

EDUCATION

Cornell University

Master of Engineering in Computer Science

Jan 2025 — Dec 2025

Ithaca, New York

Cornell University

Bachelor of Science in Computer Science, Minor in Applied Economics

Aug 2021 — May 2025

Ithaca, New York

GPA: 3.74

WORK EXPERIENCES

Theralyze AI

Software Engineering Intern

Remote (United States)

Jun 2025 — Aug 2025

- Launched internationalization (i18n) features using Flask Babel to support **30+** languages, expanding the application's user base and preparing it for **global market entry**
- Orchestrated a scalable data extraction pipeline for medical records by implementing Pytesseract, EasyOCR, & **Dockerized microservices deployed on AWS Lambda**, streamlining processing for both digital & scanned PDFs
- Transformed form parsing & annotation workflows by implementing checkbox detection logic with OpenCV, which eliminated 100% of manual reviews, accelerating document processing speed

Georgia Tech Research Institute

Software Engineer Intern

Warner Robins, GA

May 2023 — Aug 2023

- Architected and launched a full-stack inventory application (React, NextJS, TypeScript) that used graph traversal algorithms to **digitally map 1,000+** hardware components, resulting in a **50%** reduction in equipment search and utilization time for clients
- Led an agile development cycle by coordinating sprints, refining user stories, and conducting code reviews; improved team throughput by **20%** and elevated code quality and maintainability through systematic refactoring and documentation improvements
- Designed and optimized **SQL** database schemas and complex multi-table queries to support real-time inventory search and dependency mapping

PROJECTS

Reimplementation of PatchTST – Python, Pytorch

May 2025

- Applied a **transformer-based architecture (PatchTST/64)** to multivariate time-series forecasting tasks such as electricity demand, weather, and traffic patterns, leveraging patching for long-sequence modeling
- Benchmarked performance across **five real-world datasets** (Electricity, ETTh1, ETThm1, Traffic, ILI), achieving results close to published benchmarks and **outperforming prior transformer baselines** on most datasets despite compute constraints
- Optimized training under GPU memory limitations by adjusting model depth, attention heads, and dropout rates, and employed early stopping to mitigate overfitting on large-scale time-series data

Chirp — Typescript, NextJS, Supabase

March 2023

- Designed and launched a **real-time social platform** where users interact solely through emojis, delivering an engaging and seamless experience across devices
- Employed a type-safe, end-to-end API with tRPC to streamline data fetching between the client and server, while using the Prisma ORM to accelerate database schema creation and management of the Supabase database

Plastech — React, Firebase, Javascript

October 2022

- Developed an interactive dashboard in React to visualize plastic waste data through dynamic bar charts, improving accessibility and insight into environmental impact
- Utilized Firebase to handle and store over **100 MB** of data in plastic waste, and used a trained machine learning model to detect the plastic waste

SKILLS

Languages

Python, Java, PostgreSQL, OCaml, Javascript/TypeScript, C, C++, HTML/CSS, GameMaker Language

Technologies/Frameworks

Agile, AWS, Git, JIRA, Matplotlib, Numpy, AWS Dynamodb, Numpy, ExpressJs, BootStrap, Docker, Next JS, Pandas, Postman, Pytorch, React, REST, Scikit-Learn, Web API's