

# Aneesh Maganti

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## EDUCATION

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New York University, Tandon School of Engineering, Brooklyn, NY

May 2024

Bachelor of Science, Major in Computer Science

GPA: 3.70

*Relevant Courses:* Machine Learning, Software Engineering, Databases, Algorithms, Operating Systems

## SKILLS

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Languages

C++, Javascript, Python, Bash, C#, Java, Powershell, Go

Frameworks/Libraries/OS

SDL, Qt, React, Node.js, PostgreSQL, Docker, Windows, Unix

## EXPERIENCE

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MarketFusion, *Software Engineering Intern*

July 2022 - Present

- Revamped the login authentication system by implementing password strength checks and verification client-side via regex and server-side to ensure the security of the website.
- Rewrote React registration pages and user-creation process, sending a server request via the Axios library to update the internal MySQL database.

Corelink High-Speed Research Network, *Academic Researcher*

Sep 2021 - Present

- Researched the Corelink network infrastructure and implemented a network packet splitter for UDP connections
- Coordinated students and assisted them with the management of their projects
- 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

- Devised error checks and boot logging to improve Seeker performance and enable remote debugging
- Applied MVVM principles to develop new UI/UX features to enhance the Seeker machine feature-set

## PROJECTS

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Chip8 Interpreter/Emulator

August 2022

- Designed interpreter for Chip8 platform by emulating all 35 standard opcodes and its specifications (registers, memory, timers), allowing Chip8 programs to run on an x86 platform
- Wrote separate disassembler to obtain assembly instructions from program binary data, assisting with development
- Used SDL 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

March 2022

- Won 2nd place in the hackathon
- Wrote Next.js application that allowed users to discover books, learn details about them, and loan them.
- Handled connections to SQL Amazon DynamoDB and hosted on Amazon Lightsail

## **Interview Automation - HackNYU**

**February 2022**

- A Next.js application to assist with interviewing candidates for the NYU Corelink team by providing scheduling, quizzing and management services
- Wrote React pages for the question page, admin creation page, and applicant information
- Handled authentication via Auth0 configuration of NYU SSO logon

## **EXTRA-CURRICULAR ACTIVITIES**

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- Rock Climbing Team - done multiple climbs and participated within the Student organization
- Poly Programming Team - participated in programming challenges and competitions