Matt Wulff

289.698.5356 | matthewdwulff@gmail.com | Linkedin | Portfolio McMaster University, Bachelor of Mechatronics Engineering (Co-op)

Skills

DFM, Manufacturing, R D, Product Design, 3D Printing, SolidWorks, Autodesk Inventor, AutoCAD, Embedded Systems, Electrical Design, Python, C/C++, Project Management, Jira, Excel, Microsoft Office, Keynote, Negotiation

Experience

Tesla

Manufacturing Engineering and TPM

- Developed a vision guided robotic solution to line loaded parts every 10 seconds with savings over \$250k per component used, every year.
- Worked with six vendors to develop a cost effective washer through 3 trials and design meetings, reducing cost by \$125k and size by over 50%.
- Led the investigation into utilizing fast, force-sensing robots to deburr castings more efficiently and cost-effectively, collaborating across departments to procure testing equipment, manage vendors, and conduct trials.

Skygauge Robotics

Product Design

- Spearheaded the design of a waterproof drone case capable of protecting sensitive drones from impacts over 2 meters.
- Led the design and construction of an acoustic chamber for drone testing and QA, reducing decibel levels by 20%.
- Accelerated drone production by optimizing fixtures, creating detailed documentation, and developing enhanced procedures.
- Automated drone levelling using code and laser levels, achieving a cost savings of \sim \$300 per drone over its lifetime.

2Ri Robotics

Engineering Technician

- Problem solved robotic arm failures by devising and implementing cost effective repair solutions.
- Manufactured thousands of industrial cables for Fanuc in a highly efficient manner, helping resolve supply shortages during COVID.
- Operated technical PMs on robots in active factories to deduce downtime and facilitate high OEE.

3D Alive

Founder and Lead Designer

- Operated a small 3D printing and engineering consulting business to provide clients with accelerated, low cost solutions.
- Secured clients by utilizing free platforms and strategically sharing my website on key forums frequented by the target audience.

Personal Projects

Robotic Arm

Designed and built three robotic arms from scratch using off-the-shelf electrical/mechanical components, culminating in a fully autonomous, wireless controlled final design.

Automated Compound Pharmacy

Developed an automated system to streamline the compounding process in pharmacies using motors, 3D printing, and high-precision industrial equipment, all controlled with a touch-screen interface.

California, USA / Guangzhou, China

September 2023 - August 2024

May – September 2023 Ontario, Canada

July - August 2022

Ontario, Canada

2019 - 2021

Ontario, Canada