Achinth Bharadwaj

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Education

BSc. Combined Major in Computer Science and Statistics, Co-op Expected 04.2022 | 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

University of British Columbia 10.2020 – present | Vancouver, Canada
Undergraduate Student Researcher

- **Implemented a strength versus deformation curve** by conducting exploratory data analysis of seismic resilience data from ageing infrastructure with OpenSeesPy, Numpy and Matplotlib
- Conducting literature reviews on the use of ML algorithms for modelling nonlinear seismic strain

The Boeing Company 01.2020 – 08.2020 | 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
- **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

Involvement

UBC Pandas 12.2020 – present | Vancouver, Canada
Founder and Chancellor-President

- **Leading a core team of 5 to found** and stipulate UBC's **first and only** data and ML design team
- Dedicated to facilitating growth in aspiring data scientists and ML engineers by providing a space to develop skills by engaging in Kaggle projects, full-stack ML apps and showcases

UBC Launch Pad 09.2019 – 01.2021 | Vancouver, Canada
Software Developer

- **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

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

Projects

Wolfram Award: TypeMeNot2 01.2020

- **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 01.2021 – 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 10.2020

- **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