

# Tahseen Intesar

Electrical / Computer Engineering Student

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Calgary, AB, Canada

## Education

University of Calgary

*Expected April 2023*

BSc. in Electrical Engineering, Minor in Computer Engineering

- **Cumulative GPA:** 3.545/4.0
- **Relevant Coursework:** Data Structures and Algorithms, Principles of Software Development, Operating Systems, Digital Systems Design, Digital Electronics Circuits, Communication Systems and Networks, Embedded Systems, Engineering Ethics

## Experience

**Petro-Techna – Instrumentation & Controls Co-op**

*Aug. 2021 – Dec. 2021*

- Cross-checked Control System Architecture with Control Panel Drawings, I/O Lists and Assignment, and Junction Box Wiring Diagrams for Vendor quotations.
- Updated and checked Instrument Indexes, Hook-up Drawings, Instrument Datasheet with sizing calculations, and Cause and Effect Diagrams across multiple Crude Desalting projects.
- Assisted in preparing Tie-In Point Lists, Alarm Setpoint Lists and Line Designation Tables under guidance of a Process Engineer.
- Collected design data for a Research and Development software interface that analyzes CO<sub>2</sub> emissions from 10+ desalting packages.

**EPC Technical Services – Volunteer**

*Jun. 2020 – Aug. 2020*

- Reviewed Piping and Instrument Diagrams (P&ID) and Instrument Loop Diagrams for a Gas-Oil Separation Plant under guidance of a professional engineer.
- Created Instrument Index, I/O List, and Cable Schedule tables in Excel.

**Schulich Ignite – Student Mentor**

*Sept. 2019 – Dec. 2019*

- Managed a cohort of 5-10 students and oversaw their learning of programming basics.
- Encouraged students to develop solutions using object oriented and iterative practices.
- Collaborated with senior mentors and provided feedback to improve the learning environment.

## Projects

**Supply Chain Management System**

*Mar. 2021 – Apr. 2021*

- Developed an inventory management system in Java that facilitates the ordering of parts from a MySQL database at 30% efficiency.
- Demonstrated proper documentation of code, and constructed UML class diagrams.
- Created unit tests for each Java class using JUnit and JDBC frameworks.

**Handheld Gaming Device**

*Jan. 2021 – Apr. 2021*

- Built a handheld gaming device that runs simple games using an Arduino microcontroller.
- Tested display graphics and related peripherals using Arduino library functions.
- Demonstrated proper documentation and written communication of project specifications.

**Digital Dashboard**

*Sept. 2018 – Dec. 2018*

- Created a simulation of a car dashboard that responded to simulated vehicle data with visual graphics.
- Read Excel files containing 150+ vehicle data entries using file handling functions in Processing 3.

## Technical Skills

**Languages**  
**Frameworks and Tools**  
**Embedded Systems**  
**Electronic Tools**  
**Miscellaneous**

C, C++, Java, JavaScript, Python, MATLAB, VHDL, MIPS Assembly  
Azure, MongoDB, Node.js, React.js, SQL Server  
Arduino, Raspberry Pi, PIC, ESP32  
Oscilloscope, Multimeter, Function Generator, Soldering  
Agile Methodology (Scrum), Unix/Linux, Git, AutoCAD