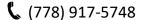
ARUNAB SINGH



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ArunabSingh

EDUCATION

British Columbia Institute of Technology

Grad. May 2023

Diploma, Computer Systems Technology (Computer Science); Co-op Student

Clubs: Senior Student Mentor for Coding Club (2022); Vice-President for CodingForAll Club (2023)

WORK EXPERIENCE

British Columbia Institute of Technology

Jan 2023 - Present

Research Assistant

Vancouver, BC

- Built Neural Networks in **Python** with **PyTorch** that detect Mobile Malware with 96.4% accuracy using features extracted from reverse engineered **Android** App APKs.
- Reduced processing times by 10x through recursive implementation of **Java** methods for extracting essential features from binary manifest and Dex files within Mobile APKs.
- Conducted an in-depth analysis of various Mobile Malware Analysis and Detection Techniques by synthesizing and summarizing numerous research articles.

Realtor.com Jan 2022 – Aug 2022

Software Engineer Intern

Vancouver, BC

- Developed and maintained testing environments by utilizing Jenkins, Docker and Shell Scripts that ran automated integration tests with every PR and QA build.
- Successfully integrated testing environments in over 10 microservices, resulting in a reduction of bugs and crashes in both production and QA environments by 40%.
- Designed and implemented AWS Serverless functions using tools such as Lambda, Step Function and API Gateway to automate recurring tasks used in the onboarding of 30,000+ customers.
- Created modular Page Object Models in Typescript using Playwright and utilized them in writing UI integration tests with over 80% code coverage.
- Achieved runner-up out of 80 submissions in the company's annual hackathon by collaborating with a team to implement a video chat feature using **React** and **Twilio**.

British Columbia Institute of Technology

Sep 2021 – Nov 2021

Math Peer Tutor

Vancouver, BC

- Answered students' questions about the lecture and clarified tough concepts.
- Supported students for the following classes: Calculus I, Calculus II, Elementary Statistics, Linear Algebra.

PROJECTS

2D Chess / Github

- Built a 2D Chess game in Java with Object Oriented design principles and an attractive interface with Swing.

NBA Predictor / Github

- Developed an NBA game winner prediction model with 65% accuracy using Python and Scikit-Learn.
- Optimized feature selection using cross-validation and feature importance analysis.

CampMonk | Github | Website

- Created a campground review platform with JavaScript and NodeJS.
- Integrated Passport middleware, Mapbox API for map display, and Cloudinary for media storage.
- Developed a robust **REST** API using **Express** and implemented CRUD operations with **MongoDB**.

TECHNICAL SKILLS

LanguagesJava, Python, JavaScript, Typescript, C/C++, SQL, MongoDBWeb DevelopmentDjango, React, Node.js, Express.js, REST, GraphQLTools/TechnologiesAWS, Jenkins, Docker, Git, Splunk, Split.ioTesting/DebuggingJest, Mocha, JUnit, Playwright, Selenium, Postman