

Joshua Saikali

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Education

Bachelor of Computer Science, Cybersecurity Stream
Carleton University – 3rd year – GPA: 11.37/12 (A+)

Sep. 2021 - Present (Expected Apr. 2026)
Ottawa, ON

Available for 4 or 8 months starting January 2025

Skills

Programming: Python, Java, C++, C, JavaScript

Technologies: Git, Docker, SQL (MariaDB, Postgres), NoSQL (MongoDB), Jenkins, Wireshark

Tools: BitBucket, GitHub, Jira, Confluence, VS Code, PyCharm, IntelliJ, Netbeans

Languages: English, French

Experience

Routing/IP Software Engineer | Ciena

Apr. 2024 - Aug. 2024

Python, Docker, Git, Unix/Linux, Bitbucket, Jira, Confluence, Jenkins, PyCharm

Ottawa, ON

- Designed and developed **Python automation scripts** to streamline **debugging and triage** for dataplane features (EVPN, Multicast, L3), **reducing triage time up to 1000%**
- Contributed to **redesigning the dataplane test suite (DPTS) infrastructure**, which enhanced overall reliability and **reduced execution time by approximately 40 hours**
- **Migrated** automated nightly **regression tests (DPTS)** from **cron** to **Jenkins** by taking the **initiative** to streamline the process, resulting in consistent testing of the latest code-base and **improved overall reliability**
- Gained hands-on experience with **router and switch operating systems**, including **5164 routers, 3924 platforms** and more, managing **Docker containers** across multiple environments for optimized operations
- Worked closely with various members across the organization to align on project goals and integrate solutions effectively via **MS Teams, Jira, and Confluence**

Software Developer | SimFront Simulations

May 2023 – Dec. 2023

Java, MariaDB (SQL), Maven, Git, IntelliJ, NetBeans, Jenkins, VSphere, Windows

Ottawa, ON

- Developed and integrated a bring your own acceptance tests (BOAT) builder feature for Wringer, combining **Java** and **MariaDB** for a seamless **GUI** and **back-end** experience
- Executed comprehensive **integration** and **acceptance tests** on VCCI (Virtual Command and Control Interface, is used to support simulation-based training to the military) software components using Wringer, identifying areas for improvement and enhancing overall software reliability
- **Troubleshoot** and **debugged** issues related to VCCI and Wringer, specializing in GUI issues and addressing intricate thread-related challenges for improved software stability using **Java**
- Enhanced **information security** for sensitive military data on CAST WG web portal using **WordPress**, ensuring **data confidentiality**

Projects

Neurofeedback EEG Simulator | Lead Software Developer | C++, Qt, Git, GitHub

Apr. 2024

- **Led a team** of software developers in **designing** and **developing** a Neurofeedback EEG Simulator, capable of **analyzing brain waves**, identifying the most dominant frequency band, and applying targeted treatment cycles
- Participated in an **agile software development lifecycle**, contributing to the creation and implementation of use cases, UML class diagrams, UML sequence diagrams, and state diagrams
- Applied **advanced design patterns** such as Observer to handle the **multithreaded** nature of the application and Mediator to decouple system components and streamline object interactions

Network Traffic Analysis Tool | Python

Jun. 2023

- Developed a packet sniffer in **Python** to perform real-time monitoring of network traffic, providing detailed insights into packet headers, payload structures, and network protocols, including analysis of **IP/TCP**, and **UDP** packets

Rocket League Plugin | C++

Jul. 2023

- Built a plugin using **C++** and the BakkesMod SDK to automate freeplay loading post-game, enhancing user's training efficiency through an **object-oriented** approach