Hamza Saqib

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Education

Bachelor of Computer Science **Sept. 2019 – Expected Apr. 2024**
University of Waterloo *Waterloo, ON*

Technical Skills

- **Programming Languages:** C, C++, Python, Java, Kotlin, JavaScript, HTML/CSS
- **Frameworks/Libraries:** Django, Express, ReactJS, React Native, Redux, REST, SQL

Experience

Newton **May. 2022 – Aug. 2022**
Software Developer *Remote*

- Implemented frontend features for the cryptocurrency exchange ReactJS web app & React Native mobile app
- Utilised AWS Lambdas to implement a "sort coins by most watched" feature from design to deployment for over 500k users, winning second place in company hackathon for Most Impactful to Customers category
- Partook in effort to migrate email delivery service from Mailgun to SendGrid by porting existing emails & writing logic for new emails (e.g. Withdrawal Complete, Unrecognized Device Login) in the Django backend
- Worked on LVCT ($10k+ transaction) & Travel Rule report generation to comply with FINTRAC regulations

Sony Interactive Entertainment **Sept. 2021 – Dec. 2021**
Software Developer in Test *Waterloo, ON*

- Collaborated with developers and project managers in an Agile team to improve the PS4/PS5 console stores
- Designed test cases with maximum requirement coverage and meticulously documented them on qTest
- Automated 30+ test cases in the Pytest framework applying object-oriented programming principles
- Conducted regression testing for three PS5 OTA updates through a Jenkins continuous integration pipeline
- Independently wrote an office-wide automation tool in Python to automatically run regression test suites on a developer PR by making qTest API calls, editing JenkinsFile, modifying JSON objects, and more

SAP **Jan. 2021 – Apr. 2021**
Quality Engineering Automation Developer *Waterloo, ON*

- Worked in a QE team closely with developers to ensure stability and reliability in every SAP HANA release
- Wrote test plans for new features and manually tested 100+ cases for Database Explorer, Web IDE & Cockpit
- Automated test streams via Selenium WebDriver for Python to identify performance and usability issues
- Constructed a framework with Python to test various web applications in Mozilla Firefox using GeckoDriver
- Reduced automation test case run time by 15% through code optimization in the automation setup process

Projects

WLP4 Compiler – *C++* **Completed in 2021**

- Developed a compiler which scans, parses, performs context-sensitive analysis (including type checking), and generates MIPS assembly code for WLP4, a simplified C++ language containing a strict subset of features

Minecraft Clone – *Java* **Completed in 2020**

- Utilised object-oriented programming to co-develop a remake of the sandbox game from scratch
- Constructed a 3D game engine by implementing ray casting in the 2D libGDX framework

Terraria Clone – *Python* **Completed in 2019**

- Implemented the Pygame library and NumPy arrays to program an open-world side scroller survival game with procedurally generated terrain, unique hostile mobs, character customization, and more

Paint Program – *Python* **Completed in 2019**

- Built a graphics editor with similar functionality to Microsoft Paint and the ability to save and load images