

# JONATHAN PAPINEAU

@ hello@jpapineau.ca  
github.com/jonapap

Ottawa, Canada  
jpapineau.ca

in linkedin.com/in/jonathan-papineau

## EXPERIENCE

### Software Developer

#### Ross Video

January 2022 – Present Ottawa, Ontario (Remote)

- Worked as part of the Ross Video softGear team to develop a software media processing platform.
- Designed and implemented a central feature for shared memory management.
- Wrote extensive documentation throughout the design process and during the implementation.
- Worked with various modern C++ features such as smart pointers, atomics, concurrency, etc.

C++ Linux Docker Make

### Software Developer

#### Solace

May 2021 – August 2021 Ottawa, Ontario (Remote)

- Worked as part of the Mission Control team of Solace Cloud to package Solace's event-broker for the cloud.
- Resolved various bugs that were directly impacting customers.
- Developed various new features intended for the Production Engineering team.
- Gained skills in working and debugging a large enterprise application that uses micro-services.

Kubernetes GCP Java Spring Linux JavaScript

### Back-End Developer / System Administrator

#### 021 Technologies

May 2020 – August 2020 Ottawa, Ontario (Remote)

- Built from the ground up and maintained a fault-tolerant web service hosted on AWS.
- Gained communication skills by giving presentations to team members and writing various reports.

AWS NGINX Apache Java Node.js MySQL Linux

## SKILLS

### Programming Languages

Proficient: C++ Rust Python Java

Familiar: JavaScript Go SQL

### Programming Tools/Software

Git Vim JetBrains IDEs AWS Android Dev LaTeX

Regex Embedded Linux

## EDUCATION

### Honours Bachelor of Science in Computer Science (Co-op) & Minor in Physics

#### University of Ottawa

2019 – 2023

## PROJECTS

### Avionics Software Lead

#### uORocketry

2021 – Ongoing Ottawa, Ontario

- Avionics Software Lead of the uORocketry team since May 2022.
- Currently designing and developing avionics to control the uORocketry's rocket for Launch Canada 2022.
- Designing communication solutions to safely and reliably control a rocket and various other components remotely.
- Learned to work with limited time and resources.

C++ Linux Embedded Arduino  
Raspberry Pi CMake

### CAN-RGX Competition

#### uORocketry

2019 – 2021 Ottawa, Ontario

- Part of the uORocketry team that won the 2021 Canadian Reduced Gravity Experiment Design Challenge.
- Built a Python app in charge of collecting sensors' data, monitoring an experiment, and controlling various elements on user request.
- Built the app to be reliable, organized, and have a strong logging system to identify issues quickly.
- See code on Github (github.com/uorocketry/can-rgx).

Python C++ Linux Embedded  
Raspberry Pi PCB

### Home File Server (NAS)

#### Personal Project

- Built a computer to function as a personal NAS using OpenSUSE Leap and Btrfs.
- Gained experience using Unix-like operating systems.
- Used a combination of KVM machines and Docker to run services.
- Used Traefik and Nginx to expose various services locally to the internet or to the local network.
- Configured the firewall and services to protect the server against threats from the internet.

Unix Linux KVM Networking  
Docker Traefik