Mohamd Imad

Mississauga Ontario, Canada
647-648-3573 medoimad@hotmail.com MohamdImad GitHub Portfolio Website

Technical Skills

Languages: Python, MATLAB-Simulink, SQL
Technologies: Linux, Git, Pandas, Numpy, Matplotlib, Scikit learn

Experience

General Motors of Canada | **Ontario Canada**

Vehicle System Diagnostics and Controls Calibration Software Engineer | **Feb 2023 – Present**

- Responsible for Body Control Module (BCM) software calibration of over 15 vehicle programs.
- Continuously building automation tool via Python to optimize the working process of testing engineers and calibrators.
- Utilizing Machine Learning in producing predictive models that is able to reduce engineers process time.

Controls and Diagnostics Test Software Engineer | **Apr 2022 – Feb 2023**

- Building automation tools via Python in VS Code to improve the process flow and reduce testing setup time. Resulted in over 40 percent test engineer's time savings.
- Responsible to conduct the testing and diagnostics of Diagnostics Trouble Codes (DTCs) in HIL benches (PHS/SCALEXIO) and in pre-development And production approved vehicles for the Body Control Module (BCM).
- Responsible to develop test plans for vehicle On Board Diagnostics (OBD) and conduct testing using Vspy3.

Castelar Tool and Grinding | **Ontario Canada**

Tool Design Engineer | **Aug 2021 – Apr 2022**

- Developed temples 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.

University of Ontario Institute of Technology | **Ontario Canada**

Research Assistant | **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.

Siemens Canada | **Ontario Canada**

Industrial Engineering Intern (Co-op) | **May 2017 - Aug 2017**

- 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.

Process Engineering Intern (Internship) | **May 2015 - Aug 2016**

- 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.

Education

University of Ontario Institute of Technology **2021**
Masters of Applied Science in Mechanical Engineering ***Ontario, Canada***

University of Ontario Institute of Technology **2018**
B.Eng (Honours) in Manufacturing Engineering ***Ontario, Canada***