Ryan Johnson

Data Scientist Seattle, WA

□+1 (253) 315-0389 | **☑** riosanjuan314@gmail.com | **⑤** rio-sanjuan | **⑥** rtjohnson12

Skills_

Programming Languages Python, R, Scala, SQL

Machine Learning Supervised Learning, Clustering, A/B Testing, Ensemble Learning, Dimensionality Reduction, Time-Series

Analysis, Feature Engineering & Selection, Deep Learning, Graph-Based Learning

MLOps AWS, Docker, Kubernetes, Airflow, Terraform, Jenkins, Git

Work Experience_

 Data Scientist
 Jan 2022 - Present

 Chewy
 Bellevue, WA

• Designed and deployed an end-to-end ML pipeline for forecasting Autoship orders. Combining subscription-level features with PySpark and AWS Glue, training and inference with AWS Sagemaker, and orchestration through Airflow dags, the pipeline involves automated ETL, tuning, and publishing, outperforming existing heuristic-based approach by up to 5% MAPE at the weekly level.

- Designed and deployed a Hierarchical Reconciliation framework as a callable AWS Sagemaker processing job, allowing for seamless integration with existing forecasting systems and providing a robust and scalable solution for reconciling forecasts across multiple granularities. This framework is now used by a majority of our production ML pipelines.
- Designed and deployed a forecast evaluation framework, allowing for automated comparison of forecast performance across our product
 catalogue, enabling us to rank model variants for specific use-cases like holiday planning, short-range labor planning, and long-lead buying
 decisions.
- Led multiple white-paper reviews within the team covering the latest research in both the field of Data Science and the eCommerce/operation planning space.

Data Scientist

Sep 2019 - Jan 2022

The Energy Authority

Bellevue, WA

- Overhauled Hydro-Power Forecasting pipeline by integrating new data feeds from NW river system and plant-level generation. The system ingests and cleans data from thousands of river meters and achieved a 5% reduction in system-level forecast MAPE.
- Designed and lead transition to new CI/CD system for running containerized models with Docker and GitHub Actions, enabling streamlined deployments and establishing new team standards for project version control and production deployment.
- Worked with Software Engineering team to develop model failsafe system. In the case of critical data feed failures, production models revert to failsafe mode and utilize a reduced set of features, ensuring that our real-time traders will always have actionable forecasts 24/7.

Education

MS in Applied Mathematics

Dec 2019

University of Washington

Seattle, WA

Professional Excellence Award for distinguished academic merit and professionalism

BS in Mathematics and Computer Science

Jun 2018

Santa Clara University

Santa Clara, CA

- Paul R. Halmos Award for Outstanding Academic Record
- · President of Pi Mu Epsilon, Mathematics Honor Society