

Mo Abidi

BASc. Mechanical
Engineering +
Computing Option
University of Waterloo
2023

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Design Tools

SolidWorks
AutoCAD
Figma

Languages

Python
HTML/CSS
MATLAB

Interests

Film
Literature
Soccer
Hiking
Spikeball
Engineering Student Society

Experience

Tesla Austin, TX | Feb 2024 - Present

Vehicle Quality Engineer - Cybertruck Interiors, Airbags, Safety and Restraints

- Root-caused critical quality concerns and designed/implemented data-driven countermeasures
- Worked closely in multidisciplinary teams of Design Engineers, New Product Introduction Engineers, and Process Engineers for design reviews and launches of vehicle components, checking fixtures, and packaging
- Led teams of Supplier Quality Engineers and Supplier Industrialization Engineers to root-cause defect failure modes and develop corrective actions to ensure supplier conformance to Tesla specifications
- Created and maintained SPC data dashboards and control charts to monitor process capability, mitigate risk, and drive product and process improvements
- Identified and contained safety-critical defects in incoming parts and outgoing vehicles and prevented escape to customers
- Leveraged rapid prototyping tools to prototype, iterate, and validate part designs and revisions
- Developed product specifications based on study of customer use cases for Cybertruck interiors components

OrganOx Limited Oxford, UK | May - Aug 2021

Biomedical R&D Engineering Intern

- Engineered improvements to the *metra* normothermic perfusion device, which keeps human livers alive outside of the body by circulating blood and nutrients through it
- Led the development of a new module to mitigate problem of cradle compression/pressure necrosis by simulating effects of breathing-induced motion on the liver
- Designed and prototyped electromechanical system and firmware for module
- Collaborated with medical experts, regulatory officers, and engineering teams to ensure design met all stakeholder requirements
- Implemented and conducted system verification/validation using porcine liver, resulting in significant reduction in liver injury due to cradle compression

Toyota Motor Manufacturing Canada Cambridge, ON | Sep - Dec 2018

Vehicle Quality Engineering Intern - Front and Rear Fascia

- Led investigation in major defects with Lexus RX350 Front Radar and Rear Wheel Arch
- Used 5 Why and Ishikawa frameworks, statistical methods, metrology systems and DOE to isolate root causes and develop actionable countermeasures
- Redesigned and validated Lexus RX350 Front Radar mount to drive mean shift in radar aim and eliminate vehicles with aim outside of Control Limits
- Developed PFMEA for front grille to identify high risk manufacturing processes and control critical dimensional features
- Managed project to introduce new airbag tracking system and integrate it into production
- Presented technical project report to cross-functional teams and Toyota executives

Bombardier Aerospace Toronto, ON | May - Aug 2019

Logistics Engineering Intern - Global 7500 Jet

- Eliminated losses of \$10,000/month by developing VBA programs to track part movement
- Optimized fairing assembly process and reduced aircraft production time by 2 hours
- Designed lineside part storage to eliminate part losses during assembly
- Developed VBA program to track part movement within manufacturing plant
- Engaged with suppliers to select parts and reduce production delays