



## EDUCATION

**Harvard University, B.A. in Computer Science;** GPA: 3.6

May 2021

**Relevant Coursework:** Data Structures & Algorithms, Theory of Computation, Functional Programming, Object-Oriented Programming, Linear Algebra, Differential Equations, Discrete Mathematics, [Systems Programming, Machine Organization, and Statistics in Progress]

**Programming Languages:** Experienced in Python and C; Familiar with Javascript and Ocaml

## PROFESSIONAL EXPERIENCE

**Harvard University**

Cambridge, MA

*Undergraduate Researcher*

June – September 2020

- Researched 4 different probabilistic machine learning recommendation models with the VLSI-Arch group
- Implemented LDA algorithm in Python to perform collaborative-filtering recommendation on Netflix dataset consisting of 1 million movie reviews from 6,000 users on 4,000 movies

**American Express**

New York, NY

*Machine Learning Engineering Intern*

June – August 2020

- Produced end-to-end internal tool for StudioA team which uses automation to improve business efficiency by clustering documents of similar type rather than needing manual sorting with 3 other interns
- Implemented K-Means unsupervised learning clustering algorithm with 75,000 uniquely generated synthetic documents of 5 different types with TensorFlow and scikit-learn
- Improved clustering algorithm's performance by 13% by using feature engineering to tokenize documents
- Transformed research into production level group of 2 Python classes for simpler use by other business groups

**URx**

San Francisco, CA

*InternHacks, Product Manager*

June - July 2020

- Spearheaded app concept, user experience, prototype roadmapping, and sprint plans for Grapevine, an Android application that allows users to find businesses near them whose ethics align with their personal values
- Awarded Best Overall Project (design) & Best Future Vision (demo) out of 34 project submissions for work with 2 engineers and 2 designers

**Facebook**

Menlo Park, CA

*Software Development Intern*

June – August 2019

- Studied in a 3-week iOS development training course and built Tipster, Tumblr, Flix, Twitter, PhotoMap, and Instagram demo apps from scratch using Objective-C and a Parse database to host and interact with user data
- Devised schema and Parse backend of Seam, an iOS application that allows users to anonymously apply to jobs with the goal of eliminating bias based on appearance, name, age, or other identifiers, with a group of 3

## EXTRACURRICULAR ACTIVITIES

**Mobile App Development:**

- Android: developed basic flashcard app using Java and wireframed a prototype reminder app in group of 3

**Web Development:**

- React: learned basics of React web development and created simple flashcard app hosted via Firebase
- Flask: member of **Harvard Open Data Project** web development team; rendered user-friendly data tables with Javascript to visualize 11 datasets and constructed a new page to display information for prospective students

**Other Activities:** Vice President of **Alpha Phi Alpha Fraternity Inc., Rho Nu Chapter**; Career Prep Fellow with **Management Leadership of Tomorrow**; Volunteer with **Y2Y Homeless Shelter**; Citizenship Tutor with **Harvard Bridge Program**