# NICOLAS DEKLEN CROCKER

@ deklen.crocker@outlook.com

**3** 825 333 4907

in NDCrocker

NDCrocker

### **EDUCATION**

### Bachelor of Science in Electrical Engineering **University of Alberta**

Sept. 2018 - Current

Edmonton, AB

- MacEwan First-Year Engineering Transfer Program (2018-19)
- Graduation Date: November 23, 2022

• Relevant Coursework:

Digital Logic Design

**Control Systems** 

**Digital Electronics** 

**Embedded System Design** 

Integrated Circuit Design

Intelligent Systems Engineering

# **WORK EXPERIENCE**

### Project Assistant (Summer Internship)

#### **Government of the Northwest Territories**

**Apr.** 2019 - Aug. 2021

Inuvik. NT

- Streamline information from project officers to regional projects manager by building and upgrading tools using Visual Basic for **Applications**
- Manage and maintain project budget and status information for over 100 projects in the Beaufort Delta, and Sahtu regions
- Complete audits of multi-year projects to assist project officers in settling disputes with contractors
- Technologies: Access, Excel, SQL, VBA

# COVID-19 Response Public Health Officer

### **Government of the Northwest Territories**

May 2020 - Aug. 2020

Inuvik, NT

- Protect the community of Inuvik from exposure to COVID-19 by processing individuals entering the community via airplane
- Direct and provide required information to visitors ensuring correct isolation procedures were followed

# **PROJECTS**

### Classroom IoT Carbon Dioxide Sensor (Capstone) **University of Alberta**

**Sept.** 2021 - Apr. 2022

Edmonton, AB

- Design a battery recharging circuit using Lithium-Polymer and NiMH battery topologies for a portable device
- Develop a smartphone application to interface with our device to provide a more fluid and controlled user interface
- Coordinate regular meetings between the group, the client and technical advisors throughout project stages
- Technologies: BLE, Dart, Flutter, KiCAD

# **SKILLS**

### Languages

C++ Dart LaTeX **MATLAB** VBA **VHDL** 

#### Tools

Cadence Virtuoso Git **KiCAD** Logic Analyzers **LTSpice** 

# **EXTRACURRICULARS**

### Member

### **University of Alberta Powerlifting Association**

Feb. 2022 - Present

Edmonton, AB

- Grow the club by marketing club perks and activities to entice individuals to join
- Plan and schedule social events with members of the club

### Member - Electrical Team

#### AlbertaLoop

June 2022 - Present

Edmonton, AB

- Reduce the error occurring within kalman filter and coordinate system conversion of the navigation module to improve the accuracy of the position estimator of hyperloop pod.
- Technologies: C/C++

#### Member

#### **Father Patrick Mercredi RSports Team**

- **■** Sept. 2015 May 2016 Fort McMurray, AB
- Built and enhanced robots for multiple high school robotics competitions (VEX, FRC)
- Learned how to follow basic design processes to develop effective robots for the required tasks
- Competed in the FRC Stronghold World Championships in St. Louis