# Ming Rui Zhang

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# TECHNICAL SKILLS

• C++17, C, Qt, Python, OpenGL, Gerrit, Jenkins, React

# **WORK EXPERIENCE**

#### Savoir-faire Linux (Jami), Montreal - Software Developer

MAR. 2019 - DEC. 2021

- Designed and Developed Jami clients on multi-platform.
- Maintained and managed the CI/CD systems for Jami clients.
- Participated in QML migration for Jami clients.
- Assisted the adaptation of Jami dependencies to build natively on Windows.

#### E-Innovation, Montreal - Automation Developer Intern

MAR.2017 - AUG. 2017

- Cooperated with a Mechanical Engineering student to automate the sealing and taping progress
  of making a new type of electrode.
- Designed a system based on 3D printed parts and circuits controlled by certain logic uploaded in the Arduino Uno logic board.
- Wrote Arduino code and designed circuits by using electronic devices which include step motor, motor driver, switches, relays, etc.
- Wrote weekly documents which include the progress, the design, and the logic of the system and present to the project manager in weekly presentations.

# ACADEMIC PROJECTS

### **OpenGL Based Mini DNF Like Game**

JUNE - AUG. 2022

- Designed and created a 2D game based on pure OpenGL and some third-party libraries.
- The game contained one main character for the player to use, one type of monster, and one NPC.
- Some UI elements, including dialog boxes, buttons, etc., were also implemented.
- The video presentation could be found <u>here</u>.

#### IoT – Sensor Data Management from Hardware to Cloud

Nov. - Dec. 2017

- The system aimed to send recorded audio data from the programming board over the BLE (Bluetooth Low Energy) connection to the smartphone device. This data was saved as a file in the smartphone and uploaded to a cloud device.
- Implemented sound recording, board interconnections, and BLE hardware part in Embedded C.

# Circuit Modelling & Simulation Project

SEP. 2017-MAY. 2018

- Developed a program that can read a relatively simple circuit netlist and convert it into a Modified Node Analysis (MNA) equation in matrix form.
- By using the MNA information, it could perform DC, frequency domain, and sensitivity analysis and show the results in the written GUI.

## **EDUCATION**

#### McGill University, Montreal Quebec

SEP. 2014 - MAY. 2018

• B.E. in Electrical Engineering

• GPA: 3.56/4.00

#### University of Waterloo, Waterloo, Ontario

- MEng in Electrical & Computer Engineering
- Software specialization

MAY. 2022