Aneesh Maganti

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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.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 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 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