# HMAD MASUD

Burnaby British Columbia, Canada

#### **EDUCATION**

**Simon Fraser University** 

Bachelor of Science in Computer Science (Co-op)

- Dean's Honor Roll
- Computer Science: Data Structures and Algorithms, Software Engineering, Computer Systems, Database Systems
- Mathematics: Discrete Mathematics, Differential/Integral Calculus, Linear Algebra, Probability and Statistics

#### TECHNICAL SKILLS

Languages: Python, Java, C++, SQL, HTML/CSS, JavaScript, Typescript, MATLAB, RISC-V, Markdown

Tools/Libraries/Frameworks: Git, React, Spring Boot, Node.js, pandas, NumPy, JUnit Testing, Agile, Gatsby.js, Django

Applications: NetBeans, VS Code, Excel, Adobe Photoshop, Blender, IntelliJ IDEA, Slack

### TECHNICAL PROJECTS (view more at <u>ahmadmasud.com</u>)

**Database Schema Constructor** | *JavaScript*, *React*, *Firebase*, *Node.js*, *jsPlumb* 

Mar 2024

Expected Graduation: December 2027

Cumulative GPA: 3.20/4.00

- A web application that allows users to create complex database schemas and export them as SQL queries
- Used Firebase user authentication and Firestore to allow users save their databases in the cloud for ease of access

**Quant Market Predictor** | Python, numpy, pandas, matplotlib, skicit-learn

Feb 2024

- Analyzes a Linear Regression model to predict future stock prices using historical market data from yfinance
- Estimates the volatility of stock by calculating the standard deviation of its market price fluctuations
- Leveraged Python's unit testing library and GitHub workflows to ensure production-ready code

RateRover | JavaScript, React, Axios, openexchangerates

Jun 2023

- A React application that makes an external api call using axios to allow users to convert between global currencies
- Optimized cache usage and minimized server requests to obtain a lighthouse performance score of 99

**Sorting Visualizer** | *Java, JUnit Testing, Swing, Maven* 

Jan 2023

- A Java application that uses a frame and bars to visualize the different routines of popular sorting algorithms
- Implemented bubble sort, selection sort, insertion sort, merge sort, and quick sort using object-oriented design

### EXTRACURRICULAR/VOLUNTEERING EXPERIENCE

# SFU OSS Development Club

Dec 2023 - Present

Software Developer

Burnaby BC, Canada

Developed the backend of an NBA Statistics application using Django resulting in a 30% increase in performance and enhanced real-time reporting capabilities for NBA statistics and player performance metrics.

**Pocket Pinata Interactive** Feb 2021 - Mar 2021

Game Tester

Remote

- Collaborated as a team to find in-game bugs efficiently resulting shorter game launch timelines
- Utilized Slack to communicate with team members, resulting in effective project coordination

VikingsDev Teaching Assistant Sep 2021 - June 2022

• Teaching assistant for a high school club aimed at teaching beginners how to program in Python

Burnaby BC, Canada

- Taught syntax of Python and useful programming concepts resulting in an increased interest in coding

## WORK EXPERIENCE

Kumon Teaching Assistant May 2023 – Dec 2023

Burnaby BC, Canada

- Guided students in learning Calculus, Algebra, Trigonometry, Reading, Writing, and Poetry
- Graded student work and provided input for improvements, increasing student productivity and learning