu)

PROJECTS

Data Analysis (Usually using the SciPy stack and/or R.)

Admissions Statistics	Analysis of admissions for EECS and CS freshman applicants to UC Berkeley.
Grade Distributions	Comparisons for departments and lower/upper division classes at UC Berkeley.

Web Development

NCIndex	**Python** [Flask]	Interface to instructor ratings on Ninja Courses.
BRISTool	**JavaScript** [node.js]	Simple tool for batch reverse image search.
4!	**JavaScript** [node.js]	Clone of the arithmetic game 24.

Coursework

KVStore (CS 162)	**Java**	Distributed key-value store with two-phase commit.
apyc (CS 164)	**C++**	"A PYthon Compiler", serving a dialect of Python.