

Yash A. Bhavsar

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<https://www.linkedin.com/in/yash-bhavsar-75a0081b8/> | <https://yashexe.github.io/Yash-Bhavsar-s-Portfolio/>

Education

McMaster University | Hamilton, ON

B.Eng. in Electrical Engineering, GPA 3.4

September 2020 – Present

Expected Graduation, May 2024

Skills

Programming: C++, C, Python, JavaScript, HTML, CSS, Verilog, MATLAB

Platforms: VSCode, Eclipse IDE, Github, Jupyter Notebook

Hardware: Raspberry Pi, Analog Discovery 2, TI MSP432E401Y microcontroller

Software: Microsoft Office, Altera Quartus II, Keil uVision 5, LTspice, Waveforms, Realterm

Experience

Grey-Bruce Telecoms | Owen Sound, ON

July – September 2022

Technical Representative

- Identified and solved variety of client issues involving hardware (router, PoE, CPE, towers) and cable misuse/faultiness
- Initialized wireless and fibre connections on administrative side by accessing IP addresses and connecting to local towers
- Utilized geographical data to test feasibility of secure wi-fi connections to remote locations/properties and relayed information to clients.
- Managed all client's banking information, past invoices, and future payments/account changes

TJX Canada | Brampton, ON

May – July 2022

Data Entry Clerk

- Created, organized, and transferred information from paper documents onto database systems
- Routinely created excel-based reports quantifying production and quality of barcodes

Projects

Lidar-Based 3D Hallway Mapper

Winter 2022

Individual, Microprocessor Project Course

- Used C in Keil to activate and rotate a LiDAR sensor, capturing segments of a hallway that are virtually displayed
- Utilized Python to organize and display data from LiDAR sensor and microcontroller
- Communicated between devices and PC using UART and C2C protocols

Website/Portfolio

Winter 2022

Personal Project

- Created an interactive HTML and CSS based website displaying my personal and school related projects
- Programmed an animated background using JavaScript comprising of 3 different layers

Automated System for Sterilizing Surgical Tools

Winter 2021

Coordinator, Integrated Engineering Projects Course

- Applied Python using a Raspberry Pi to design and develop a program that can move and manipulate the features of a robotic arm in Quanser Interactive environment
- Planned weekly meetings with the group and presented developments to the rest of the class

Activities

McMaster University | Hamilton, ON

Fall 2022– Present

Maction Club Member, Software Team

- Applied React.js and Node.js to create a GUI capable of tracking nicotine levels sent through an Arduino
- Executed C code compiled into an Arduino to control an injection needle at varying intervals

Relevant Coursework

Circuit Testing: Design of complex circuits through breadboards and LTspice; Analysis done through Waveforms, utilizing oscilloscope, and manipulating input voltage waveforms

Microcontroller Testing: Execution of C code created and pushed from PC; data sent to Realterm for visualization and debugging purposes through I2C protocols