

Ryan Johnson

DATA SCIENTIST *Seattle, WA*

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Summary

I'm a curious and adaptable Data Scientist with a passion for diving deep into complex datasets and emerging tech in machine learning. I love turning raw data into clear insights that can drive decision-making and innovation. I'm all about learning, growing, and making a meaningful impact in this dynamic field.

Skills

Programming Languages	Python (<i>sklearn, pandas, keras, pyspark, pytorch</i>), R (<i>tidyverse</i>), SQL
Machine Learning	Supervised Learning (<i>linear regression, logistic regression, SVMs, k-NN, decision trees, random forests</i>), Unsupervised Learning (<i>k-means, hierarchical clustering, DBSCAN</i>), Ensemble Learning (<i>bagging, boosting, stacking</i>), Dimensionality Reduction (<i>PCA, t-SNE</i>), Time-Series Analysis (<i>ARIMA, Prophet, LSTM, GRU</i>), Feature Engineering & Selection (<i>one-hot encoding, normalization, regularization</i>), Deep Learning (<i>FNN, CNN, RNN</i>)
Visualization	Matplotlib, Plotly, Shiny, Streamlit, Tableau, ggplot2
Dev Ops	AWS (<i>s3, Sagemaker, Athena, Glue</i>), Docker, Apache Airflow, Jenkins, Spark, Git

Work Experience

Chewy

DATA SCIENTIST II

Bellevue, WA

Jan 2022 - Present

- Developed a sophisticated Hierarchical Reconciliation framework to ensure coherency across forecasting granularities, leveraging cutting-edge research and rigorous testing to meet our team's high accuracy and reliability standards.
- Enhanced the core demand model by integrating promotion features, fine-tuning model accuracy and responsiveness to market trends and promotional impacts, utilizing AWS Sagemaker and Docker for seamless transition between development and deployment.
- Redesigned unconstrained demand model, leveraging PDP conversion and clickstream data and AWS Glue for scalable and efficient data processing, allowing for more accurate and insightful demand forecasting and reducing out-of-stock MAPE by up to 10%.
- Led effort into topic demand forecasting, employing a temporal knowledge graph approach to capture seasonal and thematic trends effectively.

The Energy Authority

DATA SCIENTIST - ANALYTICS

Bellevue, WA

Sep 2019 - Dec 2022

- Revamped Load Forecasting systems for over 30 clients reducing MAPE by 4-10%, developed more advanced ML models like RNN/CNN and XGBoost with k-fold cross-validation and outlier detection.
- Overhauled Hydro Forecasting pipeline by integrating new API data feeds from NW river system and plant-level generation, achieving a 5% reduction in system-level MAPE.
- Lead transition to new CI/CD system for running containerized applications, enabling streamlined deployments and builds from code repositories and establishing new team standards for project version control and production deployment.
- Worked with Software Engineering team to develop model failsafe system providing forecasts to real-time traders during critical data feed failures.

ANALYTICS INTERN

Summer 2019

- Supported other analysts in the maintenance and development of production models and error diagnostics.
- Redesigned several existing web applications and frameworks allowing for faster data retrieval and an integrated system for generating reports for client presentations.
- Communicated actionable data insights and issues to management to support decision processes, including changes to long-term forecast methodologies resulting in an average of 10-20 hours saved in annual work-hours per client.

Education

University of Washington

MS IN APPLIED MATHEMATICS

Seattle, WA

- Professional Excellence Award for distinguished academic merit and professionalism

Santa Clara University

BSC IN MATHEMATICS AND COMPUTER SCIENCE, EMPHASIS IN DATA SCIENCE

Santa Clara, CA

- Paul R. Halmos Award for Outstanding Academic Record.