

**Cody Bushnell – 2502 Rustic Trail Ln, Richmond, TX 77469 214-794-7277**

## **Summary**

Data Scientist/Engineer with an established background in deriving valuable and actionable insights from many types of data.

## **Technical Expertise**

- Data Analytics and Machine Learning
- Monte Carlo Simulation
- Statistical Modeling and Analysis
- Operations Optimization

## **SKILLS AND CERTIFICATIONS**

Python, R, Scala, Javascript, Scala, Spark, MATLAB, SIMULINK, C#, Java, NoSQL, SQL, Microsoft Office, VBA, Linux, AWS, SMACK (spark, mesos, akka, Cassandra, kafka)

## **PROFESSIONAL EXPERIENCE**

### **2015-present Rolls-Royce Controls and Data Services – Houston, TX Senior Data Scientist**

- In charge of delivering production quality analytics capable of solving various decision making processes across Rolls-Royce
- Developed an IoT platform for use across Rolls-Royce, enabling streaming and batch analytics on all Rolls-Royce machinery (jet engines, industrial gas turbines, diesel engines)
- Conduct FMECA workshops in order to define how machinery data can be leveraged to diagnose impending failures
- Mentor junior engineers in data analytics as well as rotating and reciprocating engine technology

### **2013-2015 Rolls-Royce Controls and Data Services – Houston, TX Technical Consultant**

- Developed a Predictive Equipment Health Management analytics solution to extend maintenance intervals by providing instantaneous turbo machinery equipment health assessments
- Customer facing engineer conducting requirements gathering, implementation, and technical sales
- Lead a team of data scientists to deliver a fully automated operational optimization solution to one of the world's largest oil and gas companies.
  - Proven to recover 5-7% of oil production being lost due to suboptimal operation

### **2011-2013 Lockheed Martin Aeronautics – Joint Strike Fighter (JSF), Fort Worth, TX Systems Engineer**

- Refactored proprietary performance model to reduce simulation and turnaround time by 75%
- Led a project across the JSF program applying algorithmic approaches to financial estimates
- Developed a Simulink discrete event performance model utilizing Orthogonal Latin Hypercube Designs to map a response surface of sustainment operations
- Served as Technical Lead on a study to relate the cost of the aircraft fleet to fleet performance

### **2010-2011 United States Bowling Congress, Arlington, TX Research Engineer**

- Responsible for automation of testing equipment through the use of robotics and microelectronics
- Conducted a Design of Experiments to characterize the effects of physics based variables on the motion of a bowling ball on a lane
- Created an automated bowling machine equipped with machine vision scoring, network results database, and statistical analysis algorithms to measure results against an established standard

**EDUCATION**

STEPHEN F. AUSTIN STATE UNIVERSITY, NACOGDOCHES, TX

Bachelor of Science in Physics, Minor Mathematics and Engineering, Magna Cum Laude

SOUTHERN METHODIST UNIVERSITY, DALLAS, TX

Master of Science in Systems Engineering