Ryan Ho

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EDUCATION

Cornell University, College of Engineering　　　　　　　　　　　　　　　Ithaca, NY
Bachelor of Science in Computer Science　　　　　　　　　　　　　　*Expected May 2025*
- Relevant Coursework: Algorithms, Functional Programming, OOP & Data Structures, Discrete Structures, Linear Algebra

Egg Harbor Township High School　　　　　　　　　　　　　　　Atlantic County, NJ
High School Diploma　　　　　　　　　　　　　　　　　　　*June 2022*
- Honors: 99th Percentile Class Rank, High Honors Varsity Scholar, National Honor Society (President), 500+ Service Hours

EXPERIENCE

Altum Labs　　　　　　　　　　　　　　　　　　　　New York City, NY
SDE Intern　　　　　　　　　　　　　　　　　　*March 2023 – Current*
- Developed a .MZXML mass spectrometer file parser which decodes raw files containing compound peaks and ionization levels
- Worked on an NLP sensory classification engine with visualizations using PyTorch and NLTK with a 98% accuracy rating
- Engineered a deep learning predictive model for drug discovery using Tensorflow & Python, increasing throughput by 35%

Axel.ai　　　　　　　　　　　　　　　　　　　　Ithaca, NY
Founding SWE　　　　　　　　　　　　　　　　*January 2023 – Current*
- Led the design and development of Axel.ai's proprietary platform using Django and React, hosted on Amazon AWS.
- Utilized AWS CloudWatch/Lambda for realtime monitoring and optimization, improving application performance by 40%
- Implemented a robust CI/CD pipeline using AWS CodePipeline and CodeBuild, reducing the code deployment time by 50% and ensuring a platform uptime of 99.9%.

OKB Hope Foundation: Hope Health Van　　　　　　　　　　　　　　　Remote
Backend Developer　　　　　　　　　　　　　　*December 2022 – January 2023*
- Deployed a back-end application leveraging the MERN stack on Amazon EC2 to assist medical professionals in Africa
- Programmed a server to receive, process, and store patient information while using REST APIs to perform back-end testing
- Implemented an SSL certificate to secure API endpoint calls, protecting over 30,000 weekly transactions through Certbot/Nginx, and employed Route53 to manage DNS for 50+ domains effectively

Rotary International: Egg Harbor Township Interact Club　　　　　　　Atlantic County, NJ
Fullstack Web Developer　　　　　　　　　　　　　　*June 2020 - June 2022*
- Completed a Flask-based project, hosted on Linode, which used SQL databases to fetch and manipulate member information
- Built and deployed a Dockerized microservice architecture, improving system scalability and maintaining 99.9% uptime
- Allowed for an accumulation of 800+ collective service hours between 300 members throughout the 2021 - 2023 service years

PROJECTS

claim.ai | *OpenCV, pandas, scikitlearn*　　　　　　　　　　　　　*May 2023*
- Web application which determines the authenticity of hospital bill charges through computer vision and machine learning
- Implemented cosine similarity algorithms to determine median price differences given procedure titles against public dataset

TrivAI | *Swift UI, React Native, AWS Lambda*　　　　　　　　　　*February 2023*
- Created a mobile application for both iOS and Android that leverages LLMs to generate questions and study materials
- Engineered a front end with custom components with both Swift UI and React Native, prioritizing AWS integration

Densetsu | *Python, Django*　　　　　　　　　　　　　　　*September 2021*
- Developed first-place winning full-stack web application for state-wide competition using Django and SQLite databases
- Employed Twilio API to create a call-fetch system that allowed users to receive real-time notifications for reservations

AWARDS AND CERTIFICATIONS

- Z-Fellows Finalist　　　　　　　　　　　　　　　　　　　*May 2023*
- Ingenious+ Youth Innovation Challenge Winner　　　　　　　　　　*March 2023*
- 2022 Big Red Hacks Hackathon: Best Hack for User Accessibility sponsored by Fidelity Investments　　*October 2022*
- First place at New Jersey Future Business Leaders of America's Web Design Contest　　　　*May 2022*

TECHNICAL SKILLS

Languages: Python, Java, HTML, CSS, JavaScript, Swift, SQL
Technologies: React (Native), Node, Express, Flask, Django, SwiftUI, pandas, scikit-learn, MongoDB
Developer Tools: Git, Docker, centOS, Ubuntu, Jupyter Notebook, Google Firebase, AWS, Linode, GCP