# Samuel Habib

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### SKILLS

Languages: Python, Ruby, C, C++, C#, Java, JavaScript, Typescript, Perl, PHP, SQL, HTML/CSS, XML, Groovy Frameworks/Tools: AWS, Nodejs, Reactjs, Flask, Unity, Docker, MATLAB, SocketIO, Bootstrap, Git/Github, JIRA, VS code, Visual Studio, Confluence, SSH, Vim, SCP, Bash, Linux, Google Cloud Platform, Arduino, Jenkins, JQuery, NLP

#### EXPERIENCE

**Amazon** May 2023 – Sept 2023

Software Development Engineer Intern

Toronto, ON

- Designed and built a comprehensive end-to-end project, leveraging AWS services SQS, DynamoDB, DAX, SNS, VPC
- Utilizing Kotlin developed a partitioning mechanism to distinguish between data types, enhancing data accuracy by 90%.
- Effectively managed data storage, implementing DAX caching strategies that reduced costs by an impressive 45%.
- Managed the entire **project cycle**, integrating it into the team's system, ensuring no latency, and achieving **zero** delays
- Established CloudWatch alarms and custom real-time dashboards to monitor p90, max, min and average metrics
- Designed CDK infrastructure to be easily configurable for future datasets, ensuring scalability and adaptability.
  Introduced the capability of handling over 2 billion records per hour in the largest dataset using AWS services.

### AMD (Advanced Micro Devices)

May 2022 - May 2023

Software Engineer Full Stack Intern

Toronto, ON

- Built auto-scaling and self-healing back-end using Ruby & YAML performing Regression tests of 1k+ tests in parallel.
- Leveraging Ruby to develop services boosting work efficiency by 70% through automation of CI/CD logging pipelines.
- Creating a gateway for parsing and filtering log files using REGEX, further standardizing the current logging dashboard
- Implementing Agile methodology's best practices that increase software delivery processes' speed by 50%.
- $\bullet \ \ \text{Developing and maintaining $PHP$ front-end code relaying data to $MySQL$ back-end utilizing $REST$ $API$ requests.}$
- Utilizing JIRA and communicating with other engineers to monitor and resolve various issues in the back-end.
- Using SSH, Vim, SCP, and BASH, through remote Linux environment monitoring deployment process and debugging.

# Projects

## **2D Action Game** | C#, Unity, Photoshop

- Developed a 2D multi-level game that allows your character to freely move in an environment and shoot projectiles
- Utilized the Unity engine to construct script API in C#.
- Leveraged A.I. dependencies to create enemies with various difficulties, designed a user-friendly GUI utilizing PhotoShop
- Developed a robust algorithm to generate dynamically changing levels using C#.
- Collaborated with a colleague to compose numerous **OOP** scripts and debug code on visual studio code utilizing **C**#.

#### Retail Store DBMS Application | Java, Python, SQL, React, Flask, HTML/CSS, Git/GitHub

- Created an eCommerce application using SQL and Java that pulls information from a computerized database.
- Utilized SQL developer connected to Oracle, to construct a database and used queries to retrieve data within the DB.
- Developed a user-friendly interface using **React** & **Flask**, and implemented software design patterns to improve scalability
- Designed the database with various relations with appropriate key values, constraints, and data types.
- Implemented various functionalities such as search items, categories, discounts, and inventory.

### Interactive Drawing Game - Skribble Guess | NodeJS, ReactJS, SocketIO, HTML/CSS, JavaScript, Git/GitHub

- Utilized NodeJS, ReactJS, and SocketIO to create an online multiplayer drawing game.
- Developed an interactive and visually appealing User-Interface using HTML, CSS, and JavaScript.
- Created and Implemented various Unit Tests to ensure that each part of the application is working as intended.

#### Book Store Application | Java, JavaFX, Git/GitHub

- Developed a functional bookstore application using Java with an admin and customer portal.
- Incorporated features such as searching for books, adding customers to the database, and a functional reward system.
- Designed and created a user-friendly interface for various parts of the application using JavaFX

#### **EDUCATION**

# Toronto Metropolitan University

Toronto, ON

B.Eng Computer Engineering, CGPA: 3.90

Aug 2019 - May 2024

 $Relevant\ Courses$ : Digital Systems  $\bullet$  Software Systems  $\bullet$  Data Structures and Algorithms  $\bullet$  Object-Oriented Analysis and Design  $\bullet$  Database Systems I  $\bullet$  Microprocessor Systems  $\bullet$  Signals and Systems I  $\bullet$  Computer Visions  $\bullet$  Computer Networks