Nick Titterton

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Education

University of California, Berkeley — Fall 2015 - Spring 2019

Computer Science

CS GPA: **3.50**

Courses I've enjoyed:

Theory: CS170, CS294-145, CS294-134: Algorithms, Approximation Algorithms, Beyond Worse Case Analysis
AI/ML: CS188, CS189, CS194-129: Artificial Intelligence, Machine Learning, Deep Learning
Misc: CS61A/B/C: Intro/Data Structures/Architecture, CS70: Discrete Math and Probability, CS161: Security, CS168: Networking, CS186: Databases, EE16A/B: Intro to Electrical Engineering

Experience

CS70 Coordinator, Computer Science Mentors — (5th semester, 4th position)
Mentored CS61A and CS70 students in a small group setting on class concepts. Collaborated with fellow mentors to create teaching content and learn teaching methods. Mentored other mentors and led meetings.

Undergraduate Student Instructor: CS170, CS61A — Spring 2018, Fall 2018
Developed course slides, taught students in section, wrote questions for exams, graded exams, facilitated office hours and homework parties, and coordinated with other staff (held course staff positions before this too).

Software Engineering Intern, ServiceNow — Summer 2018
Updated AWS EC2 and EBS API frameworks from Java to REST-ful Javascript on the ITOM team.

Projects

Markov Chain Generator Reddit Bot
Wrote, tested, and deployed a reddit bot that scans a user's recent comments and generates a markov chain using Python Reddit API Wrapper (PRAW), AWS EC2, SQS, Lambda, and Cloudwatch.

SDP Max Cut Approximator
Wrote and tested a randomized 0.5-approximation, derandomized greedy 0.5-approximation, and semidefinite programming relaxation 0.879-approximation of the MAX CUT problem using cvxpy and numpy.

Parallellized Image Compressor
Used PySpark, CV2, numpy, and scipy to implement parallelized image compression w/ DCT, blocking, quantization (CS61C).

Skills

Languages
Proficient: Python (numpy, scipy, cvxpy, TensorFlow), Java, Javascript (base, React)
Familiar: SQL (mySQL, SQLite), HTML, CSS (bootstrap), Objective-C, C, MIPS, Scheme

Tools
Terminal, Git, Sublime Text, IntelliJ, XCode, emacs, LaTeX (TeXWorks)