Jason Shiverick

Lead Data Scientist and Data Engineer

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Tech Stack

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

Experience

Tesla Motors *Associate Manager, Data Science | Reliability* **2015 to Present**

- Grew the Data Science team and capacity within the organization. Evangelized the need for data and infrastructure to facilitate data driven decision making.
- 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 Motors *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 Motors *Reliabilty Data Scientist* **2013 to 2014**

- Developed the tools required for analyzing fleet logs at scale, and characterizing usage conditions.
- 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

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Invited Talks

PHM Socioty 2015 automotive panel discussion

ARS 2014 Big Data in Reliability: 1st Place