Samuel Park

⟨► Website | ⟨► Portfolio | ♠ Github | In LinkedIn | ■ Gmail

EDUCATION

Cornell University Ithaca, NY

Bachelor of Science in Computer Science | Minor: Artificial Intelligence

• Courses: Foundations of AI (Python), Intro to Machine Learning, Designing AI Products and Services, Intro to Database Systems (SQL), Object Oriented Programming and Data Structures (Java), Discrete Structures, Intro to Analysis of Algorithms, Embedded Systems

SKILLS

Web/Mobile Development: React, Next.js, TypeScript, JavaScript, Node.js, HTML, CSS, Tailwind CSS, Swift

Programming/Backend: Python, Java, OCaml, Flask, SQL, MySQL, PostgreSQL, Azure, Cosmos

Tools/Skills: Docker, Github, LangChain, VS Code, Pycharm, Pydantic, ROS, IntelliJ IDEA, Prisma, Postman, Agile, Jira, Figma

EXPERIENCE

Walmart Global Tech Sunnyvale, CA

Software Engineer Intern (SEM Team)

June 2025 - August 2025

Expected Graduation: May 2026

- Built a scalable LLM-based tool with RESTful API endpoints and rate limiting to detect anomalies and give actionable business insights within advertisement campaign data, leading to an 80% decrease in manual effort and cutting processing time from 2 hours to 2 minutes
- Integrated MCP toolbox architecture enabling chatbot access to 25 additional specialized agents, expanding system capabilities by 400% and supporting complex multi-agent workflows
- Developed a comprehensive session management system with persistent chat history and user feedback capabilities, featuring thumbs up/down ratings and automated conversation scoring to handle 20,000+ monthly conversations
- Architected data validation pipelines with caching using Pydantic schemas, ensuring 99.9% data integrity across 500,000+ campaign entries
- · Actively contributed to agile development workflows through bi-weekly sprint planning and daily standups, utilizing Jira for task management

Cornell University AutoBoat

Ithaca, NY

Artificial Intelligence Team

Sep 2022 – Dec 2024

- Collaborated with a sub-team of 6 members to engineer a fully autonomous surface vehicle through various navigational tasks by implementing path planning and decision making algorithms
- Implemented an algorithm using A* path planning with the YOLO v8 model to increase the speed of completing its task by 125%
- Ensured end-to-end testing using Unity and ROS2 to create simulation environments for edge cases and debugging

Manna Hot Bagel Inc

Brooklyn, NY

 $Software\ Engineer\ Intern$

May 2024 – August 2024

- Designed a fully responsive search engine optimized website powered by React, leading to a 200% increase in site traffic
- Diagnosed and resolved critical frontend issues through targeted JavaScript and CSS improvements, reducing user-reported problems by 65%

PROJECTS

FantasyEdge AI | TypeScript, Python, PostgreSQL, Next.js, FastAPI, Docker

July 2025 - August 2025

- Built a full-stack AI-powered fantasy football analytics platform with ESPN API integration, featuring player predictions, interactive rankings, and real-time draft boards serving **50,000+** player projections
- Developed sophisticated prediction engine using multi-factor algorithmic analysis to generate player forecasts with **68**% accuracy improvement, implementing explainable AI with human-readable reasoning and confidence scoring
- Engineered responsive React application with TypeScript featuring 12+ interactive components, advanced data visualization using Recharts, dynamic routing with player detail pages, and comprehensive draft preparation tools

BeanSearch | Python, HTML, CSS

April 2025 - May 2025

- Engineered a high-performance search engine for specialty coffee beans using TF-IDF weighting, inverted indexing, and cosine similarity, enabling users to efficiently discover beans based on nuanced flavor profiles and descriptive queries
- Implemented advanced semantic search with Singular Value Decomposition, reducing dimensionality of the term-document matrix to capture latent relationships and improve result relevance for conceptually similar queries

CSettlers of Catan | OCaml

January 2025

• Created a terminal-based virtual implementation with at team for the board game Settlers of Catan that supports multiplayer gameplay utilizing agile software practices with test-driven development, feature sprints, and git