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

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*
Simulations of wishful thinking in Markov decision processes. [Python, NumPy] (*Supervisor*: Tom Griffiths)
Efficient chi-squared testing of genomic data. [Scala, Spark] (*Supervisor*: Rasmus Nielsen)
Carnegie Mellon University (Pittsburgh, PA)   05/2015 – 07/2015
Detecting activity clusters in fMRI with machine learning. [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 CS 161 (computer security).
Berkeley Math Tournament   **Chief Technology Officer**   09/2012 – *present*
Leading development of web apps used in K-12 math contests, built with Python and 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. |