# Alan Liang

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## **Education**

## University of California, Berkeley

Exp. Grad May 2020

Computer Science B.A., Economics B.A., Cert. in Entrepreneurship & Tech GPA: 3.90, Technical GPA: 3.97, Dean's Honor List (top 4%) cience Data Science, Data & Decision Making in Business, Statistics

**Data Science** Data Science, Data & Decision Making in Business, Statistics **Computer Science** Databases, UI/UX, Algorithms, Data Structures, Cryptocurrency **Math** Discrete Math and Prob, Linear Algebra & Diff Eq, Multivariate Calculus

# **Work Experience**

## **SEELE TECH**

May 2018 - Aug 2018

Implemented **data pipeline** of social metrics from scratch. Wrote scripts for data collection, deployed databases, conducted **data analysis** to provide insight, and made a live dashboard to present metrics and KPIs, utilizing **AWS** for deployment. Created bots for alerts and auto moderation in channels w/ **30k+ members,** including **sentiment monitoring** and spam **classification**. Wrote technical articles, translated documentation between Chinese & English, and conducted blockchain algorithm research for project white paper and yellow papers.

## DIV. OF DATA SCIENCES, UC BERKELEY Jan 2018 - Current

**Team lead** and **project manager** for external data science pedagogy and infrastructure team. Strategize and grow national data science education initiatives by leading to build a community of practice. Collaborate with and assist other institutions to help implement data science infrastructure and adopt data science pedagogy by leveraging Berkeley's experience and resources. **Coordinated a national workshop of 40+ universities** on data science pedagogy.

## **MICROSOFT**

May - Jul 2017

Program management intern in Microsoft C+E's Developer Division for Azure IoT tooling. Worked on customer acquisition through search engine optimization, AB testing, customer development, and developer outreach. Conducted web traffic analysis and analyzed user telemetry through SQL dialects and Power BI for data insight to improve conversion and optimize user experience. Helped double monthly traffic and grow monthly attached users by 6 times.

## **XYZ-E EDUCATION GROUP**

Jan - Mar 2016

Paid student intern conducting question and **knowledge-point analysis** with machine-learning software used for personalized learning in mathematics.

# **Research and Projects**

## Conspicuous Consumption in Nightclubs | Python

Work with PhD Candidate Max Mueller to scrape and analyze social media data for research on individual conspicuous consumption. Utilized **Azure** Cognitive Services **API** and implemented other classifiers for predictions and feature analysis.

## Predicting the Effects of Trump's Tax Cuts | Python, Jupyter

Conducted **multi-feature linear regression** of historical tax data to predict the effects of Trump's tax cuts on income inequality.

## Git Version Control System | Java

Created a Git-like local version control system for files.

## The Lorenz curve and Income Inequality

Analyzed math models of the Lorenz curve and their implications on the Gini index.

## **Data Science Education Infrastructure**

Co-author of peer-reviewed paper examining data science education infrastructure in US & Canadian universities. Paper was presented at SciPy2018 and Jupytercon.

## **Skills**

#### Data

Python (NumPy, Pandas, sklearn etc), SQL, R, Testing, Validation, Visualization, Modeling & Prediction, Google Analytics, Excel, Power BI

## **Program Management**

Scrum/agile processes, customer development, A/B and user testing, Microsoft Sharepoint

#### Backend

Python, Java, SQL & RDBMS, UNIX, NoSQL (MongoDB, Redis), AWS and Azure services

## **Native Languages**

English, Chinese

## **Others**

Scripting, Git, HTML & CSS, Technical & Documentation Writing, web scraping, LaTeX, Microsoft Office, Photography, Photoshop, Indesign, Final Cut Pro

# **Activities**

## **Data Science Tutor**

Paid course staff for Foundations of Data Science (Data 8). Teach 2 weekly sessions, grade homework, hold office hours, and more.

## **Computer Science Mentor**

Teach weekly sessions for *Discrete Math and Probability* (CS 70) with Computer Science Mentors (CSM).

## **UPE Nu Chapter**

Member of UPE's UC Berkeley chapter, a computer science honor society. Part of web development committee.

## Lab Assistant

Assist students in multiple labs for The structure and interpretation of computer systems (CS 61A) weekly.

## **Quiz Bowl and History Bowl**

Staff and moderate national and local tournaments. Organized and led team to win multiple international competitions around Asia. Club President and Team Captain in High School (2013-2016).