Aarham Haider

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TECHNICAL SKILLS

Languages: C#, Rust, C, C++, Python, Typescript(React, Vue.js), SQL (PostgreSQL, SQL Server), Bash, MATLAB

Platforms and Tools: Git, Linux, Windows, Microsoft Azure, JIRA, Docker, Jest, NUnit, Selenium, CMake

EDUCATION

Simon Fraser University   **Expected Graduation: May 2025**

Bachelor of Science in Computing Science

GPA: 3.75/4.33

EXPERIENCE

Junior Application Developer   **Jan 2023 - Aug 2023**

Modrinth Inc.   *New York City, NY, USA*

- Spearheaded the transition of Modrinth Theseus from **Electron.js** to **Tauri**, shrinking binary sizes by **37%** and enhancing performance by reducing RAM usage by **63%**.
- Constructed native **plugins and API's** in **Rust** in order to conduct identity management services, such as user registration, authentication, and dynamic package displays based on user profile.
- Maintained **QA** standards by building **unit and integration** tests cases for **Vue.js GUI** project files using **Selenium**.
- Accelerated application delivery by advocating for the employment of **Docker**-based deployment.

CS Campus Tutor   **Sep 2022 - Dec 2022**

Simon Fraser University   *Burnaby, BC, CA*

- Collaborated with a tutoring team to lead practice labs for first year computer science students.
- Developed testing scripts using **Python** and **C** to automate the marking process, regularly completing marking ahead of the due date.
- Earned a **95%** approval rating based on end-of-semester surveys from participating students.

PROJECTS

Command Line Chatter   **Oct 2023**

Academic Project | Github   *C | Linux | Pthreads | Sockets*

- Collaborated with a classmate in building a multithreaded chat application via CLI between two remote machines.
- Designed two sets of read and write **threads** to handle protocol steps as isolated tasks, leveraging concurrency.
- Employed the use of **mutexes** and **conditional variables** within the **Pthreads** library to regulate access to critical sections and ensure thread safety.
- Operated communication protocol by calling and processing requests over a **UDP** connection.

PalmPlayer   **Mar 2023 - Jun 2023**

Personal Project | Github   *C# | .NET WPF | SQLite | NUnit*

- Developed a native desktop music player application in **C#** and **.NET WPF** which supports MP3 playback, custom playlists, and YouTube downloads, providing an alternative solution to browser based launchers such as Spotify.
- Employed **SQLite** and **Entity Framework** to efficiently fetch and store over **100** playlists within a local database.
- Conducted thorough **unit testing** of classes with the **NUnit** testing framework, assuring program correctness.
- Leveraged **MVVM** design and **SOLID** OOP principles to construct modular and scalable code.