Aneesh Maganti

(312) 841-0636 • New York • aneesh.maganti@nyu.edu • github.com/aminoa • linkedin.com/in/aneesh-maganti

EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY **May 2024**
Bachelor of Science, Major in Computer Science, Minor in Mathematics **GPA: 3.70**
Relevant Courses: **Algorithmic Machine Learning, Software Engineering, Databases, Algorithms, Operating Systems**

SKILLS

Languages **C++, Javascript, Python, Bash, C#, Java, Go**
Frameworks/Libraries/OS **SDL, Qt, React, Node.js, PostgreSQL, DynamoDB, Docker, Windows, Li**

EXPERIENCE

MarketFusion, Los Altos, CA, *Software Engineering Intern* **July 2022 - Present**
• **Rewrote 2 React registration pages and user-creation process, sending server requests via the Axios library to the internal MySQL database, facilitating the creation of multiple user accounts**
• **Revamped the login authentication system by implementing 4 unique character password checks and a length requirement of 8-20 characters client-side and server-side via regular expressions to ensure the security of the website**

Corelink High-Speed Research Network, Brooklyn, NY, *Academic Researcher* **Sep 2021 - Present**
• **Implemented a UDP network packet splitter to enable researchers to bypass Corelink's MTU limit from 20,000 to 64,000 bytes, increasing maximum throughput by 220%**
• **Managed 3 students within my team, assisting them with project design and implementation**
• **Researched Corelink's network architecture and RDMA (Remote Direct Memory Access)/InfiniBand protocol and ran memory tests to determine the protocol's effectiveness for NYU researchers**

Monarc, Dallas, TX, *Software Engineering Intern* **Aug 2021 - Jan 2022**
• **Applied MVVM (Model-View View-Model) principles to develop a C# UWP (Universal Windows Platform) page, letting users manipulate a robotic football quarterback to throw balls at 5 placements and distances up to 100 yards**
• **Devised error checks and boot logging to enable remote debugging, improving the stability of the machine**

PROJECTS

Chip8 Interpreter/Emulator **August 2022**
• **Designed interpreter for Chip8 platform by emulating all 35 standard opcodes and its specifications (registers, memory, timers) after disassembling program binary data, allowing Chip8 programs to run on an x86 platform**
• **Employed SDL graphics library to write graphics renderer using SDL textures and handle user input**

Alzheimer MRI Detection **May 2022**
• **Developed classification machine learning algorithm to sort preprocessed set of Alzheimer MRI images**
• **Tested using Sklearn library with three models - a logistic regression, support vector machine and convolutional neural network - with varying levels of regularization to determine which had the greatest accuracy**

bkRoad - Amazon Lightsail Containers Hackathon - Overall 2nd Place **March 2022**
• **Wrote Next.js application that allowed users to search, learn details, and loan books using 5 React**

pages
• Handled connections to a SQL Amazon DynamoDB and hosted on an Amazon Lightsail platform

Interview Automation - HackNYU **February 2022**
• Wrote Next.js React pages for creating questions and admins and applicants info pages, assisting with interviewing candidates for NYU Research Teams by providing scheduling, quizzing and management services
• Handled authentication with NYU SSO (Single Sign-On) login via Auth0 platform

EXTRA-CURRICULAR ACTIVITIES

• NYU Rock Climbing Club - Partaked in weekly climbs and joined meetups for fun and exercise
• Polytech Programming Team - Participated in competitive programming challenges and university competitions