Jayant Bhardwaj



in /Jayant-Bhardwaj \$\cup +1-604-404-2790

⇔ Skills

Programming Languages C, C++, Java, Python, JavaScript, HTML, CSS, Verilog, Assembly: x86-64, ARM **Frameworks and Tools** PyTorch, OpenCV, Android Studio, JSON, REST API, Spring Framework, Spring WebFlux, Redis, Mockito, Numpy, Pandas, Flask, Kivy, Git, MATLAB, Google Colab, IntelliJ, Raspberry Pi, Linux/UNIX



University of British Columbia

2018 – Present

Bachelor of Applied Science, Computer Engineering, 4th Year

Vancouver, BC



Royal Bank of Canada (RBC)

Sep 2021 – Present

Software Development Engineer (Enterprise Services)

Toronto, ON

- > Working on microservices using Spring Boot and Spring Webflux
- > Ensured robust RESTful APIs by unit testing and fully mocking depending services and databases

Seahawk Robotics

May 2021 - Sep 2021

Software Engineer Intern

Vancouver, BC

- > Developed GUI to accommodate for the sensor upgrades to SeaHawk's multi-domain UAV-based ocean observation system
- > Successfully added support for multiple video streams to the UAV's ground control system

Astin Analytics

Aug 2020 - Mar 2021

Software Engineer Intern

Vancouver, BC (Remote)

- > Implemented a solution for mass thermal scanning and attendance with a team of developers
- > Learnt and worked with the OpenCV, Numpy, Flask and Pandas frameworks
- > Developed a web application using Python that displayed the camera feed and attendance
- > Developed and maintained automated tests for unit testing using PyUnit

C.O.D.E Hack Hackathon

Jul 2020 - Aug 2020

Senior Technical Advisor

Remote Work

- > Established a streamlined system for automating tests and expedite evaluation of the code submitted
- > Trained staff to use Git in order to effectively assist participants during the event

UBC Advanced Research Computing (ARC)

Summer 2019

Teaching Assistant

Vancouver, BC

- > Learned about the applications of High Performance Computing (HPC) and Digital Research Infrastructure
- > Provided assistance to the researchers with command line and Python in order to access the HPC resources

Smarter.Codes Nov 2017 – Dec 2017

Android Developer Intern

Bangalore, India

- > Implemented a chat-bot using REST APIs and JSON
- > Parsed the outputs and presented it the form of text and speech using the Android TTS library
- > Unit-tested the code for robustness, including edge cases, usability, and general reliability



MeMeow: ML based Cat Meme Generating Android App

Tools: Android Studio, Java, XML, PyTorch, Sentiment Analysis, Pandas, NLP, Google Colab, Transfer Learning, LSTM/RNNs

- > Text Sentiment Analysis model classifies the caption entered by the user and creates a cat meme based on that. Used text embedding to improve efficiency and created an LSTM-based model in order to account for the overall context of the input; achieved validation accuracy in the high 90s
- > Image Classifying model recognizes the sentiments of the cat in order to bring you an interesting meme. Used ResNet18 trained on cats and humans using SGD; achieved a high validation accuracy

Debugger for y86-64

Tools: C, Ubuntu, y86-64

O

> Implemented a GDB-like debugger for y86-64 written in C and y86-64, similar to what GDB does for programs written in C. It supports commands like 'quit', 'step', 'run', 'next', 'jump X', 'Registers', 'Break X' etc.

Mediator Service and Server for Wikipedia

Tools: Java, FSFT Buffer, ANTLR, JSON, JWiki API, IntelliJ

()

> Implemented a server application that wraps the mediator service capable of processing multiple client requests simultaneously, using JSON to exchange information and ANTLR to parse requests

Weather.io

Tools: HTML, JavaScript, ReactJS, CSS

> The perfect weather widget made using ReactJS and RESTful API integration