# **Achinth Bharadwaj**

## **EDUCATION**

#### University of British Columbia &

Sep 2018 – Apr 2023 | Vancouver, Canada

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

- Computer Science courses: Object-oriented Construction, Data Structures and Algorithms, Introduction to Computer Systems, Introduction to Databases, Introduction to Artificial Intelligence
- Statistics and Data Science courses: Introduction to Data Science, Introduction to Probability, Statistical Inference for Data Science, Statistical Data Analysis
- Associations: UBC ultimate intramural champions, UBC Science Co-op

**Stanford University** 

Jun 2020 – Aug 2020 | Coursera

Machine Learning

# **EXPERIENCE**

#### **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 old and introduced new guidelines for team **project management** and aided in recruitment of candidates

#### The Boeing Company ∅

Jan 2020 – Aug 2020 | Vancouver, Canada

Software Engineering Intern

- Revitalized user experience and load time by 30% by leading the overhaul and redesign of a legacy operations dashboard web app using **Vue.is** and **Node.is** to serve Boeing factory engineers
- 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 **R-Prophet**, **R-changepoint** and **Tidyverse** on **Jupyter Notebooks** to aid in detecting changes in mean time series data
- Interfaced with development and quality teams to define requirements and documentation for current projects

#### **PROJECTS**

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

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

TypeMeNot2 

Jan 2020

- Utilized Google's Perspective API in order to determine input text toxicity for automatic moderation
- Built a Google Chrome extension using JavaScript and Node.JS

# Predicting cervical cancer in patients from lifestyle choices $\mathscr D$

Nov 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

## **SKILLS**

Languages: Python, Java, Javascript, R, Bash, C/C++, HTML/CSS

**Frameworks and other technologies:** Vue, React, React Native, Git & Github, Flask, Jupyter, OpenCV, Pandas, Scikitlearn, Tidyverse, Node.js, PostgreSQL, Unix, JIRA, Docker, Redis, Firebase, Tensorflow

# **AWARDS**

Wolfram Award Jan 2020

nwHacks 2020

- Top 15 programming projects at UBC's largest hackathon with over 300 participants
- Won for the project "TypeMeNot2" above

# **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