RODOLFO LERMA

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🌐 GitHub: Portfolio

EXPERIENCE

BOEING, PRODUCT REVIEW ENGINEER (MRB) – L2
JAN 2019 – PRESENT
- **Full MRB Authority** (Boeing and FAA Certified).
- Analyzes data to determine the best resolution for critical emerging problems.
- Conducts root cause analysis and develops solutions for production emerging problems and design non-conformances.
- Applies engineering principles to research technical, operational and quality issues that cannot be resolved by customer and engineering solutions.
- Identifies documents, analyzes reported problems and communicates deviations that could impact design intent and safety.
- Recommends and manages resolutions for any kind of production problems.

GE AVIATION, DATA ANALYST
NOV 2015 – JAN 2019
- Developed **R & Python tools** to help in the design of data analytics to predict failures in engine performance.
- Built and analyzed dashboards and reports to forecast engine performance.
- Designed and evaluated hypothesis experiments on how to improve the life of fleet.
- Developed procedures (guidelines) for new processes & best practices on data analysis.
- Applied statistical analysis in the determination of root cause analysis and improvement tasks.
- Built baselines to determine stability of data for different systems of the engine.
- Experienced manipulating data sets through statistical software (**Python, R and JMP**).
- Programmed data bases (**SQL**) to determine component efficiencies by means of Field Data.
- Analyzed behavior of Fleet of Engines at different sites by means of **Big Data tools**.
- Developed analytical models to diagnose the health of engine's components (thermodynamics).
- Kept track of the Instrumentation Measurements of multiple sites (around the globe) to ensure data's quality.
- Developed algorithms in JMP to determine trends rates for different fleets.
- Programmed thermodynamic models using **NPSS** (Numerical Propulsion System Simulation).
- Experienced with prediction in adversarial environments.
- Experienced communicating results of analyses with product and leadership teams to influence the strategy of the product.

NEW MEXICO STATE UNIVERSITY, RESEARCHER
JULY 2013 – AUGUST 2014
- Fluid-Solid interaction research.
- Aerothermodynamics analysis.
- Analyzed the interaction between flutter in an airplane and nonlinear energy sinks.
- Wind Tunnel construction.

EDUCATION

M.S. IN BUSINESS ANALYTICS, CARNEGIE MELLON UNIVERISTY, PITTSBURGH, PA, **AUG 2022 - MAY 2024**

M.S. IN SPACE ENGINEERING, POLYTECHNIC OF MILAN, MILAN, ITALY (PENDING THESIS), **AUG 2014 - NOV 2015**

B.S. IN AEROSPACE ENGINEERING, NEW MEXICO STATE UNIVERSITY, LAS CRUCES, NM, **AUG 2009 - MAY 2013**
- G.P.A. 3.85
- Crimson Scholar – College of Honors
- Tao Beta Phi Engineering Honor Society Member

MACHINE LEARNING CERTIFICATE, UNIVERSITY OF WASHIGTON
SEATTLE, WA, **OCT 2021 – JUN 2022**
- 1st quarter (Autumn 2021): Introduction to Machine Learning
- 2nd quarter (Spring 2022): Advanced Machine Learning
- 3rd quarter (Summer 2022: Deep Learning

DATA SCIENCE CERTIFICATE, UNIVERSITY OF WASHIGTON
SEATTLE, WA, **OCT 2020 – MAY 2021**
- 1st quarter (Autumn 2020): Process & Tools
- 2nd quarter (Spring 2021): Methods for Data Analysis
- 3rd quarter (Summer 2021): Machine Learning Techniques

AI FOR TRADING NANODEGREE PROGRAM, UDACITY
ONLINE, **MAY 2021 – NOV 2021**

DATA SCIENCE & BIG DATA ANALYTICS CERTIFICATE, MIT
ONLINE, **MAY 2020 – AUGUST 2020**

DATA SCIENTIST IN PYTHON BOOTCAMP, DATAQUEST
ONLINE, **AUGUST 2019 - MAY 2020**

SKILLS

Python	*Jupyter Notebook*	*Bootstrap*
SQL	*A/B Testing*	*Machine Learning:*
R	*Data Cleaning*	*Regression & Regularization (Lasso, Ridge & Elastic Net)*
JMP 13	*Data Visualization*	
Tableau	*Feature Selection*	*Naïve Bayes*
MINITAB	*TensorFlow*	*Time Series Analysis*
Advanced Excel	*Keras*	*Sentimental Analysis*
Basic NPSS	*Numpy*	*Deep learning: ANN, RNN & CNN*
Trained in 6σ	*Pandas*	
	Sklearn	

LANGUAGES
- Spanish – Native
- English – Fluent

TRAINING & OTHER CERTIFICATES
- Tableau (Data Visualization) – Udacity 2021
- Version Control with Git – Udacity 2021
- Introduction to Machine Learning on Azure – Udacity 2021
- Intro to TensorFlow for Deep Learning – Udacity 2021
- A/B Testing for Business Analysts – Udacity 2021
- SQL for Data Analysis – Udacity 2021
- **Data Engineer Bootcamp** – Dataquest 2020
- **Data Analyst in Python Bootcamp** – Dataquest 2019
- MRB Authority Certification – Boeing/FAA 2020
- Data Visualization with Tableau – Duke University 2020
- Probability & Statistics for Engineers – Boeing 2020
- Six Sigma Training Certification – GE Aviation 2017
- Data Analysis & Interpretation – Coursera Wesleyan University 2017
- Python for Everyone – Coursera University of Michigan 2017