

Aryton Hoi

Software Engineer

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EDUCATION

Northeastern University / Boston, MA
Khoury College of Computer Sciences
Bachelor of Science in Computer Science, Minor in Mathematics

2017 - Expected May 2021

GPA 3.74

Courses

Web Development, Database Design, Object-Oriented Design, Networks and Distributed Systems, Algorithms, Graph Theory, Computer Systems, Embedded Systems, Probability and Statistics, Multivariable Calculus, Differential Equations and Linear Algebra

Awards

University Honors Program and Scholarship, Dean's List, Google CodeJam2018 Qualifier, HackMIT & YaleHack Award Winner

SKILLS

Languages Python, Java, Javascript, HTML/CSS, MySQL, Matlab, C/C++
Technologies Unix, Git, React, Django, Firebase, Jenkins, Figma

WORK EXPERIENCE

BitSight / Software Engineering Intern / Boston, MA
Python, Django, Jenkins, Swagger / OpenAPI, AWS S3

May 2020 - Present

- Developing configurable internal metrics collection and visualization tool for PMs to track project impacts - to be built and integrated with Python, AWS S3, Jenkins, Graphana, and Prometheus
- Built Jenkins interface enabling non-technical employees to run complex backend commands, complete with local file upload to AWS S3, slack progress notifications, and output files delivered via email attachments
- Simplified API documentation validation by reducing Django endpoint test classes into one configurable base class and redesigning Python API validation library to support documentation upgrade to OpenAPI 3.0 - led entire project through proposals, implementation, and seamless integration into fast-paced development and deployment workflow

MIT Lincoln Laboratory / Software Engineering & Research Intern / Lexington, MA
Python, Matlab, Keras

Jan - Sept 2019

- Increased 3D brain data processing pipeline capacity by 6,300% and reduced pipeline to one bash command after learning Matlab and optimizing built-in library functions within a week
- Enabled development of neural network training data and evaluation metrics by building Matlab library to annotate 3D brain data and visually overlay 3D neural network axon tracings onto actual brain scans
- Developed proof-of-concept automated drone rescue system in Python by integrating MIT's RoadTracer neural network to extract road graph from aerial images and training other neural networks on 70GB dataset to locate civilians and classify their health conditions

PROJECTS

Cedars-Sinai Staff Website / Software Engineer & Product Manager / Boston, MA
Javascript, React, Node.js, Firebase

Aug 2020 - Present

- Building internal staff website for Cedars-Sinai non-profit hospital by designing hierarchical data structures optimized around Firebase's unfamiliar NoSQL database, designing and building Node.js API, and working closely with designers to build React frontend
- Ensuring website meets client requirements and managing team of 7 designers and developers by setting recurring team-client meetings to share progress and get feedback, planning weekly team meetings and project timelines, and tracking metrics to quantify website impact

AirVisuals / Won "Best Website" at YaleHack2019
Python, Javascript, MySQL, React, Flask, Google Cloud API

Sept 2019

- Built and co-designed website that highlights and visualizes positive airline customer reviews to emphasize employee appreciation value with 1 designer and 2 developers
- Self-taught fullstack introduction by designing and implementing both MySQL database to store over 10,000+ reviews in 6 tables and Flask REST API middleware, and building React frontend from mock designs

ACTIVITIES

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