Achinth Bharadwaj

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EDUCATION

University of British Columbia Expected: Apr 2023 | Vancouver, Canada
B.S. Combined Major in Computer Science and Statistics, Co-op
- Major GPA: **3.6/4.0**
- Coursework:
  - **Computer Science**: Intro to Systems, OOP, Intermediate Algorithm Design, Relational Databases, Intro to AI
  - **Statistics and Data Science**: Intro to Data Science, Probability, Inference for DS, Statistical Modelling
- Associations: UBC ultimate frisbee intramural champions, UBC Science Co-op candidate

EXPERIENCE

The University of British Columbia Oct 2020 – present | Vancouver, Canada
Undergraduate Student Researcher
- Conducting **exploratory data analysis** & assessment for **nonlinear modelling** of seismic resilience of infrastructure with **OpenSeesPy, NumPy and Matplotlib**

UBC Launch Pad Sep 2019 – present | Vancouver, Canada
Software Developer
- UBC's resident student-run software engineering **design team**
- Develop software products (including **Footprint** below) with 4 team developers across 4-8 month **agile sprints**
- Refined guidelines for team **project management, conducted UX research**, and aided in recruitment of candidates

The Boeing Company Jan 2020 – Aug 2020 | Vancouver, Canada
Software Engineering Intern, Digital Solutions and Analytics
- **Revitalized user experience** and **load time by 30%** for Boeing engineers by leading the redesign of a legacy operations dashboard using Vue and Node.JS
- Implemented a quality framework using **Pytest, Flask** and **Redis Queues** for a containerized web app to detect functional and database vulnerabilities in production, leveraging the **Tableau Server Client**
- Created and analyzed a proof-of-concept for a change point detection algorithm using **Prophet, R-changepoint** and **Tidyverse** on **Jupyter Notebooks** to aid in detecting changes in mean time series data

PROJECTS

Footprint Oct 2019 – Mar 2020
- Developed a **cross-platform** mobile application in **JavaScript** which aids users in tracking their ecological footprint
- Implemented **data visualization** and **analytics** pages using **React Native** and **Expo**, pulling from a native **Flask** API

Predicting cervical cancer in patients from lifestyle choices Oct 2019 – Dec 2019
- Analyzed a UCI Machine Learning cervical cancer dataset using **R** and **tidyverse**
- Tuned a **k-nearest neighbours** machine learning model to predict prevalence with an **86% accuracy**

Yogini Oct 2020
- Developed a **serverless web app** with **React** and **Next.js** to aid in online yoga instruction during the pandemic
- Implemented an **AR canvas,** a **pose estimator model** with **Tensorflow** and an algorithm to track **limb angles**

Wolfram Award: TypeMeNot2 Jan 2020
- **Top 15 programming projects at UBC's largest hackathon with over 300 participants**
- a real-time **input moderator** built as a Chrome extension, made with Node.JS and the Perspective API for **text analysis**

SKILLS

Languages: Python, Java, Javascript, R, Bash, C/C++, HTML/CSS
Tools and Frameworks: Vue, React, React Native, Git/Version Control, Pandas, Numpy, Tidyverse, Tensorflow, JIRA, Docker, Node.JS, Flask, PostgreSQL, Go (currently learning), MongoDB (currently learning)

AWARDS

Youth Good Neighbour Award May 2018
Association of Neighbourhood Houses of British Columbia
- Awarded with the Burnaby Neighbourhood House for creating a youth leadership and empowerment program for elementary school students