

Sarim Aleem

sarimaleem99@gmail.com | [linkedin/sarim-aleem](https://www.linkedin.com/in/sarim-aleem) | [github/sarimaleem](https://github.com/sarimaleem)

EDUCATION

University of Texas at Austin

Austin, TX | May 2024

B.S. COMPUTER SCIENCE, MINOR ARABIC, GPA: 3.83

Coursework: Data Structures, Algorithms, Computer Architecture, Operating Systems, Distributed Systems, Compilers, Computer Networks, Intro to Machine Learning

WORK EXPERIENCE

FUJITSU NETWORK COMMUNICATIONS | SOFTWARE DEVELOPMENT INTERN

Dallas TX | Jun 2022 – Aug 2022

- Developed custom webclient to store network topology data in Configuration Persistent Storage database using Java Spring
- (alternative?) Migrated network element data storage platform from MongoDB to CPS using Java Spring
- Configured Docker files so microservices can communicate with each other in docker-compose
- (alternative?) Configured network bridge in Docker files in order for microservices to communicate with each other
- Migrated topological discovery of network elements from direct drivers to a software defined network controller
- Created bash scripts to automate container deployment and test REST endpoints
- Used Java reactive streams to load balance client requests from frontend and ensure requests are nonblocking (sounds fancier than it is)

BAYLOR COLLEGE OF MEDICINE | RESEARCH ASSISTANT (RA)

Houston, TX | Jan 2021 - August 2021

- Created computer vision model in C++ to fit ellipses to pupils of mice, improving speed over deep learning model by 50x
- (alternative?) Created computer vision model in c++ to analyze mice pupil dialation size, faster than deep learning model by 50x
- Programmed Tkinter GUI to edit audio files based on signal patterns and spectrogram
- Developed Python library to analyze pupil dilation of mice
- Analyzed and Visualized Data with Pandas and Matplotlib

PROJECTS

MARKDOWN BASED CONTENT MANAGEMENT SYSTEM

Go, TypeScript, Express, MongoDB

- Created web server where users can upload markdown content using Go based Command line app
- Deployed Web server using GCP that converts markdown to HTML accessible through REST endpoints

DISTRIBUTED KEY-VALUE STORE WITH LOAD BALANCING

JAVA, DISTRIBUTED SYSTEMS

- Created linearizable distributed key value Store which replicates data with fault tolerance using Paxos.
- Load balanced key/value workloads using sharded Paxos based replica groups

PINTOS OPERATING SYSTEM

C, CONCURRENCY, OPERATING SYSTEMS

- Implemented Operating System with Thread Priority Scheduling, System Calls, Virtual Memory, and EXT based File System
- Debugged race conditions, deadlocks, memory errors, and other bugs using GDB

MULTIPLAYER GOMOKU WITH AI

JAVASCRIPT, EXPRESS, WEB SOCKETS

- Created multiplayer website with communication through websockets
- Implemented single player mode with AI using Minimax with Alpha Beta Pruning for

SORTING WEBSITE

REACT.JS, FIREBASE

- Created website to visualize sorting algorithms using React.js, deployed using firebase

SKILLS

Languages: Java, C, C++, Python, Bash, SQL

Web Development: React, JavaScript, TypeScript, HTML/CSS, Express, Node

Technology: Git, SQL, Docker, \LaTeX , MongoDB, Spring

ACTIVITIES

Central Texas Model United Nations Organized Model UN conference for highschoolers across Texas

Advancing UT Technology Team leader for social media website to connect UT students

Texas Judo Participated in Judo contests