Mohamd Imad

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Technical Skills

Languages/Technologies: Linux, Python, Javascript, HTML, CSS, Git, SQL
3D Modeling Software/FEA Solvers: AutoDesk Inventor, SolidWorks, ABAQUX/Explicit

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.

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 **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*