# 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                    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, Linux |

## EXPERIENCE

**MarketFusion**, Los Altos, CA, *Software Engineering Intern*                    July 2022 - Present
• Rewrote 2 React.js 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 via regular expressions to aid the security of the website

**Corelink High-Speed Research Network**, Brooklyn, NY, *Academic Researcher*                    Sep 2021 - June 2022
• Implemented a C++ 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 wrote bash 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 C++ 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 Python 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**                    March 2022
• Won 2nd place in the hackathon
• Wrote Next.js application that allowed users to search, learn details, and loan books using 5 React.js 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