

# BRADLEY MCFADDEN

Sudbury, Ontario

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<https://github.com/bradley-mcfadden>

## CORE COMPETENCIES

- Able to work independently with little direction, or as part of a team
- Able to communicate technological concepts clearly and effectively
- Strong organizational skills
- Strong attention to detail and concern for maintainability
- Able to troubleshoot problems and apply problem solving skills to understand issues
- Able to meet deadlines and work under pressure
- Interest in continuous learning of new technologies and professional skills
- Able to research many solutions to a problem before choosing the appropriate solution
- Most comfortable working with regular direction and clear requirements

## TECHNICAL SKILLS

- Very comfortable programming in object oriented languages such as Java, Python, and C++
- Comfortable working with UI frameworks including the Android framework, Java Swing, or Qt
- Very familiar with standard Java libraries
- Comfortable working with SQL and databases
- Comfortable working with version control systems such as Git
- Comfortable with solving problems using trigonometry and/or linear algebra
- Comfortable working in a Linux environment and on the command line
- Some experience using build tools such as Gradle and Ant
- Some experience with continuous integration/deployment tools such as Jenkins
- Some experience working with graphics technologies such as OpenGL, and HLSL
- Some experience working in a limited-resource, embedded environment

## EDUCATION

**Laurentian University**, Sudbury, ON

*Bachelor of Science, Major in Computer Science*

2018-2022

- My main areas of interest included user interfaces, game design, and performance

## PROFESSIONAL EXPERIENCE

### **Jannatec Technologies**, Sudbury, ON

*Intermediate Developer*

May 2021- Present

- Worked extensively in an Android and embedded environment to develop critical safety-related applications
- Contributed to the design of a modular system for Android and embedded ESP-32 applications
- Designed responsive, robust user interfaces for Android applications
- Designed and implemented a variety of peripherals into a collision avoidance system, including backup cameras, sensors, and vehicle status monitoring systems
- Created proof-of-concept systems for customer demonstrations
- Responsible for creating user manuals, or explaining potential solutions at a high level
- Worked with a variety of communications systems including UART, CAN bus, Bluetooth, MQTT protocols, and event queues
- Experience working in a multi-threaded environment, including using IPC, tasks, and real-time operating systems
- Performed system testing to measure system reliability, performance, and ensure freedom from runtime errors
- Responsible for performing research tasks involving comparing possible solutions to a problem and presenting to the team
- Created thorough and extensive documentation for both users and developers

### **Ingenious Countermeasures Technologies Inc.**, Sudbury, ON

*Software Developer*

March 2020-February 2021

- Worked with Python, Qt, Bash, and MySQL to engineer and implement a robust RF-sniffing application running on a mobile Linux device
- Worked with multi-threading to create an efficient, responsive user interface with minimal delay
- Wrote tools to assist development tasks, including a web scraper to download cell band data, and automatically insert scraped content into a database, and an application installer
- Created tools for users to export summarized reports for each day from a database into a document file using Python and MySQL
- Incorporated a wide variety of different modules into the system including Bluetooth scanning, GPS, and various RF applications including LTE, GSM, and WiFi
- Worked with some open-source repositories including GNURadio to learn about flowgraphs
- Used Git and other version control applications to maintain an understandable code history