






# Alex Martin

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## EDUCATION

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<b>New York University</b> <i>Bachelor's of Computer Science</i>	<b>2020-2025</b> <i>GPA: 3.0</i>
<b>Penfield High School</b> <i>Regents Diploma with Advanced Designation</i>	<b>2017-2020</b> <i>GPA: 94.0</i>

## WORK EXPERIENCE

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**NYU IT High Speed Research Network** · *Software Development Intern* *Sept 2021 - Jan 2022*

- ▷ Implemented a python library that does client server communication with internal pub/sub application.
- ▷ Utilized TLS authentication/encryption, data transfer through UDP/TCP/WS, and client unit tests.
- ▷ Created documentation and guided people's use of the library, as well as participated in bug fixing.

**IDM.Grow** · *Software Developer* *Sept 2021 - Jan 2022*

- ▷ Display plant CO2 data on a unified UI with ReactJS to enable plant health tracking.
- ▷ Implemented I2C data transfer and custom power distribution circuitry with a Raspberry Pi.
- ▷ Researched hydroponics and innovative design solutions for improving the IDM.Grow Lab

**NYU IT Labs** · *Lab Technician* *Sept 2021 - Jan 2023*

- ▷ Enforce lab policies, manage student space scheduling, and troubleshoot equipment problems

## PROJECTS

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**Virtual Wardrobe** *Developing*

NextJS webapp that tracks your wardrobe through photos. Keeps track of dirty laundry with either user input or laundry basket tracking with opencv. Users can create virtual outfits and manage laundry status.

**OpenGL Game** *Deployed*

Platformer game created using game engine made from OpenGL library. Player avoids enemies in the dark using a light source that follows the character. Player can win by reaching the end of the levels and turning the light back on.

**Personal Website** *Deployed*

Created a NextJS website with p5.js canvases in order to create and interactive and animated website. The website is deployed on AWS Amplify and renders all content client-side to reduce server burden/costs.

**Braille Keyboard** *Deployed*

Created CAD models for keycaps and printed out physical models on 3d printer. Interfaced buttons with Raspberry Pi GPIO and implemented a USB HID library for keyboard communication.

## SKILLS

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<b>Languages</b>	Python, C++, C, Javascript, Unix Shells, LaTeX
<b>Tools</b>	Linux, AWS, ReactJS, p5.js, Git, Fusion360, OpenGL, Unity, Machine Learning

## CERTIFICATIONS

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**AWS Cloud Practitioner** *Sept 2022 - Sept 2025*