Achinth Bharadwaj

achinth@student.ubc.ca | +1 (778) 319-8140 | achinth | achinthb | achinth-b | Vancouver, BC

Education

BSc. Combined Major in Computer Science and Statistics, Co-op — Expected Apr 2022 | Vancouver, Canada
University of British Columbia

- **Major GPA: 3.5/4.0**
- **Coursework**:
  - **Computer Science**: Software Engineering, Algorithm Design, Relational Databases, Artificial Intelligence
  - **Statistics and Data Science**: Probability, Inference for Data Science, Regression, Machine Learning

Experience

Covalent — Incoming, May 2021
Software Engineer Intern, API — Vancouver, Canada
Covalent is a leading DeFi startup building an API for blockchain assets backed by Binance, Coinbase and Hashed.

University of British Columbia — Oct 2020 – Feb 2021
Undergraduate Student Researcher — Vancouver, Canada

- **Implemented a strength versus deformation curve** by conducting exploratory data analysis of seismic resilience data from ageing infrastructure with OpenSeesPy, Numpy and Matplotlib
- Built a **logistic regression model** with 11 features to estimate probability of resilience under earthquake duress
- Conducted literature reviews on the use of ML algorithms for modelling nonlinear seismic strain

The Boeing Company — Jan 2020 – Aug 2020
Software Engineering Intern, Digital Solutions and Analytics — Vancouver, Canada

- **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
- **Relieved major bugs by creating a framework** to verify authorization permissions, visualizations and database integrity using Pytest, Flask and Redis Queues for a Dockerized web app, leveraging the Tableau Server Client
- **Created a proof-of-concept for a changepoint detection** algorithm using Prophet, R-changepoint on Jupyter Notebooks to detect changes in mean time-series data
- Wrote **configuration & migration YAML scripts** to automate workflows and continuous integration on Azure cloud pipelines for data science projects

Involvement

UBC Launch Pad — Sep 2019 – Jan 2021
Software Developer — Vancouver, Canada

- **Co-developed 'Footprint', a cross-platform mobile app** to aid users in tracking their ecological footprint
- Implemented data visualization and analytics pages using React Native and Expo, pulling from a Flask API
- Refined project management guidelines, conducted UX research and managed recruitment for the design team

Projects

Wolfram Award: TypeMeNot2 — Jan 2020

- **Top 15 programming projects at UBC's largest hackathon** with over 400 participants
- a real-time input moderator built as a Chrome extension with Node.JS and the Perspective API for text analysis

Cassava Leaf Disease Detection — Jan 2021 – present

- **Utilized transfer learning from ResNet50** to build a classifier to detect four types of diseased cassava leaves
- Cross-validated images for accuracy and achieved an 82% accuracy using Keras, Tensorflow and Numpy

Yogini — Oct 2020

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

Skills

Software: Python, JavaScript, Java, Git, Bash, Vue, React & React Native, C/C++, Docker, Node, Flask, AWS
Data: R, PyTorch, Tensorflow, Keras, Pandas, Numpy, SK-Learn, Matplotlib, Tidyverse, OpenCV, MongoDB, SQL