Ericka Howard

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SUMMARY

Data scientist experienced with machine learning, statistical modeling, data exploration, communication, & coding.

Expertise in: Python, R, Shiny, H2O, AWS, SQL, HTML.

Toolkit: GitHub, Excel, EC2, Jupyter Notebook, PyCharm, PuTTY, GIS, AWS, Snowflake Data Cloud, S3

WORK EXPERIENCE

Data Scientist | 04/2022 - current

Associate Data Scientist | *05/2021 – 03/2022*

The Hartford Insurance Group

- Transform large data sets into actionable business insights using predictive modeling and machine learning, including gradient boosting machines, A/B testing, logistic regression, power analysis, statistical tests.
- Create and deliver analytics solutions for business partners, using data visualization and automation to translate technical findings to diverse audiences.
- Build and monitor advanced machine learning models in Python used in the deployment of novel sales strategies that effectively target and prioritize profitable customers in real-time production settings.

Research Assistant | *06/2020 – 12/2020*

Cooperative Institute for Marine Resource Studies

- Leveraged data cleaning skills & discipline knowledge for analysis of large, messy datasets.
- Researched & implemented clustering algorithm to solve a data grouping problem.

Intern | 08/2020 - 11/2020

National Oceanic & Atmospheric Administration

• Automated data management processes in R, resulting in a dramatic decrease in process time & a reduction in errors.

Technician | 03/2019 – 09/2019

Intern | 10/2018 - 03/2019

• Used R, Python, Excel, Shiny, GIS for machine learning modeling & predictive analytics of large spatial datasets.

EDUCATION

M.S. Statistics Oregon State University

03/2021

Quantum Spatial Inc.

Teaching Assistant: Methods of Data Analysis (Graduate Level), Intro to Statistical Methods

Coursework: Probability, Computing, & Simulation; Data Visualization; Command Line Analysis; Python;

Sampling; Survey Methods; Generalized Regression Models; Time Series; Unix/Linux

B.S. Math/Biology Western Washington University 06/2015

Employment: Database Assistant using Excel & Access; STEM Tutor teaching R & Excel

Coursework: Computer Programming & Data Structures; Differential Equations; Linear Algebra

PROJECTS

Interactive & Explorative Web-Based Tool for Communication of Large Ensemble Models

01/2020 - 07/2020

- Honorable Mention (2nd place) nationwide from the American Statistical Association.
- Designed dashboard & visualizations to analyze high volume datasets and communicate ensemble models to technical & non-technical audiences.

Classification Using Satellite Imagery & Random Forests 12/2020 – 03/2021

• Built simulations in R training many random forests, compared accuracy with different hyperparameters.

Bootstrapping the Pacific Crest Trail in Parallel 10/2020 – 12/2020

• Tested use of socket method of parallel processing to manage bootstrap resampling & simulations.

A Comparison of Generalized Regression Models for Interpretation of COVID-19 Case Counts 11/2020 – 12/2020

• Analyzed, fit, & evaluated negative binomial, quasi-Poisson, & Poisson regression models.

An Interactive Shiny App for Data Visualization *May.* 2020 – *June* 2020

• Created a Shiny app to analyze time series data.