Samuel Park

EDUCATION

Cornell University

Ithaca, New York

Bachelor of Science in Computer Science | Minor: Artificial Intelligence

Expected Graduation: May 2026

• Courses: Analysis of Algorithms, Foundations of AI, Intro to Backend Development, Discrete Structures, Object-Oriented Design & Data Structures in Java, Digital Logic and Computer Organization, Linear Algebra

SKILLS & INTERESTS

Languages: Python, Java, JavaScript, HTML/CSS, Typescript, LATEX, SQL, SQLAlchemy

Tools/Frameworks: Git/GitHub, VS Code, React.js, IntelliJ IDEA, Node.js, Roboflow, ROS, Docker, Flask, Postman

Libraries: NumPy, MatPlotLib

Other Involvements: Cornell Swimming Club, Cornell Bowling Club, Emmaus Road English Ministry

EXPERIENCE

Frontend Developer Intern | Manna Hot Bagel Inc

May 2024 - Present Brooklyn, NY

- Developed and implemented a responsive web design for the company's main website
- Collaborated with the UX/UI team to optimize the frontend of the company's online platform
- Utilized JavaScript, HTML, and CSS to create interactive features for the company's web applications

AI Software Engineer | Cornell Autoboat

Sep 2022 – Present Ithaca, NY

- Designed and built an autonomous surface vehicle (ASV) capable of path planning, decision making, and image recognition for the annual Roboboat Competition hosted by Robonation
- Researched and developed a task algorithm for the 'Follow the Path' challenge in Python using various path planning algorithms such as A^* algorithm and pure pursuit algorithm with the help of computer vision
- Developed 50+ simulations using Python MatPlotLib and unit-tests for tuning PID to improve performance

Co-President | Rubber Ducky Coding Club

Jan 2023 - May 2024 | Ithaca, NY

- Led 10 weekly general body meetings and participated in coding competitions to hone programming skills
- Facilitated two social events for 20+ members while managing with a budget to increase team growth by 120%
- Mentored 5 underclassmen by meeting up weekly to introduce them to the club and answer any questions

PROJECTS

Personal Portfolio / Blog Page | Javascript, Typescript, HTML/CSS

May 2024 – Present | Melville, NY

- Created a personal portfolio using React and Chakra UI to showcase my profile, experience, and blogs.
- Deployed my website on Netlify and utilized SEO to promote my site and ensure its visibility on search results.

To-do Task Application | SQL, Python

April 2024 – May 2024 | *Ithaca*, *NY*

- Implemented the backend for an application that categorizes and keeps track of a user's To-do tasks
- $\bullet \ \ Designed \ multiple \ databases \ using \ SQLAlchemy \ and \ Python \ with \ a \ one-to-many \ relationship \ to \ store \ user \ input$
- Documented API Specification using markdown for ease of understanding and containerized the application using Docker for deployment on a public server by providing a public server IP for interaction with the application

McDiver Sewer Project | Java, IntelliJ IDEA

May 2023 | Ithaca, NY

- Created an mock sewer system where our character escapes a randomly-generated maze under various constraints
- Implemented and utilized Dijkstra's Algorithm in Java with a priority queue to navigate through the mazes
- Enhanced the efficiency of GUI animations through the implementation of concurrency

Asteroids | Python, VS Code

December 2022 | Ithaca, NY

- Created an object-oriented asteroid shooter game using Python with interactive functionality
- Modeled object movement by managing object collisions, incorporating user input, and using vector calculations
- Presented objects and their movements in a GUI with enhanced visual effects, including animations

- Researched statistical measures of tropical cyclones, focusing on hurricanes that impacted the Atlantic Seaboard
- Utilized Java to organize statistical data such as accumulated cyclone energy, wind speed, and barometric pressure
- Placed 3rd in 2022 JSHS regional symposium within the Earth and Space Science category