

Ericka Howard

Experienced data scientist with strong background in statistical analysis, machine learning, and data visualization. Skilled in programming, relational databases, and predictive modeling. Recognized for problem-solving abilities and innovative thinking.

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RELEVANT EXPERIENCE

AmTrust Financial — Data Scientist

FEB 2023 - PRESENT

- Spearheaded new Business Owners' Policy predictive model, achieving a 27% increase in customer acquisition.
- Led full model development life-cycle, including EDA and R&D, building data pipeline and deployment into production of web app hosting model predictions.
- Established experimental framework for model selection, communicated results to product owners and leadership, leveraging SHAP, feature importance analyses, and data visualization.
- Combined multiple data sources using: structured and unstructured data, 3rd party data, feature engineering, dimensionality reduction, NLP, text embedding, and named entity recognition.

The Hartford — Data Scientist

APR 2022 - FEB 2023

- Directed unsupervised ML anomaly detection model focused on optimizing customer experience, mentored a junior data scientist in the process.
- Played a pivotal role in implementation of a profitability model into production, delivering real-time removal of high loss customers, garnering support and leadership buy-in through clear communication and data visualization.

The Hartford — Associate Data Scientist

MAY 2021 - MAR 2022

- Headed outbound sales machine learning model, supported business partners through A/B testing, data visualization, and in-depth statistical analyses.
- Supported customer segmentation predictive ranking model that drove sustained improvements in sales performance.

CIMERS — Research Assistant

JUN 2020 - DEC 2020 (Contract)

- Co-authored a peer-reviewed scientific publication based on statistical analysis and data visualization of spatial data.
- Implemented a clustering algorithm to solve a complex data grouping problem.

Quantum Spatial Inc. — Geospatial Data Technician

MAR 2019 - SEP 2019

- Designed training materials and led interns and technicians in data analysis techniques, in addition to continuation of duties below.

Quantum Spatial Inc. — Geospatial Data Intern

OCT 2018 - MAR 2019

- Assisted with machine learning modeling and predictive analytics of large spatial datasets, using R, Python, Shiny dashboards, and GIS.

SKILLS

Python
SQL
Git
AWS

WEBSITES

ericka-howard.github.io
linkedin.com/in/erickasmithhoward

EDUCATION

Oregon State University

M.S. Statistics

SEP 2019 - MAR 2021

Probability, Computing, Simulation;
Data Visualization; Python;
Sampling; Generalized Regression
Models; Time Series, Unix/Linux;
Advanced Statistical Methods and
Theory

Western Washington University

B.S. Biology/Math

SEP 2011 - JUN 2015

Computer Programming, Statistics,
Data Structures, Differential
Equations, Linear Algebra

SELECTED PROJECTS

Machine Learning Classification

Using Satellite Imagery - Built simulations by training many random forests for hyperparameter optimization analysis.

Bootstrapping Parallelization

Experiment - Tested use of socket method for parallel processing workflow to efficiently manage bootstrap simulations.

Interactive Web-Based Tool for Communication of Large Ensemble Models

- Awarded 2nd Place Nationwide by the American Statistical Association, Designed dashboard and visualizations to analyze high volume datasets and communicate ensemble models.