# YOUSIF FADHEL

ELECTRICAL AND BIOMEDICAL ENGINEER
*Mississauga, Ontario L5B 4A1*
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## TECHNICAL SKILLS

**LANGUAGES:** JavaScript, Python, C, C++, HTML/CSS, MATLAB, Latex
**Algorithms and Data Structures:** Stacks**,** Queues, Bubble & Sort, Inheritance, Singly & Doubly Linked Lists
**Technical Skills:** Circuit design, Oscilloscope understanding, PCB layout, 3D printing, FPGA Design
**TOOLS:** Git, Adobe Photoshop, Autodesk Inventor (AutoCAD), Microsoft Excel, Microsoft Word, Microsoft PowerPoint, AD2, PSpice, Quartus

## EXPERIENCE

**Team Lead**                                                                       Mississauga, Canada, Feb. 2021 - Aug 2024
- In charge of coordinating park rotations, assuring park attractions are safely monitored, assigning closing tasks to coworkers, and scheduling breaks.
- Developed excellent leadership and customer service skills ensuring satisfaction of all customer visits.

**Audio-Visual Club**, *Executive*                                              Mississauga, Canada, Oct. 2020 - June 2022
- Operated stage lights, soundboards, and microphones for several stage performances in fast paced work environments

## PROJECTS

**Personal Website (CSS/HTML/JavaScript) -** Website
- Built a website using HTML and CSS from scratch utilizing bootstrap elements and hosted on GitHub
- Created a dynamic Projects section that features academic and independently developed projects
- Incorporated problem-solving skills to ensure intuitive user interaction with the website

**Snake (C/C++)**
- Programmed a unique version of the popular snake game from scratch using high level OOD through C++
- Learned how to optimize code time complexity through asymptotic analysis and appropriate algorithm application
- Learned how to work cooperatively on code at a high level of efficiency

**Automated Inhaler (Python) –** Autodesk Viewer
- Built a prototype of a wrist attached inhaler using a cam and follower mechanism on **Autodesk Inventor** and a **Raspberry Pie** programmed in python as the brains of the machine
- Depicted leadership by managing a group of 4 peers and delegating the workload according to individuals' areas of expertise
- Created a complex moving .IAM file that incorporated several different individual parts that are accurately constrained

**Hip Implant Prosthetic (Python)**
- Created a prototype of a hip implant with a shape that was designed to specifically accommodate for aseptic loosening
- Uses a **python** program that would suggest dimension parameters based on calibration questions
- Further enhanced my skills with CAD, Autodesk Inventor and 3D-printing

## HONORS & AWARDS

**Engineering Award of Excellence**
- Offered a $3000 scholarship in recognition of academic success from my enrollment into McMaster University

## EDUCATION

**McMaster University**                                                                     Sept. 2022 - April 2027
Bachelor of Electrical Engineering – Biomedical Engineering CO-OP
**Relevant Course Work**: AI-Innovative Technologies (A+), Statistical Methods BME (A-), Biochemistry (A+), Mechanics (A-)