

Rory Hartong-Redden

November 11, 2024 | Boulder, CO | roryhr@gmail.com | linkedin.com/in/rory-hartong-redden | roryhr.com

Summary

Experienced data scientist with accomplishments across scientific research, data engineering, and software engineering. Core competencies: Python, ML, and statistical analysis, complemented by 3 years of management experience.

Skills

Programming Languages: Python, SQL, R, Shell DevOps: GitHub, AWS, Docker, CI/CD, CircleCI
Data Processing: Postgres, Spark, Hadoop, S3, Airflow, Databricks
Python Tools: pandas, scikit-learn, Flask, XGBoost, TensorFlow, PySpark, Matplotlib, Jupyter

Professional Experience

- **Fast Radius (SyBridge)** Boulder, CO
Senior Data Scientist / Technical Manager Aug 2021–May 2024
 - Led a 3-person data science team, partnering with product and engineering teams, and shipped key software products like part analysis that were featured in the FSRD IPO presentation
 - Ensured API uptime of our revenue-critical service, facilitating \$10M in monthly instant quotes
 - Trained and deployed a random forest regression model of CNC cycle time for CNC instant quoting, providing the majority of the revenue of our site
 - Predicted shipping costs using mixed integer programming to pack boxes as input to the UPS API
 - Performed time-series analysis on manufacturing IoT data to support R&D efforts
 - Used SQL to extract and analyze data, monitor model performance, create dashboards, and answer business questions
 - **Fast Radius** Chicago, IL
Data Scientist Feb 2020–Aug 2021
 - Tech stack: Python, Flask, Docker, AWS ECS, Datadog, Metabase
 - Founding data scientist: developed, deployed, and maintained the first cost-prediction regression models, contributing to the early growth of the platform
 - Contributed to the “Manufacturing and Development Platform” patent, laying the groundwork for the company’s software architecture
 - In the startup culture I dipped into the Elixir backend, JavaScript frontend, or Terraform infrastructure to fix bugs and remove blockers
 - **runtastic** Linz, Austria
Data Engineer Oct 2018–Sep 2019
 - Tech stack: Python, SQL, Spark, Hadoop, Flume, Oozie, Hive
 - Designed and developed a “People You Might Know” feature using Python, Spark, and Hadoop, improving user retention
 - Built an ETL pipeline to anonymize customer data for GDPR compliance
 - Led the design and development of a data exchange prototype using Apache Kafka and AWS S3
 - **Allstate** Menlo Park, CA
Research Analyst Jul 2016–Sep 2018
 - Tech stack: Python, pandas, TensorFlow, Spark, Julia, PostGIS
 - Developed and trained machine learning models using Python, pandas, TensorFlow, and Spark to predict risk using customer GPS data, public crash data, and synthetic data
 - Co-authored a research paper with the Stanford Intelligent Systems Lab: “Real-time Prediction of Intermediate-Horizon Automotive Collision”
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Education

- **University of California, Santa Barbara**

Santa Barbara, CA

MS Mechanical Engineering

Dec 2014

- Tech stack: MATLAB, SolidWorks, L^AT_EX
- Thesis research: Designed and built an experiment to measure Faraday waves using a novel image processing technique for 3D high-speed mm-resolution measurement over a surface area of 225 cm²

- **University of California, Santa Barbara**

Santa Barbara, CA

BS Physics & BS Mechanical Engineering

June 2010