# Mohamd Imad

Mississauga Ontario, Canada

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#### **TECHNICAL SKILLS**

Languages/Technologies: Linux, Python, Javascript, HTML, CSS, Git, SQL, MATLAB-Simulink

Software/FEA Solvers/tools: AutoDesk Inventor, SolidWorks, ABAQUX/Explicit, dSPACE/ Control Desk, Vspy3

#### **EXPERIENCE**

#### **Controls and Diagnostics Software Test Engineer** | General Motors - Oshawa, Ontario

Apr 2022 - Present

- Responsible to develop test plans and conduct the tests for vehicle On Board Diagnostics (OBD).
- Utilizing Python and MATLAB-Simulink to automate the testing and diagnostics of Diagnostics Trouble Codes (DTCs) in HIL benches (PHS/SCALEXIO) and in pre-development production approved vehicles.
- In charge of building testings scripts using VSP3 to test the Body Control Module (BCM).

### **Tool Design Engineer** | Castelar Tool and Grinding - Mississauga, Ontario

Aug 2021 - Apr 2022

- Developed temples for custom made cutting tools using VB's ilogic feature in Autodesk Inventor.
- Designed costume made tools and fixtures.
- Prepared detailed engineering drawings for the various manufacturing stages cutting tools must undergo to be manufactured.

#### **Research Assistant** | University of Ontario Institute of Technology - Oshawa, Ontario

Sept 2018 - Jun 2021

- Developed a novel numerical model that analyzed cutting inserts of indexable milling tools using ABAQUS/Explicit solver.
- Utilized LABVIEW to acquire experimental cutting forces and compare it to the generated numerical cutting forces from the FEA model.
- Used Python to create multiple scripts that calculated cutting forces analytically.

# **Industrial Engineering Intern (Internship)** | Siemens Canada - Scarborough, Ontario

May 2017 - Aug 2017

- Conducted detailed time and cost studies on bottleneck departments, while supervising two industrial engineering students.
- Based on the acquired results a manufacturing time calculator was created for production supervisors to use to allocate the correct time for the production of different parts.

#### **Process Engineering Intern (Co-op)** | Siemens Canada - Scarborough, Ontario

May 2015 - Aug 2016

- Collaborated with production supervisors, engineers and floor employees to create various plants layouts in AutoCAD to support the plant's manufacturing departmental layout changes.
- Improved manufacturing procedures to maximize production quality and minimize defects.

# NOTABLE PROJECTS (ALL PROJECTS ARE IN ())

## **Animal Sounds Web Application** | HTML, CSS, JavaScript, Git

Aug 2022

- Developed a web application that is able to play animal sounds by either clicking on the animal's image or typing the name of the animal in an input text box.
- The web application is responsive to different web page sizes and different screen views.

#### **Used Cars Web Scrapper** | Python, HTML, CSS, Git, PostgreSQL, Linux

Apr 2022

- Developed a web application that scrapes the data of all used vehicles on the web page of a major automotive dealership.
- The web application is able to transfer the data into a .csv file and to a PostgreSQL table.

#### **Tic Tac Toe Application** | Python, Git, Linux

Dec 2021

• Developed a command line application using Python that duplicates the game Tic Tac Toe.

#### **EDUCATION**

University of Ontario Institute of Technology
Masters of Applied Science in Mechanical Engineering
University of Ontario Institute of Technology
B.Eng (Honours) in Manufacturing Engineering

**Jun 2021** Oshawa, Ontario **Jun 2018** 

Oshawa, Ontario