

# 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, ABAQUS/Explicit, dSPACE/ Control Desk, Vspy3

## 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).
- 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 templates for custom made cutting tools using VB's illogic feature in Autodesk Inventor.
- Designed custom 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.

## 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 Scraper** | *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** **Jun 2021**

*Masters of Applied Science in Mechanical Engineering* **Oshawa, Ontario**

**University of Ontario Institute of Technology** **Jun 2018**

*B.Eng (Honours) in Manufacturing Engineering* **Oshawa, Ontario**