Mark Matis

WORK EXPERIENCE



Amazon: Software Development Engineering Intern - Seattle, Washington

January 2022 - April 2022

- Singlehandedly crafted the design document, wrote the work back plan, and implemented the project in 3 months
- Developed and programmed the backend for an event driven automatic revenue prediction service, which can forecast revenues on demand and add them to the universal ledger.
- Implemented 5 packages and created a deployment pipeline to achieve this.
- Languages/Tools used: Java, AWS Lambda, AWS S3, AWS CloudWatch, Jira, SNS, SQS



Moneta: Co-Founder and Head of Software Development - Lubbock, Texas

December 2021 - Present

- As co-founder and head of software development, I built the entire backend and frontend of our app. The frontend was created with React-Native, and the backend is hosted with AWS services.
- Authentication is done with Amazon Cognito, our data is stored in Dynamo DB tables, and we access the backend using AWS
 Amplify to reach the API Gateway of my custom AWS Lambda functions.
- To learn more about our business, please see our website here: https://www.monetatech.net/



Salesforce: Software Engineering Intern - San Francisco, California

May 2022 – August 2022

- Began by adding dynamic refresh to the Orchestrator Work Guide, allowing users to see the updates resulting from their work item completions in real time.
- Allowed the user to refresh their current work items while considering whether other users in the system with the same work item have completed it using a button, cutting down on our end user's potential repeated work considerably.
- Wrote rigorous web driver tests and unit tests for all of the features I developed
- Languages/Tools used: Typescript, Java, Jest Testing Framework, Selenium
- Proficient in: C++, Python, Java, Linux Commands, JavaScript, HTML, Git, Jira, Agile Methodology, AWS Cloud Technologies

PROJECTS (Check my GitHub for More!)



Mock Threads - C++ and Inline Assembly

- Wrote a library to simulate unlimited virtual user threads mapped to four simulated kernel threads.
- Threads can be scheduled using FIFO or through Priority Scheduling. My scheduler can interrupt, schedule, and reschedule user threads on any of the four kernel threads, so each user thread has its own stack pointer, stack base pointer, and registers
- See the code here: https://github.com/markatron9000/MockThreads



Operating Systems Student's Daily OSTEP Service - Java, DynamoDB, AWS Lambda

- Created a complete AWS system from scratch that will send ascending chapters of Operating Systems in Three Easy Pieces directly to the inbox of subscribers, making it both accessible and easy to build the habit of reading one chapter a day.
- The backend of the project is deployed entirely in the cloud with AWS, utilizing multiple Lambda Functions, S3 buckets, a DynamoDB table, CloudFormation, SES, and Java.
- The service can accommodate any number of new users, and will start each one on their own timeline, meaning each user will start from page 1 of the book and will receive one chapter daily to their inbox until they reach the end of the book.
- Subscription to the service can be had here: https://chaptereveryday.xyz



Google Software Product Sprint - Java, JavaScript, HTML

February 2021 - May 2021

- An 11- week program within Google where I collaborated with a team of peers to design and implement the backend and frontend of two web applications while supervised by current Google software engineers
- I used Java, JavaScript, HTML, and CSS over the course of 10 weeks, leveraging various Google Cloud Platform APIs
- Practiced industry best practices such as: contributing to open-source software using Git and GitHub, conducting code reviews, participating in distributed development, designing new components and leading them to completion.

EDUCATION



Texas A&M University *B.S. Computer Science*

August 2019 - Present: Graduation in May 2023

College Station, TX

Relevant Coursework: Operating Systems, Parallel Computing, Data Structures and Algorithms, Computer Organization

Additional Information: I am a member of Mensa, will be a monk for over a month, and am running my first half-marathon this April!