# Aaron Lin

#### University of California, Berkeley

B.S. in Electrical Engineering & Computer Sciences (GPA: 3.74)

#### **Relevant Coursework:**

Data Structures	Efficient Algorithms
Internet Architecture	Artificial Intelligence
Machine Learning	Convex Optimization

#### WORK EXPERIENCE

**Palantir,** Software Engineering Intern **Teradata, Inc.,** Software Engineering Intern

- 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

- 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

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

### PROJECTS

### Image Compression and Transmission over Radio

- 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.

### Stylized Music Generation

• 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.

### Actionable Analytics on Stock Trade, Cal Hacks 3.0, UC Berkeley

• 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

# Space Technologies at Cal (STAC), UC Berkeley – Member

• Work on the High Altitude Balloon team to design, test, and improve beaconing and live location tracking of weather balloons from ground stations.

### Build the Future, UC Berkeley - Course Facilitator, Advisor

• Organize speaker outreach for a class of 100+ engineering students interested in tech and entrepreneurship, inviting prominent Bay Area founders and VCs to speak and interact with students.

### Engineers Without Borders, UC Berkeley

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

# TECHNICAL SKILLS

# Programming: Python, Java, C, HTML/CSS, Javascript, Typescript, React, SQL, PySpark, RSoftware: IntelliJ, Eclipse, RStudio, Jupyter NotebookGeneral: Git, Scrum, Amateur Ham Radio Technical License, UNIX

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2016 – Present Expected: May 2020

Signals and Systems Digital Signal Processing Probability & Random Processes Operating Systems

Washington, D.C., Jun 2019 - Present Santa Clara, CA, Jun – Aug 2018

> Berkeley, CA, Jun – Aug 2017 ce and facilitate marketing of

> > Sep – Dec 2017

April 2018

April 2018

Nov 2016

Sept 2018 – Present

Jan 2018 – Dec 2018

Sep 2016 – Jun 2017