John Ahn

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EDUCATION

University of British Columbia

Vancouver, BC

 $Bachelor\ of\ Computer\ Science$

Expected May 2024

• WAM/GPA: 86%

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C++, C, HTML/CSS

Frameworks: MySQL, Typescript, Redux, React, NodeJS, Flask, nginx, Maven, Git

EXPERIENCE

NetApp May 2022 - Sept 2022

Software Developer Intern

Vancouver, BC

- Worked to develop a native engine that provides real-time analytics of NetApp's distributed file system.
- Pinpointed software defects and worked alongside QA and SW teams on solutions and implementation.
- Collaborated with senior developers to improve the automated testing of Data ONTAP features in Python and Perl.

The Reliable, Secure, and Sustainable Software Lab

 $Jan\ 2021-Jul\ 2022$

Research Assistant (NSERC Research Award, IBM Center for Advanced Studies)

Vancouver, BC

- Researched novel methods to decompose monolithic applications to microservices.
- Engineered an unsupervised ML solution in Python to refactor Java monolithic applications into k-partitions (microservices), utilizing structural and semantic dependencies from the source code to find optimal microservices candidates .
- Developed a full stack web application with React and Flask to provide users a multifaceted view of different microservice recommendations of their application.
- Accepted research paper at the 38th International Conference on Software Maintenance and Evolution (ICSME), 2022 (23% acceptance rate).

UBC Sailbot Sept. 2019 – Dec 2021

Software Developer

Vancouver, BC

- Developed a full stack web application with React and FastAPI to monitor the sailboat's diagnostic data and GPS coordinates real time; stored the data in a MongoDB Atlas cluster.
- Implemented REST interface used to relay the boat's computed path between ROS nodes and a custom network table over ethernet and satellite.
- Constructed scripts integrated into system's CI to validate the path and integrity of transmitted data.

Projects

Neural Notes

- A Java Android app that reads and play-backs a musical score using machine learning.
- Designed and trained a Pytorch-based CRNN model to analyze and classify musical notation.

Snowball (nwHacks2021)

- An IOS virtual pet app developed in Swift.
- Implemented features so that the pet uniquely responds to different smartphone gestures/features such as touching, swiping, shaking, and voice recognition.

Insight UBC

- A full stack web application that allows users to effectively query historical grade distributions of courses on the UBC campus.
- Developed in Typescript using React and Express; verified correctness by creating test suites with Mocha and Chai.