Veer Bhatia

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EDUCATION

University of British Columbia

Aug. 2020 – May 2024

Bachelor of Science in Computer Science and Mathematics

Vancouver, BC

• Relevant Coursework: Software Engineering & Design Lab, Software Construction, Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Embedded Systems, Discrete Math, Software Architecture

TECHNICAL SKILLS

Languages: Go, Java, Python, C, C++, JavaScript, TypeScript, SQL, C#, HTML/CSS, Rust

Frameworks/Libraries: React, NodeJS, Express, Flask, OpenCV, PyTorch, Firebase, TensorFlow, Spring, Django Developer Tools: AWS, Docker, MongoDB, Heroku, Azure, Kubernetes, PostgreSQL, Android Studio, JIRA, Git

EXPERIENCE

RBC Capital Markets

Sep. 2022 – Dec. 2022

 $Incoming\ Software\ Engineer\ Intern\ -\ Electronic\ Trading\ Platform\ Team$

New York, NY

Royal Bank of Canada

May 2022 - Aug. 2022

Software Engineer Intern

Toronto, ON

- Carbon Advisor Team; Led development on responsive full-stack React application and interactive dashboard to measure compute carbon impact of physical and virtual on-premise software for 10,000+ daily active users
- Developed a machine-learning recommendation engine using a microservice architecture containerized on OpenShift that provided app-specific carbon emissions reduction recommendations to clients in real time (< 1 sec)
- Engine developed in Python with Flask API with a data pipeline including vROps and PostgreSQL
- Designed RESTful and scalable API (NodeJS, Express, MongoDB) built for SaaS which passed extensive security review for use on RBC's Apigee external environment using OAuth 2.0 and integration with VMWare
- Filed a **provisional patent** application for the solution with expressed interest from senior executives and estimated \$275,000 in cost savings and identified 9,806+ underutilized servers reducing over 40,651 grams/kWh of CO2eq emissions per year

Cognistx AI Sep 2021 – Dec. 2021

Software Engineer Intern

Seattle, WA

- Developed API Endpoints within a Microservice Architecture with Java, Spring, and Jersey
 - Created Exception Mappers to increase security in API responses
 - Automated significant amount of End-to-End and integration testing in development applications with Typescript, Selenium, and Webdriver reducing vulnerabilities and code smells by over 90% across five microservices
 - Improved resiliency by identifying and fixing bugs in integration tests
 - Automated advanced data queries in SQL in AI-enabled applications reducing data processing times by $\sim 15\%$
 - Built CI/CD pipelines with Groovy and Jenkins for triggering test automation in deployment process

Projects

Bucket Model | Python, Jupyter, Azure, Firebase, PostgreSQL, Git

Dec. 2021 - Mar. 2022

- Trained and developed a per-player three-pointer accuracy odds determining Machine Learning model based on 41.8k basketball statistics, using PyTorch and Azure Data Classification Tool
- Deployed a program to utilize model to estimate outcomes to every match and statistical over/under accuracy odds for the next year and estimated 11% greater odds of return when compared to in-game field goal odds

Sign Language Interpreter | Python, Azure, TensorFlow, Scikit-learn React

Jan. 2021 - May 2021

- Machine Learning Model trained using 3000+ images from Kaggle for interpreting sign language hand gestures
- Used Azure along with TensorFlow is used to train the RNN with 78% accuracy and interactive frontend using React, Redux, and Materials UI Library with integrated component-based unit testing
- Explored modern neural network architectures, image classification algorithms, and efficient data streaming

Orwell Project | Swift, Objective-C, MongoDB, React Native, Android Studio

Sep. 2020 – Jan 2021

- Collaborated with designers and engineers from different teams to revamp the mobile client to better visualize data from new NoSQL database schema
- Solved critical bug affecting 200+ clients through implementing the MVC design pattern on legacy Swift codebase to identify and fix vulnerability