NICOLAS DEKLEN CROCKER

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EDUCATION

Bachelor of Science in Electrical Engineering
University of Alberta

📅 Sept. 2018 - Nov. 2022 📍 Edmonton, AB

- **Relevant Coursework**:
  Digital Logic Design   Control Systems   Digital Electronics
  Embedded System Design   Integrated Circuit Design
  Intelligent Systems Engineering

WORK EXPERIENCE

Embedded System Developer
Jones Microwave Inc.

📅 Aug 2022 - Present 📍 Edmonton, AB

- Review dozens of potential laser drivers for viability in custom PCB design
- Research further background theory in the physical attributes of VCSELs and laser diodes for their successful implementation in a PCB.
- **Technologies:** Qucs Studio, Laser Diodes, VCSELs

Project Assistant (Summer Internship)
Government of the Northwest Territories

📅 Apr. 2019 - Aug. 2021 📍 Inuvik, NT

- Automate preexisting VBA tools to shorten information sharing process between Project Officers and Regional Project Manager by multiple days across entire team.
- 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 power management 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

EXTRACURRICULAR

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