Samuel Park

github.com/samparkk13 | linkedin.com/in/samuel-park | (631) 372-2927 | sp994@cornell.edu | Melville, NY

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*, Embedded Systems*, Discrete Structures, Object-Oriented Design & Data Structures in Java, Digital Logic and Computer Organization

$*$ = currently enrolled

SKILLS & INTERESTS

Languages: Python, Java, C, JavaScript, HTML/CSS, LaTeX, SQL
Tools/Frameworks: Git/GitHub, VS Code, IntelliJ IDEA, Roboflow, ROS, React.js, Docker, Flask, Postman
Libraries: NumPy, Matplotlib
Other Involvements: Cornell Swimming Club, Cornell Bowling Club, Emmaus Road English Ministry

EXPERIENCE

Cornell Autoboat | *AI Team Software Engineer* 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 simulations using Python MatPlotLib and unit-test procedures for tuning PID to improve performance

Rubber Ducky Coding Club | *Recruitment Lead* Jan 2023 – Present | *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 20%
- Mentored 5 underclassmen by meeting up weekly to introduce them to the club and answer any questions

PROJECTS

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
- 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*

- Collaborated with a partner to create a mock version of a sewer system, programming our McDiver to escape a randomly-generated maze of sewers while under different 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 incorporating user input, projected velocity using vector calculations, and managed collisions between objects
- Presented objects and their movements in a GUI with enhanced visual effects, including animations

Tropical Cyclone Independent Research | *Java, Juypter Notebook* June 2021 – April 2022 | *Stony Brook, NY*

- 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