Zach Cramer

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EDUCATION

The University of Texas at Austin   Austin, TX
B.S. in Computer Science   *May 2024*
- GPA: 3.6
- Relevant Coursework: Computer Architecture, Operating Systems, Machine Learning, Algorithms, Data Structures, Discrete Math, Probability, Statistics, Multivariable Calculus, Linear Algebra
- Honors & Awards: Dean's List
- Organizations: Texas Blockchain Engineering, Texas A4C

SKILLS

Languages: Java, C++, C, Python, JavaScript, Swift, Solidity, SQL
Technologies: React, Node.js, Git, Scikit-Learn

EXPERIENCE

Amazon   May 2023 - August 2023
SDE Intern   *Sunnyvale, CA*
- Expected to focus on **personalization** and **data analytics**.

HID Global   July 2022 - September 2022
Software Engineer Intern   *Austin, TX*
- Worked on a project to **reduce production time** of radio frequency readers over **30 percent** by automating the timing of the production cycle. This was done using a Python script that implemented an **automatic timer displayed on a GUI**, and then reported the time to the company database.
- Collaborated with international engineers to fix the *Saturn,* a machine responsible for **20 percent** of RFID tag production at the Austin location.
- Followed the Agile Scrum methodology, wrote and debugged scripts that directly impacted production.

iD Tech   June 2022 - August 2022
Online Instructor   *Austin, TX*
- Led a virtual class teaching **Java, C++, Calculus**, and K-12 math topics.
- Planned and integrated lesson plans, provided real time examples and projects in Java and C++.

PROJECTS

Bankruptcy Prediction
- Employed **Neural Networks, Decision Trees, Random Forests Ensemble, and ADABoost Classifie**r to determine whether or not a company will go bankrupt. Predicted bankruptcy with **97% accuracy** through feature engineering and proper data cleaning.
- Languages/Technologies: Python, Scikit-Learn

Huffman Compression
- Built a **lossless compression algorithm** with a Graphical User Interface that uses a variety of canonical data structures (**binary trees, priority queues, hashmaps**) to compress and decompress files.
- Languages/Technologies: Java, Java FX

TCP Networking
- Implemented the **TCP networking** protocol to ensure reliable messaging on an unreliable network. Employed **Reed-Solomon** error correction to account for bit flips and bit loss, used a **Caesar Cypher** to encrypt/decrypt packages.
- Languages/Technologies: C++

Ext2 File System
- Developed a fully functional ext2 file system for **Linux Kernel**. The system displays pertinent file metadata and **decreases average disk seek time** by storing relevant files in adjacent blocks.
- Languages/Technologies: C++