Achinth Bharadwaj

EDUCATION

University of British Columbia ∂

Expected: Apr 2023 | Vancouver, Canada

B.S. Combined Major in Computer Science and Statistics, Co-op

- Coursework:
 - Computer Science: Intro to Systems, OOP, Intermediate Algorithm Design, Relational Databases, Intro to Al
 - 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

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

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

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