Zach Cramer

Austin, TX | linkedin.com/in/zach-cramer | 512-865-7570 | zachacramer@gmail.com

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++