# 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

• Graduation Date: November 23, 2022

• Relevant Coursework:

Digital Logic Design C

**Control Systems** 

**Digital Electronics** 

Embedded System Design | Integrated Circuit Design

Intelligent Systems Engineering

## **WORK EXPERIENCE**

#### **ADD JOB TITLE**

## Jones Microwave Inc.

Aug 2022 - Present

Edmonton, AB

- Build a market survey analysis for power management ICs to provide the most effective power supply for a PCB
- Develop further background theory in the physical attributes of components to develop the most effective PCB design

## Project Assistant (Summer Internship)

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

**Apr.** 2019 - Aug. 2021

- Inuvik, NT
- Streamline information from Project Officers to Regional Project 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

## **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 chemistries for a portable device
- Develop a smartphone application to interface with sensor 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 C++ Dart LaTeX MATLAB
Python SQL VBA VHDL

#### **Tools**

Cadence Virtuoso Git KiCAD

Logic Analyzers LTSpice Qucs Studio

## **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

- Improve precision of hyperloop pod's position estimator by reducing errors in the Kalman filter and coordinate system conversion modules
- Technologies: C++, Python

#### 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
- Technologies: C++, easyC