



# Matthew do Santos-Zounon

▪ matthewsantos314@gmail.com    ▪ 647-622-5879    ▪ mdsz.ca    ▪ github.com/Zounon

## Tech Skills

- Comfortable with development Linux, Bash scripting
- Novice in C++ (Studying Koenig, Moo's "Accelerated C++")
- Proficient with Python and data science packages

## Personal Projects

### Static and Dynamic ARM/Thumb Emulation

- Studied ARM/Thumb emulation to understand the behavior of firmware.
- Used QEMU with a custom cross-compiler toolchain to run static and dynamic x86-ARM emulation

### Simple SLAM

- Researched and built real time Simultaneous Localization and Mapping (SLAM) system using Python with the goal of writing code that will help others learn how a SLAM system works.

### AI Chess

- Researched machine learning and tested knowledge by building an AI chess engine, implemented in Python.

### MIT 6.S191 – Introduction to Deep Learning

- Completed 12 Lecture course learning to build neural networks in TensorFlow. Topics include deep reinforcement learning and deep generative modeling.

## Professional Experience

### Jr. Software Systems Tester

May 2022 – December 2022

- Carefully executed tests, presented test reports, was a crucial member in making decisions about a firmware's release.
- Used firmware analysis tools RadRare2 and Ghidra to find crucial security vulnerabilities. Presented my findings along with a how-to document allowing others to reproduce my results.
- Wrote Bash scripts which ran packet captures and logged data that was crucial for understanding and quickly debugging the system under test.
- Spent off-work time building tools that improve the speed and reliability of tests and reading code written by our developers to better understand our product

### IT Assistant, GreenLaFleur Homecare

August 2021 – November 2021

- Designed a webapp that would resolve issues with employee efficiency and improve quality of life
- Created a prototype of my webapp implemented in a MERN stack
- Demonstrated self-learning skills in learning and applying the MERN stack with little prior knowledge

Used effective time management to balance approximately 30 hours per week of work alongside a full-time course load.

## Additional Experience

### Irrigation Technician, The Garden Irrigation Inc

May 2019 – December 2020

- Worked with a team to efficiently install commercial irrigation systems.
- Carefully listened to clients' needs and made decisions to resolve any issues and ensure their satisfaction.
- Provided training to 3 entry level employees ensuring that they understood the requirements of their task, how to complete effectively and supported as needed.

## Education

### Simon Fraser University – Burnaby BC

B.Sc. Computing Science (intended), 2021 – Present

### York University – Toronto ON

2018 – 2021