# 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

# NOTABLE PROJECTS (ALL PROJECTS ARE IN (7)

## **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.

#### **EXPERIENCE**

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

Apr 2021 - Present

- Responsible to develop test plans and conduct the tests for vehicle On Board Diagnostics (OBD).
- In charge of automating vehicle/HIL controls and diagnostics software testing.
- Utilizing Python and MATLAB-Simulink to automate the testing and diagnostics of DTCs in the HIL bench and in the
  vehicles.

#### **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** | 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** | 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.

#### **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