# Jason Shiverick

## Lead Data Scientist and Data Engineer

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#### Tech Stack

Spark, Python, Docker, Ansible, Git, SQL / NoSQL, Statistical Modeling, Machine Learning, AWS

#### Experience

Tesla Associate Manager, Data Science | Reliability 2015 to Present

- Developed Ansible/Docker deployment architecture for a Spark standalone cluster and python libraries for efficient manipulation and processing of log data.
- Established an analytics workflow leveraging git version control, with jira integrations. Designed the ETL workflow using spark, airflow, jupyter and superset.
- Provided direction on proactive maintenance campaign and prognostics algorithm development using machine learning techniques: random forest, logistic regression, physics of failure.

## Tesla Senior Data Scientist 2014 to 2015

- Established an extensive code base that provides tools to the organization for extracting, transforming, and analyzing field data at scale.
- Developed a modern approach to advanced warranty simulation in Python that can account for competing failure modes in a repairable system under varying use conditions.

## Tesla Reliabilty Data Scientist 2013 to 2014

• Developed statistical frame work for python: Weibull analysis, Stress-Strength Convolution, Hypothesis testing, Best fit solver, generalized distribution framework, newton-raphson solver, ranking methods, mttf

Ingersoll Rand Reliability Engineer 2011 to 2013

Medtronic INC. Product Performance Specialist 2010 to 2011

Boeing Corporation Systems Engineer 2008 to 2009

## Education

Graduate Course Work (Reliability Engineering) 2012 to 2013 University of Maryland (online) College Park, Maryland ENRE 602: Reliability Analysis ENRE 655: Advanced Methods in Reliability Modeling

Bachelors of Science in Aerospace Engineering 2004 to 2008 Iowa State University Ames, Iowa

**Invited Talks** 

PHM Society 2015 automotive panel discussion

 $\mathbf{ARS}\ \mathbf{2014}\ \mathrm{Big}\ \mathrm{Data}$  in Reliability: 1st Place