

# MOHAMD IMAD

Mississauga Ontario, Canada

📞 647-648-3573 ✉ medoimad@hotmail.com 📄 MohamdImad 🐙 GitHub 🏠 Portfolio Website

## TECHNICAL SKILLS

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**Languages:** Python, SQL, Javascript, HTML, CSS, MATLAB-Simulink

**Technologies:** Linux, Git, Pandas, Numpy, Matplotlib

## EXPERIENCE

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**Controls and Diagnostics Software Test Engineer** | *General Motors - Oshawa, Ontario* **Apr 2022 – Present**

- Responsible to automate the testing and diagnostics of Diagnostics Trouble Codes (DTCs) in HIL benches (PHS/SCALEXIO) and in pre-development production approved vehicles.
- Building automation tools via Python in VS Code to improve the process flow and reduce testing setup time.
- Responsible to develop test plans for vehicle On Board Diagnostics (OBD) and conduct testing using Vspy3/C.

**Tool Design Engineer** | *Castelar Tool and Grinding - Mississauga, Ontario* **Aug 2021 – Apr 2022**

- Developed templates for custom made cutting tools using VB's ilogic feature in Autodesk Inventor, resulting in 80 percent decrease cutting tools development time.
- 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.

## SELECTED PROJECTS (ALL OTHER PROJECTS ARE IN 📁)

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**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

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**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*