Ryan Ho

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EDUCATION

CORNELL UNIVERSITY
BS in Computer Science
Dec 2025 | Ithaca, NY
GPA: 3.7 / 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

CISCO | Software Engineer Intern
April 2024 – August 2024 | San Jose, CA
- Re-designed user interface with React/Tailwind and optimized API interactions through asynchronous functions.
- Optimized backend microservices in Golang for efficient VPC/VM metric retrieval across AWS, GCP, and Azure.
- Launched development of generative-AI based network proxy for dynamic network threat detection and mitigation.

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

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

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 LLVMs (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.