SAMUEL VALENTINE

https://samuelvalentine.netlify.app

PROFESSIONAL SUMMARY

A third year McGill student majoring in mechanical engineering with a minor in software engineering, searching for internship opportunities for the summer of 2022. Visit my online portfolio using the QR code or link above.



EDUCATION

Bachelor of Engineering Major: Mechanical Engineering 09/2019 - 05/2024 McGill University, Montreal, Canada Minor: Software Engineering 3.54 / 4.00 CGPA **Pure and Applied Science** 09/2017 - 06/2019

EXPERIENCE

BOMBARDIER AVIATION – LOADS AND DYNAMICS

01/2021 - 08/2021

Created tools for predicting loads on aircraft wings and fuselage using numerical methods and machine learning. This process included the following:

- Automating and improving existing conceptual load design tools in Python
- Developing physical interpretations for load prediction results
- Formally presenting and documenting all work throughout each project while using Mercurial version control

MCGILL ROCKET TEAM (MRT)

Marianopolis College, Montreal, Canada

09/2019 - 08/2021

- Completed a JavaFX UI designed for tracking specifications of the rocket from the ground-station
- Won the design award for MRT's Hackathon 2020 event

STRATHMORE LANDSCAPING - TEAM LEADER

12/2017 - 08/2020

- Built positive relationships with clients, even in challenging circumstances
- Experience driving large Isuzu dump trucks, pickup trucks, and other vehicles
- Trained new employees

SKILLS

ENGINEERING	CAD: SolidWorks, Solid Edge, Mastercam	FEA: Abaqus		
MACHINING	Mastercam, G-Code, CNC Milling, CNC Lathing, 3D Printing	WHMIS, Class 5 License, Landscaping Equipment		
PROGRAMMING LANGUAGES	Python: TensorFlow, Pandas, Seaborn, Numpy, Sphinx Java: Software Development	Other: Matlab, Simulink, SPICE, LabView		
SOFTWARE	Microsoft Office Suite, Google Suite	OS: Windows 7 / 8 / 10 / 11 / XP / Vista		
LANGUAGES	English – Fluent	French – Conversational		
PROJECTS				

Bike Pedal Assembly - Manufacturing Project

A team project in a bicycle pedal assembly was designed in SolidWorks, transformed to G Code using 09/2021 - 12/2021Mastercam, and then manufactured using 3D Printing, CNC milling and CNC turning.

Bicycle Assembly – Design for Manufacturing

09/2019 - 12/2019

A CAD project designing a bicycle prototype from scratch, with standard parts from McMaster-Carr.

Structural Bracket - FEA Analysis and Structural Design

A research and simulation project based in Abaqus to design a structural bracket while minimizing weight