Permanent Address 126 E Wedgwood Dr. Yorktown, Virginia 23693 Annie Cao alc3pf@virginia.edu (757) 291-8155 https://annie-cao.netlify.app/

Current Address 126 E Wedgwood Dr. Yorktown, Virginia 2369

EDUCATION

HackCville, Charlottesville, Virginia

March 2020 – *June* 2020

Launch Program, Software Engineering Track

- Studied and practiced software engineering and professional skills in a selective, extracurricular, intensive program
- Built series of small applications individually and in groups using React and Firebase Realtime Database

University of Virginia, Charlottesville, Virginia

Class of 2022

College of Arts & Sciences Undergraduate

Computer Science (BA), Statistics with Biology Concentration / GPA 3.94

 Completed coursework: Algorithms, Program and Data Representation, Computer Architecture, Cybersecurity, Machine Learning, Cloud Computing, Database Systems, Advanced Software Development, Discrete Mathematics, Elementary Linear Algebra, Probability, Calculus I & II, Introduction to Mathematical Statistics, Nonparametric Statistics, Data to Knowledge

WORK EXPERIENCE

Department of Computer Science at the University of Virginia, Charlottesville, VA

September 2020 - Present

Teaching Assistant for Software Development Methods (CS 2110) and Machine Learning (CS 4774)

- Hold weekly office hours (4 hours) for students to ask questions about the course material; give feedback on assignments and help students understand programming in Java (CS 2110) and machine learning algorithms and practices (CS 4774)
- Meet weekly with 6 student cohorts (3-4 students each) to provide more personalized and accessible aid (CS 2110)

TD Securities, New York City, NY

June 2021 – August 2021

Technology Analyst on Quantitative Modeling and Analytics Team

- Generated a python script to automate daily generation of bond analytics reports, which included the generation of Nelson-Siegel models, yield curves, charts on top 5 richest and cheapest bonds, and more
- Contributed new endpoints to an internal REST API that retrieves bond information

Digital Capital Solutions, Washington, D.C. (Remote)

July 2020 - Present

Software Engineer Intern

- Worked in a team of 4 to build a social media application using React Native Expo
- Collaborated in a team of 6 to generate a mobile template application to present resources, information, and alerts for a given town using React Native, Android Studio, and Figma

PreHealthPivot, San Francisco, CA (Remote)

July 2020 – *January* 2021

Website Editing and Development Intern

- Generated a new custom React website for PreHealthPivot, adding user authentication and authorization, incorporation of Firebase Realtime Database, and new custom sections for the website
- Workshopped and maintained the current PreHealthPivot site on Squarespace; coded a Python script to use SendGrid Email API and Google Sheets API to automatically send emails to those who filled out a mentoring survey

PROJECT EXPERIENCE

Recycle Buddies, Charlottesville, Virginia

March 2021

Programmer

- Built a mobile application where users upload pictures of disposable items to have the app classify the item as recyclable, compostable, or garbage; made Flask REST API which employed an ensemble learning classifier for mobile app to interface with
- Technology stack included React Native, Firebase Cloud Storage, Scikit-learn; worked in a team of 4; demo: https://devpost.com/software/recycle-buddy-wkc32q Recycle Buddy | Devpost

Creative Corner, Charlottesville, Virginia

May 2020

Co-Designer and Co-Programmer

- Created a web application for writers to share, edit, and explore stories; two-part project with part 1 completed during a 48-hour MLH hackathon RookieHacks and part 2 completed as a project for the class Database Systems
- demo: https://devpost.com/software/rookiehacks101 (part 1), http://cs.virginia.edu/~alc3pf/ajax/project/index.php (part 2)

Textbook Exchange, Charlottesville, Virginia

February 2020 – April 2020

Requirements Manager and Programmer

- Worked with four classmates in the course Advanced Software Development to create textbook exchange application using Python, Django, Heroku, and Travis CI as well as MVC design; accessible here: https://textbooks-exchange.herokuapp.com/
- In charge of eliciting requirements from stakeholders and creating requirements document to guide overall project
- Integrated PostgreSQL and external APIs to enable user data and profiles, posting/managing textbooks for sale, and efficient browsing of available textbooks; utilized agile methodology during development

SKILLS

- Python, Java, R, C++, C, PowerShell, JavaScript (React), HTML/CSS, x86 Assembly, Bash, PHP, SAS, Linux, Bootstrap
- Django, Heroku, Travis CI, GitHub, Firebase Realtime Database, PostgreSQL, MySQL, CakePHP, React Native, Figma