Aaron Lin

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EDUCATION

University of California, Berkeley 2016 – Present

B.S. in Electrical Engineering & Computer Sciences (GPA: 3.69) Expected: May 2020

Relevant Coursework: (* in progress)

Data Structures	Efficient Algorithms	Machine Structures	Signals and Systems
Discrete Math & Probability	Probability & Random Processes	Artificial Intelligence	Digital Signal Processing
Internet Architecture (*)	Operating Systems & System Programming (*)		

Campolindo High School (4.0 UW; SAT: 2350) 2012 – 2016

WORK EXPERIENCE

Teradata, Inc., Software Engineering Intern Santa Clara, CA, Jun – Aug 2018

- Initiated project to analyze customer system CPU usage data with the goals to gain insights into how various customers use their systems and usage trends, to improve system design for customers and to aid marketing.
- Developed new in-house data analytics tools and an interactive time-series plotting tool in RStudio for understanding customer system usage patterns.
- Presented findings at the Teradata Intern Poster Session to 150 Teradata colleagues with either engineering or non-technical backgrounds.

SimpleWater, Software Engineering Intern Berkeley, CA, Jun – Aug 2017

- Designed and built a recommendation algorithm to improve user experience and facilitate marketing of water-testing kits by streamlining the user to checkout.
- Designed a JavaScript interface to show users relevant "water-health" data based on input location, allowing users to see source, known contaminants, and risk factors in their water.

UC Berkeley, *Dept. of Electrical Engineering and Computer Science*

Lab Tutor, Designing Information Devices and Systems I Sep – Dec 2017

- Helped and mentored 50 students for 6 hours a week in basic circuit design and signal processing labs.

Academic Intern, Structure and Interpretation of Computer Programs Jan – May 2017

- Taught students during office hours on intro CS topics (recursion, abstraction, OOP) in Python.

PROJECTS

Stylized Music Generation April 2018

- Built a program to compose piano sheet music based on music data from a particular style. Implemented a Monte-Carlo Markov Chain method to generate samples of music similar in note transition and rhythm.

Image Compression and Transmission over Radio April 2018

- Designed an image compression algorithm to wirelessly transmit digital images between two computers.
- Used wavelet transforms and color space reduction for compression, and implemented an AFSK-1200 modem and the AX.25 protocol to transmit and receive radio signals.

Actionable Analytics on Stock Trade, Cal Hacks 3.0, UC Berkeley Nov 2016

- Developed a tool to analyze the price movements of cross-listed tickers and determine latency of information flow between geographically separated exchanges. Built with NASDAQ API and Python.

ACTIVITIES

Build the Future, UC Berkeley – Course Facilitator Jan 2018 – Present

- Organize speaker outreach to leaders in tech and entrepreneurship for a class of 100+ engineering students.

Engineers Without Borders, UC Berkeley Sep 2016 – Jun 2017

- Designed a water distribution system for San Francisco, Panama.

TECHNICAL SKILLS

Programming: Python, Java, C, HTML/CSS, JS, PHP, jQuery/Ajax, SQL, R

Software: Git, IntelliJ, Eclipse, RStudio, Jupyter Notebook

General: Amateur Ham Radio Technical License, Scrum