

— WILLIAN MELNECHUKY —

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HIGHLIGHTS OF QUALIFICATIONS

- Excellent problem solving and technical skills with a focus on **continuous improvement** and flexibility developed through **16 months of engineering co-op experience**
- Excellent leadership and teamwork developed by **leading McMaster Hyperloop team**, curriculum group projects and Designathon participation
- Strong communication, organization and time management skills gained through academic courses
- Substantial ability to interpret mechanical design drawings from co-op work projects



EDUCATION

Bachelor of Engineering, Mechanical Engineering & Management Co-op

McMaster University, Hamilton, ON

- 5-year program pursuing minor in Commerce
- Expected Graduation - Spring 2022

SKILLS

Software

- SOLIDWORKS
- Python
- Microsoft Office
- Excel VBA
- Access
- Visio
- Power Automate
- Power BI
- GD&T
- MATLAB
- Inventor
- Siemens NX
- DriveWorks

Laboratory

- Laser Cutting
- Machine Shop
- 3D Printing
- WHMIS Trained
- Multimeters
- Measuring Instruments
- Arduino

PROJECTS

Easy Snow Shovel *(Jan 2019-April 2019)*

- Designing a spring-loaded shovel utilizing stress analysis knowledge to account for mechanical loading
- Working diligently in a team of 4 with mentor guidance and following a design timeline
- Shaping the most optimal design by using the Design Process
- Comparing design performances utilizing Inventor & Excel to perform Free Element Analysis (FEA) and equation solving to allow for iterative design

The Frog – Robot Race *(Jan 2018- May 2018)*

- Constructed an obstacle traversing robot optimizing for these criteria: speed, manufacturability, weight, and ingenuity
- Competed against classmates and cooperated with a team of 4 placed in the top 80% of the class
- Used various tools such as: Arduino, Laser Cutting, 3D Printing, Tolerances, Design Process, SOLIDWORKS and FEA

EXPERIENCE

Product Engineer Intern

Cogent Power Inc, Burlington, ON

(May 2019 - August 2020)

- Responsible for developing autonomous processes for design vetting using SOLIDWORKS, VBA, Python, Parametric Software, Access, SQL, MS Power Automate and Power Apps.
- Providing Engineering support to production through interpreting and creating detailed blueprint drawings
- Performed Root Cause Analysis on process failures, operational problems and provided solutions
- Crafted and implemented projects to upgrade production processes and improve efficiency
- Established Work Standards and performed time studies to analyze production cycle
- Constructed product costing models and product handling requirement models (e.g., Lift Permit and Shipping supports)
- Created Data Models using Pivot Tables and Power BI

Shipping Service and Warehouse Associate

Pool Supplies Canada, Burlington, ON

(May 2017 - Aug 2018)

- Supervised and trained new hires and oversaw integrity and accuracy of all products leaving the warehouse.
- Increased efficiency of the shipping process by 80% using programming to improve current work systems and to better manage inventory.

EXTRACURRICULARS

Electrical Lead

McMaster Hyperloop Team

(Jan 2019 – Aug 2020)

- In charge of project management for team of 16 and providing support meet project timelines
- Lead projects including BMS development, Pneumatic System and Eddy Current Breaking Prototype
- <http://www.mcmasterhyperloop.ca/ourTeam>

McMaster Designathon Competitor

Retractable Wheel for an Autonomous Vehicle Project

(Jan 2018)

- Collaborated with a team of 4 in a 2-day engineering design competition to solve real-world problems in the engineering field
- Involved in: Pitching Ideas, Explaining Concepts, SOLIDWORKS modelling, 3D printing and Oral Presentation

HOW I STRUCTURE MY TIME AT WORK

