Aryton Hoi

Software Engineer

arytonhoi.me

% (603) 233-3081

github.com/arytonhoi

hoi.a@northeastern.edu

EDUCATION

Northeastern University / Boston, MA Khoury College of Computer Sciences 2017 - Expected May 2021

GPA 3.74

Bachelor of Science in Computer Science, Minor in Mathematics

Courses Web Development, Database Design, Object-Oriented Design, Networks and Distributed Systems, Algorithms,

Computer Systems, Graph Theory, Embedded Systems, Statistics, Multivariable Calculus, Differential Equations

Awards Dean's List, University Honors Program & Scholarship, HackMIT & YaleHack Award Winner

Leadership Managing Director of Application Development at DevelopForGood

SKILLS

Languages Python, Java, Javascript, HTML/CSS, MySQL, Matlab, C/C++

Technologies Git, React/Redux, Django, Node.js, Firebase, Jenkins, AWS S3, Kubernetes, Docker, Prometheus, Figma

WORK EXPERIENCE

BitSight / Software Engineering Co-op / Boston, MA

May 2020 - Present

Python, Django, Jenkins, AWS S3, Kubernetes, Prometheus, Grafana, OpenAPI

- Automated metric tracking by co-developing data collection and visualization tool using Jenkins, Python, and S3; integrated with Django for production database queries and Slack API for error alerts
- · Contributed to test suite runtime reduction of 50% by eliminating excessive Django queries and object creations
- Simplified API development by leading redesigns and implementations of configurable base test class, schema validation library, and interactive OpenAPI documentation

MIT Lincoln Laboratory / Software Engineering & Research Co-op / Lexington, MA

Jan 2019 - Sept 2019

Python, Matlab, Keras, Tensorflow

- Increased data pipeline capacity by 6,300% through Matlab library optimizations and automated data processing using bash scripts integrated with MIT's supercomputing cloud
- Enabled neural network development by building Matlab library to manually trace 3D axons and overlay tracings onto 3D brain volume
- Prototyped drone rescue system by integrating MIT's RoadTracer neural network to extract road graphs from aerial images and training neural networks on 70GB video dataset to locate civilians and classify health conditions

Northeastern University / Teaching Assistant / Boston, MA

Sept 2018 - Jan 2019

- Held weekly office hours for CS1800 "Discrete Structures" with peak capacities of ~50 students
- Graded ~20 assignments weekly and attended faculty meetings to discuss student feedback and course adjustments

PROJECTS

Cedars-Sinai Hospital Staff Portal / Software Engineering & Product Manager / Los Angeles, CA

Sept 2020 - Present

Javascript, React, Node.js, Firebase

- Saved hospital \$24,000 by building internal website using React, Node.js, and Firebase to improve staff access to information and allow managers to post procedures, guidelines, announcements, and events
- Reducing storage cost and browser load time by automating image upload resizing
- · Managing team of 5 part-time volunteer designers and developers to ship product in one semester

AirVisuals / Won "Best Website" at YaleHack2019

Oct 2019

- · Collaboratively built website to celebrate airline employees by visualizing positive reviews using React, Flask, and MySQL
- Designed and implemented MySQL database to store 10,000+ customers reviews across 6 tables

CounterPoint / Won 1st place "Best Use of Google Cloud" at HackMIT2019

Sept 2019

- · Collaboratively built website to combat media bias by suggesting opposing and neutral articles to any given online political article
- · Computed article sentiment and keyword analysis using Google's NLP API and fetched opposing articles using Google search API

ACTIVITIES

Involvement Hobbies

Develop For Good, Boston Youth Symphony, NEU Chamber Orchestra, Obstacle Race Course Training Violin, Swimming, Snowboarding, Mountain biking, Tennis, Origami, Ice skating, Cooking