PAUL STONE

540 · 395 · 6720 ◇ pws59@cornell.edu

EDUCATION

Cornell University, College of Engineering   *August 2021 - May 2025*
B.S. in Computer Science
Relevant Coursework: Data Structures, Algorithms, Machine Learning, Artificial Intelligence, Systems Programming, Database Systems, PLL.

EXPERIENCE

Machine Learning Engineer Intern   June 2024 - August 2024
Zeta Global

· Developed and optimized a RAG-based chat-bot using AWS Bedrock and Dockerized microservices for deployment.
· Compared Assistant services performance across OpenAI / OpenAPI, AWS Bedrock, Claude, and other Large Language Models (LLM).
· Deployed scalable Kubernetes clusters.
· Worked with CI/CD workflows for model training and deployment using GitHub Actions and Terraform.
· Worked closely with the other engineers to integrate AWS services (S3, EC2, Lambda) into existing systems using IAM roles and role-based access control (RBAC).
· Took part in daily stand-ups, code reviews, and the software development life cycle (SDLC).
· Created an in depth guide for future maintenance and upgrades on the chat-bot development process.

Research Assistant   February 2022 - May 2022
Cornell University   *Ithaca, NY*

· Deployed a mesh network of distributed Internet of Things (IoT) microcontrollers across the Cornell campus to monitor energy usage which lead to a 10% reduction in energy waste.
· Developed the microcontroller software using C++ with MQTT-based communication.
· Using data pipelines, I was able to visualize the data in graphs through Grafana dashboards.

PROJECTS

Agario Game Clone   Spring 2021 - Fall 2023

· Developed an online game similar to agar.io using Angular and TypeScript.
· Implemented server communication through WebSockets which allowed for real-time gameplay.
· Created a robust database using MongoDB to manage users, scores, and game statistics.
· A local version was built using Docker which allowed for seamless unit tests and integration.

Secret Santa App   Fall 2021 - Spring 2022

· Led a team of developers in designing a Secret Santa app using Agile methodology.
· Created Hamiltonian cycles to ensure that participant matching was optimal.
· Utilized React, AWS, Firebase, and FastAPI to build the backend.
· Created APIs and different design patterns to ensure perfect matching.

TECHNICAL SKILLS

Programming Languages	Python, OCaml, RISCV, x86, C/C++, Java, JavaScript, TypeScript
Web Development	HTML, CSS, PHP, Svelte, React, Angular, FastAPI, Firebase
Databases	MongoDB, SQL, MySQL, NoSQL
Cloud Services	AWS (S3, EC2, Lambda), Docker
Tools & IDEs	Vim, VSCode, Git, JIRA
Technical Knowledge	Networks, Functional Programming, Computer Architecture, Artificial Intelligence, Machine Learning, System Design, OpenAI, LLMs

EXTRACURRICULAR ACTIVITIES

- **Varsity,** Heavyweight Rowing, Cornell University

    – Competed at the highest level of collegiate rowing.

    – Worked closely with my team to achieve results both on and off the water.