

ARUNAB SINGH

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TECHNICAL SKILLS

Languages	Java, Python, JavaScript, Typescript, C
DBMS	MongoDB, DynamoDB, SQL, Firebase Database
Libraries/Frameworks	React, NodeJS, Express.js
Tools/Technologies	REST, GraphQL, Jenkins, Docker, Git
Testing/Debugging	Jest, JUnit, Playwright, Selenium, Postman

EXPERIENCE

British Columbia Institute of Technology

Jan 2023 – Apr 2023

Research Assistant (Part-time)

Vancouver, BC

- Building Machine Learning models to detect Mobile Malware using features extracted from reverse engineering Mobile App APK Archive.
- Wrote a comprehensive taxonomy about Mobile Malware Analysis and Detection Techniques used in the last decade.

Realtor.com

Jan 2022 – Aug 2022

Software Engineer Co-op — AWS Serverless, Typescript, DynamoDB, Playwright, Jest

Vancouver, BC

- Built a system with Jenkins, Docker and Shell Scripts that ran automated integration/end-to-end tests with every PR build. Later, integrated this system in over 10 microservices as it significantly reduced bugs and crashes in the PROD and QA environments.
- Wrote over 10 functions utilizing AWS Serverless tools like Lambda, StepFunction and API Gateway for executing recurring tasks.
- Migrated automated integration tests from the original monolith application to a microservice in the Product Decoupling Project while ensuring over 90% code coverage.
- Created reusable and scalable Page Object Models with Playwright to utilize them in writing UI integration tests for multiple repositories.
- Runner-up in the company annual hackathon by working in a pair to implement a video chat feature on dashboard.
- Contributed and asked relevant questions in all scrum events and participated in code reviews.

British Columbia Institute of Technology

Sep 2021 – Oct 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

SkillMeet | React, JavaScript, Firebase, Material UI

May 2021

- Collaborated to create a social media app that connects people based on their technical skills and hobbies.
- Responsible for writing API calls to Firebase, creating database schemas and performing CRUD operations.
- Integrated 3rd party APIs to connect users to their social media accounts mainly Twitter and Facebook.

2D Chess | Java, Swing GUI

Aug 2022

- Built a 2D Chess game by following Object Oriented Principles in Java and creating responsive UI with Swing.

CampMonk | NodeJS, Express, MongoDB, JavaScript, Heroku

July 2021

- Built a yelp like review website for campgrounds where users can find/add/delete/review campgrounds.
- Created a robust REST API with Express and added Authentication & Authorization with Passport Middleware.
- Utilized Mapbox API for displaying location and cluster maps, also added image upload and media storage feature.

EDUCATION

British Columbia Institute of Technology

Jan 2021 - May 2023

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

- **Clubs:** Senior Student Mentor for Coding Club (2022), Vice-President of the Coding-4-all Club (2023)