Nicole Malku

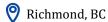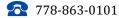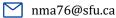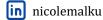📍 Richmond, BC   ☎ 778-863-0101   ✉ nma76@sfu.ca   in nicolemalku   ○ 00nicole

Skills

Programming Languages: Python, C, Java, C++, TypeScript, JavaScript, SQL HTML, CSS
Libraries/Frameworks: React.js, JUnit, Tkinter, Tesseract, Pytest
Databases: SQLite, MongoDB
Developer Tools: Visual Studio Code, Git, Jira, Maven, Figma, Confluence

Experience

Netgear | Software Test Engineer Co-op   May - Dec 2024

- Identified, documented, and analyzed software defects, collaborating with development teams to troubleshoot and verify bug fixes on the Mobile Hotspot devices
- Implemented and maintained automated test scripts in Python, streamlining test procedures while enhancing test coverage and software reliability
- Authored comprehensive test plans as the UI Test Lead, documented detailed testing procedures on Confluence, and delivered clear and actionable test reports to ensure seamless functionality and usability.

Projects

Convertly | *Python, Streamlit, Tesseract, CSS*

- Developed a currency conversion application that integrates OCR technology with Open Exchange Rates API to detect prices from camera input, perform real-time currency conversions
- Implemented efficient image processing using OpenCV and Tesseract OCR to extract monetary values from live image frames, improving accuracy by comparing scanned prices across consecutive frames
- Designed a multi-page Streamlit application with custom CSS styling, interactive navigation, and session state management, enabling both manual and camera-based currency conversion

Let's Talk! | *C*

- Built a peer-to-peer communication application, enabling real-time text-based conversations between two terminals over a network
- Implemented multi-threading with POSIX threads, UDP socket communication, and effective synchronization
- Managed message queues between threads by designing and implementing a statically allocated linked-list data type

Alien Escape | *Java, Maven, JUnit*

- Collaborated in a team of 4 to design and implement a 2D arcade-style game in Java, encompassing player control, dynamic enemy behaviour, and interactive reward systems
- Executed full-stack game development, neatly integrating a graphical interface, user input, and backend logic for a cohesive gaming experience
- Applied rigorous testing by meticulously crafting test cases to ensure reliability and functionality for users

Rentzy | *TypeScript, React, MongoDB*

- Developed a full-stack rental marketplace web application, seamlessly integrating user account functionality by enabling users to create profiles, list items, and manage reservations
- Utilized MongoDB for efficient data storage, ensuring a responsive and scalable platform
- Enhanced user experience through advanced filtering options for listings based on object categories, dates, and location preferences

Education

Simon Fraser University   Sep 2021- Dec 2026
BSc in Computing Science
Dean's Honour Roll