MICHAEL BASKHAIROUN

Mississauga, ON. 647-550-5617 baskhaim@mcmaster.ca michael-baskhairoun-a60981149

HIGHLIGHTS OF QUALIFICATIONS

- Graduated McMaster University Electrical Engineering.
- Excellent communication, and leadership skills demonstrated through projects, work experience, and extracurricular involvements.
- Proficient in reading and designing electrical schematics and wiring diagrams.
- Excellent at troubleshooting and isolating problems using troubleshooting techniques like drawing analysis.
- Experience with Tele-protection equipment gained through engineering internship.
- Experience with circuitry and logic systems gained through academic course and lab work.
- Experience with various coding languages learned through academic course work, and individual learning.
- Experience in internet communications gained through academic work.
- Excellent written and fluent verbal communication skills in English and Arabic.

EXPERIENCE

Tele-protection Engineering Intern — July 2020 – August 2021

Hydro one, Toronto, ON

- Prepared drawing markups and schematics for various tele protection equipment.
- Coordinated outages for stations to facilitate in servicing and out servicing equipment by ensuring redundancy and back up connections using power line schematics for area in scope (Eastern Ontario).
- Prepared equipment and station to station schematics and wiring diagrams for field workers to apply.
- Created settings for tele protection equipment, according to relevant drawings and requirements.
- Upgraded and repaired defective aspects of the company's software (cable ordering software, and circuit tracking database) using VBA.
- Worked with PLC (Power Line Carrier) systems, copper mediums (S4T4 circuits) and fiber optics to communicate protection protocols between stations.
- Conducted site visits to assess and test pre-existing and potential equipment.

EDUCATION

Bachelor of Engineering, Electrical Engineering — September 2017- May 2022

McMaster university, Hamilton, ON

- Enrolled in the 5-year Engineering with Co-op program at McMaster University.
- Relevant courses: *Energy Conversion, Communication systems, Power systems, Image processing, Advanced Internet Communications and Machine Learning.*

SKILLS

Programming:

Software:

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- Java, JavaScript, C, MATLAB, Python, VBA
- Autodesk Inventor, AutoCAD, HMI 570, Meridian, Microsoft Visio, Arduino, Pspice, Solid Works

Laboratory:

- Soldering and wiring circuits using PCBs, breadboards, and jumpers.
- WHMIS trained
- Oscilloscopes, function generators, and multimeters

TECHNICAL PROJECTS

3D Printed Bionic Arm (capstone)

Fall 2021-Winter 2022

- Awarded first place out of 200 groups for a robotic design university wide.
- Awarded first place for best use of additive manufacturing out of 50 groups faculty wide.
- Working in a team of five members to fully design and build a prosthetic arm using (type of) technology, for trans radial amputees (amputated from elbow down).
- Conducted market research to identify competitors in the market as well as the technologies existent.
- Designed a hand model that mimics the geometry of a real hand to give the users a real hand-like experience.
- Isolated and solved multiple problems faced during the design process leveraging troubleshooting skills.
- Used microprocessors to program the circuitry driving the arm to enable movement in the prosthetic hand.

Grade Retrieval Serial App

Winter 2022

- Used python coding language to design a serial server and application sides for Advanced internet communications course.
- Designed the server to store student grades and communicate with the application through a set of commands that are transferred as bytes.
- Built the serial application to transmit and receive data bytes (execution commands, and authentication) to the server and receive data relevant to those commands.

Garbage Disposal Arm

Fall 2017

- Worked in a team of 4 students to design and build a motorized electronic arm that aids a disabled patient in disposing their garbage.
- Used an Arduino microcontroller to build and program the circuitry of the device.
- Used Autodesk Inventor to design and 3D print a claw that attaches to a servo motor to grab the garbage bag.