

Ryan Ho

ryanisho.com | github.com/ryanisho
rh564@cornell.edu | 609.553.9005

EDUCATION

CORNELL UNIVERSITY

BS IN COMPUTER SCIENCE

May 2025 | Ithaca, NY

GPA: 3.4 / 4.0

EGG HARBOR TOWNSHIP HIGH SCHOOL

June 2022 | Egg Harbor Twp, NJ

GPA: 106.500 / 100.000

LINKS

Portfolio:// [ryanisho](#)

GitHub:// [ryanisho](#)

LinkedIn:// [ryanisho](#)

COURSEWORK

OOP & Data Structures (Java)

Functional Programming (OCaml)

Analysis of Algorithms

Computer Systems/Organization

Machine Learning

Computer Vision

Data Science for Engineers

Probability and Inference

Discrete Structures

Linear Algebra

SKILLS

PROGRAMMING

Python • Java •

JavaScript/TypeScript • C++ • C •

Ruby • Go • PHP • HTML/CSS •

OCaml • R • SQL • Swift(UI) •

Kotlin • MATLAB

TECHNOLOGIES

React • Express • Next • Ruby on
Rails • Flask • Django • scikit-learn

• numpy • pandas • OpenCV •

TensorFlow • PyTorch • Mongo •

Dynamo • SQLite/SQLAlchemy •

Ubuntu • Vercel • Git/GitHub •

Docker • AWS/GCP

AWARDS

Z-Fellows Finalist • Ingenious+
Youth Innovation Challenge Winner

• 2022 BRH Hackathon: Best Hack
for User Accessibility • 2022 NJ

FBLA: 1st place Web Design

EXPERIENCE

CORNELL DATA SCIENCE | DATA ENGINEERING SUBTEAM

October 2022 – Current | Ithaca, NY

- Implemented motion-detection and bounding-boxes for facial recognition system in C++ using OpenCV to achieve low-latency capture and model prediction on images
- Engineered front-end for AI-focused mobile study app using Swift UI and React Native
- Created Flask web-app using CV and cosine similarity to detect hospital bill anomalies and generated analysis report resulting in up to 30% savings in healthcare costs
- Developed movie-recommendation system with PyTorch using both kNN and deep neural network classifiers achieving over 80% accuracy on validation

ALTUM LABS | SOFTWARE DEVELOPMENT INTERN

March 2023 – September 2023 | New York, NY

- Developed a Python .MZXML parser to extract compound ionization levels and peaks
- Designed database and access strategies using Supabase ensuring user-level security
- Created React application for users and optimized with SWR React hooks reducing data access latency by over 60% on common workloads
- Integrated backend using Express and Stripe API for secure user-payment handling

OKB HOPE FOUNDATION | SOFTWARE ENGINEER INTERN

December 2022 – January 2023 | Ithaca, NY

- Deployed app using MERN stack on Amazon EC2 to assist medical staff in Ghana
- Programmed server to store and process patient information using REST APIs
- Implemented an SSL certificate to secure API endpoint calls through Certbot/Nginx
- Collaborated directly with clients to prototype and design user-interface and developed functional and non-functional specifications

FREELANCE | FULLSTACK DEVELOPER

December 2019 – July 2023 | Remote

- Implemented a patient management system for a psychology clinic using Ruby on Rails
- Created web-app for restaurant using Django and integrated with Twilio SMS API
- Built web app to prepare people for quant finance interviews with React and Express
- Designed frontend for professional tutoring service using TypeScript, HTML, and CSS

PROJECTS

GOT | OCAML

December 2023

Developed a command-line version control tool in OCaml, incorporating file marshalling and serialization for project initialization, file staging, and commit management, along with features for branch handling and commit log viewing.

SAKURA | FLASK, PYTHON, OPENAI

November 2022

Created a Flask-based web application leveraging LLMs (OpenAI) to allow users to generate, analyze, and debug Python code with an aesthetically pleasing, user-friendly frontend.

X86 BOOTLOADER | x86, C++

July 2023

Designed and executed a display routine to output a greeting message and implemented disk operations to read multiple sectors all using a Global Descriptor Table for efficient memory segmentation and access control.