

# Rafael Zalewski

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## PROFESSIONAL EXPERIENCE

### Tesla Inc.

January 2021–September 2022

Remote – Whistler, BC, Canada

Sr. Product Support Engineer, Service Engineering

- Engineering lead for closures electromechanical components across all vehicle models. Oversaw product lifecycle from design to customer. Collaborated with engineering teams to optimize product designs.
- Worked closely with service centers to develop software diagnostic tools and service procedures.
- Performed data analysis and statistical modeling to estimate latent failure rates for recall campaigns.
- Led investigation into an electrical circuit quality issue affecting 60% of model 3 and Y fleet. Used complex data analysis to determine root cause. Successfully negotiated cost recouperation with supplier. Created design and supplier test changes to prevent issue from occurring again as well as recall campaign.
- Led proactive design efforts to optimize design for serviceability on cybertruck and semi truck platforms. Reviewed CAD assemblies, recommended changes and used failure models to make data driven decisions.

### Tesla Inc.

November 2016–January 2021

Fremont, California, US

Sr. QA Engineer, Quality Engineering

- Subject matter expert for automated testing of vehicles within Fremont factory. Spearheaded root cause analysis on several major quality issues as well as real-time reporting to executives and containment strategies. Proactively reviewed processes to ensure capture of all failure modes.
- Proven expertise in complex problem solving using: Pareto charts, 5 Why's, FMEA/PFMEA/DFMEA, and fishbone diagrams. Comfortable solving problems across all areas of engineering.
- Led investigation into production critical issue affecting 100% of all vehicles produced over a period of 2 weeks. Facilitated daily morning meetings with electrical, software, manufacturing and executive teams. Determined root cause to be incorrectly specified electrical component. Developed containment strategy and rework instructions under extremely tight deadline.
- Led development of machine learning vision inspection system in Fremont factory to record and alert non-conformances in station. This project led to a decrease of 30% of issues affecting completed vehicles.
- Worked closely with data science teams to develop new platforms and data visualisation tools.
- Designed and fabricated equipment for use in production. Integrated with existing systems and processes.

### Evertz Microsystems Inc.

December 2014–June 2016

Burlington, Ontario, Canada

Field Service Engineer, Service Engineering

- Lead field engineer on slow motion video replay systems for MLB and NBA stadiums.
- On-site work included diagnosing electrical and software issues, providing direction to customers and collaborating with engineering teams during development process.

## EDUCATION

May 2014

**McMaster University, Hamilton, Ontario, Canada**

Bachelor of Mechatronics Engineering and International Studies

## ADDITIONAL SKILLS

- Soft skills: Collaborator, excellent communicator, mentor, detail oriented with high commitment to quality.
- Software: SQL, Python, PySpark, Jira, C++
- Hardware: Catia, Fusion 360, Siemens PLM