Franklin Wu

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EDUCATION

Duke University **Durham, NC**
B.S in Computer Science, Minors in Biology and Chemistry Class of 2023

- **GPA**: 3.97/4.0
- **Relevant Coursework**: Data Structures & Algorithms (CS 201), Computer Architecture (CS 250), Software Design (CS 307), Intro to Machine Learning (CS 371), Intro to Databases (CS 316), Computational Data Science (STAT 199)
- **Activities and Societies**: Duke Impact Investing Group, Duke Applied Machine Learning, Duke Tour Guides, Duke Investment Club, Phi Delta Epsilon Medical Society (Recruitment Chair)

Technical Skills:

- **Languages:** Advanced: Python, Java, R, HTML, CSS; Proficient: C, JavaScript, SQL
- **Tools/Frameworks:** AWS Services, Git, Flask, React, Linux

EXPERIENCE

Amazon Web Services, Inc. **Boston, MA**
Software Development Engineer Intern May 2021- Aug 2021

- Generated proof of concepts for an early-stage sales outcome machine learning platform for Amazon Web Services (AWS) to streamline customer workload migrations to the cloud
- Leveraged AWS EC2, S3, and Sagemaker to build and deploy logistic regression propensity models predicting a customer's likelihood to use AWS services; over 80% accuracy, recall, and precision. Models used in production

Duke Computer Science Department **Durham, NC**
Undergraduate Teaching Assistant Jan 2021 - Present

- Teaching Assistant for Data Structures and Algorithms course (CS 201) at Duke University
- Instructing students in understanding Java data structures and common algorithmic problem solving techniques
- Held weekly recitation sessions, office hours, and graded student work and exams

Duke Impact Investing Group **Durham, NC**
Data Analyst Jan–May 2021

- Undertook a pro-bono project for Ginger.io, an online mental health service, to uncover insights on product usage
- Performed data ingestion with company backlogs to analyze coach behavior and inform a redesign of the patient UI

Computational Cancer Genetics Research **Durham, NC**
Research Assistant Jun 2020 - Present

- 1 of 15 recipients of the Duke Biological Sciences Undergraduate Research Fellowship in Summer of 2020
- Wrote Python scripts to extract thousands of identified somatic mutations from ICGC data repositories
- Developed and implemented biocomputational algorithms to identify cancerous mutations across novel genomes
- Project currently gearing towards eventual journal publication

Kline and Company **Stow, MA**
Data Analytics Intern 2018 - 2019

- Developed an algorithm using economic census data to build a predictive model of U.S oil demand for ExxonMobil
- Wrote script automating data sorting process, shortened project timeframe from three months to two weeks

PROJECTS

TeachOverflow

- Developed full-stack web app for HackDuke that gives teachers a platform to share ideas, upload teaching resources, and navigate online education as a community
- Hosted Postgres database in ElephantSQL, wrote APIs in back-end using Python and Flask, used Bulma for CSS styling

Java Game Engines

- Created multiple game engines, including Bloons Tower Defense, Cellular Automata simulations, and Brickbreaker
- Used Java in the back-end and JavaFX for animations and visualization while adhering to SOLID design principles and implementing the Model-View-Controller framework.

INTERESTS

Hobbies: NBA & Duke Basketball, Fantasy Football, Brain Teasers, Rewatching Marvel Movies, Spikeball, Chess
Foreign Languages: Fluent in Chinese, achieved Advanced Proficiency in French