Zhitong Zhang

Education

Tufts University, Medford, MA

Class of 2022

Bachelor of Science in Data Science, Computer Science, and Math

Minor: Engineering Management and Economics

GPA: 3.90/4.0

Professional/Tech Experiences

Citrix Burlington, MA

Software Engineering Intern

May 2020 - Present

- Mobilize the migration from nightly to continuous build and integrations using Jenkins for the provisioning team.
- Integrated an industry-standard login VSI via Azure for the provisioning team that tests and monitors the performance and availability of both virtual desktop infrastructure and applications.
- Implemented locality in relation to network optimization that speeds up compilation of the master build by 3%.

Tufts JumboCode Medford, MA

Head Of Operations

January 2019 - Present

Developer

September 2018 - Present

- Manage and oversee day-to-day operations of 8 individual projects that develop a variety of mobile and web applications for non-profit clients.
- Act as the main person of outreach for the club.
- Work as a Software Engineer in a team of both Designers and other Engineers to provide a web application that displays a comprehensive map view of Bi+ organizations and events based on geographical locations, along with basic contact/sign-up guides.
- Utilize React.js and Node.js to develop a custom map-based web search for the National Bisexual Resource Center.

Tufts CS/EE Department

Medford, MA

COMP 135 - Intro to Machine Learning TA

January 2019 - Present

- Hold weekly office hours, where I help students with Coding Practical assignments implementations and analysis of supervised and unsupervised Machine Learning Algorithms.
- Grade homework and exams, all while giving feedback on how to write more effective code.
- Lead labs that consisted of concepts from the week's lecture.

Bank Of America Manhattan, NY

Digital Ambassador Intern

June 2018- August 2018

- Engaged, informed, and assisted clients on how to conduct simple transactions through self-service technologies.
- Ensured clients are connected to the appropriate experts to help them achieve their financial goals; make sure service and specialized needs are met.
- Leveraged available resources and technologies (such as tablets and bank by appointment) to optimize the client experience and serve our clients with operational excellence and accuracy.

Projects

Brown University Datathon (Semi-finalist)

February 2020

- Utilizing Citizen Bank's data on user credit, location, other financial attributes, I created a deep neural network model that predicts whether or not a home buyer is a first-time buyer or not with an accuracy of 81.21% on a held-out dataset of 1,200,000.
- Created a data visualization heat-map of the US that shows "potential intent" of house buyers with a dataset of over 1,000,000 first-time house buyers.

Tufts Medical COVID-19 April 2020

- Adapted the CHIME model from UPenn Medicine, a tool that leverages SIR modeling to assist hospitals with capacity planning around COVID-19.
- Communicated model results to aid forecast of early ICU strain on the hospital to stakeholders.

Image Compressor & Decompressor

- Designed and implemented interfaces for converting RGB color space to component video color space, using the discrete cosine transform, and quantizing chroma.
- Wrote bit-packing modules to condense pixel information into 64-bit words.

Decision Tree in C++

- Created a supervised machine learning model using only basic math functions and data structures in C++.
- Explored the utilization (pros/cons) of basic counting heuristic vs. information-theoretic heuristic.

Technical Skillset

Programming Languages: C++, C, JavaScript, Java, Python, Matlab, and C#

Tools: Microsoft Azure, AWS, Jenkins, Jira, Git