

**EDUCATION**

**University at Albany, Junior**

- Cumulative GPA: 3.78
- *Major:* Computer Science
- *Minors:* Math & Informatics
- *Honors:* Dean's List (Fall 2022 - Spring 2024)
- Extracurriculars: ARTC (Fall 2022 - Current)

Albany, NY  
Expected December 2025

**Relevant Coursework**

Software Engineering  
Data Structures  
Database Systems  
Computer Architecture  
Computer Networks

**SKILLS**

- *Technical Skills:* -Object Oriented Programming; -Java; -C; -git; -Unix; -JavaScript; -React; -Nodejs; -CSS; -HTML; -Tailwind; -AWK
- *Soft Skills:* -Problem solving; -Creativity; -Teamwork; -Adaptable

**PROJECTS**

**3D Rendering Application**

Spring 2024 - Current

- Developed a 3D rendering program using exclusively 2D graphics libraries (AWT), with camera controls, in Java.
- Implemented all matrix math and perspective projection algorithms from scratch, showcasing knowledge of computer graphics principles and linear algebra.
- Engineered the rendering pipeline to convert 3D objects into 2D representations.

**32-bit Computer Emulator**

Spring 2024

- Developed an emulator for the SIA-32 chip architecture, with 4KB of main memory, in Java.
- Built a caching mechanism to interact with the virtual ram more efficiently.
- Created a custom assembly language to interface with the emulated hardware in a more straightforward manner.

**Portfolio Website**

Spring 2024

- Developed a dynamic portfolio website using React, Node.js, and JavaScript to exhibit computer science projects in an interactive appealing manner.
- Applied CSS for a modern design and responsiveness across various devices.
- Integrated Three.js for 3D graphics, demonstrating proficiency in advanced web technologies.

**AWK to Java Interpreter**

Fall 2023

- Utilized lexical analysis to tokenize AWK code into meaningful components
- Developed a parser to generate an abstract syntax tree (AST) from parsed AWK code
- Translated the AST nodes into the equivalent Java code
- Ensured compatibility with AWK language features and Java syntax
- Integrated error handling mechanisms for efficient debugging

**EXPERIENCE**

**UAlbany Hackathon Winner, Albany NY**

Spring 2024

- Led programming efforts for a team of 4 to develop a game using the Godot engine, overseeing all technical aspects and ensuring seamless functionality.
- Achieved 1st place in the competition, demonstrating good teamwork and technical skills.

**The RED Bookshelf, Albany NY**

Summer 2023

- Volunteered to collaborate with a team of 8 people employing creative problem-solving techniques while restoring and preserving books.
- Devised innovative ways to overcome the lack of usable materials, while maintaining dedication to the quality of the product