Rory Hartong-Redden

July 10, 2024 | Boulder, CO | roryhr@gmail.com | linkedin.com/in/rory-hartong-redden | roryhr.com

Summary

Expert Data Scientist with expertise in machine learning, telematics, deep learning, and software deployment

Tools

Python, Git, Shell, Terraform, Elixir
SQL, Metabase, Postgres, Spark, Hadoop, S3
Docker, AWS, CircleCI, Github CI/CD
Jupyter Notebooks, PyCharm, ChatGPT
Python Tools: Scikit-learn, XGBoost, TensorFlow, pandas, Flask, numpy, Matplotlib, pytest, Spark ML

Professional Experience

- **SyBridge Technologies (Fast Radius)** Boulder, CO
  Technical Manager and Lead Data Scientist *Aug 2021–May 2024*
  - Leading the data science team as we expand and improve models that instantly quote parts
  - Ensured high availability of revenue-critical APIs through high-quality code, comprehensive test suites, and synthetic Datadog API production tests to deliver $10M per month in instant quotes
  - Created SQL queries in Metabase to collect training data and track model performance over time
  - Supported R&D initiatives with statistical analysis and visualization of varied data such as accelerometer, temperature readings, and CAD file sizes using Jupyter Notebooks with Python
- **Fast Radius** Chicago, IL
  Data Scientist *Feb 2020–Aug 2021*
  - Tech stack: Python, SQL, Scikit-learn, Flask, Docker, AWS ECS, Datadog, Metabase
  - Deployed a Dockerized machine learning model powering our eCommerce contract manufacturing business, progressing from ad hoc statistical data exploration to production deployment, to instantly generate customer quotes for the FDM 3D printing process
- **runtastic** Linz, Austria
  Data Engineer *Oct 2018–Sep 2019*
  - Tech stack: Python, Spark, Hadoop, Flume, Oozie, Hive, RabbitMQ
  - Led the design and deployment of a "People You Might Know" data product using Spark, scikit-learn, SparkML, and Elasticsearch
  - Built a data exchange prototype with Apache Kafka and a production system with AWS S3
- **Allstate** Menlo Park, CA
  Research Analyst *Jul 2016–Sep 2018*
  - Tech stack: Python, pandas, TensorFlow, Spark, Julia, PostGIS
  - Trained machine learning models and analyzed telematics and crash data for risk prediction
  - Co-authored a paper on our research "Real-time Prediction of Intermediate-Horizon Automotive Collision" with the Stanford Intelligent Systems Lab

---

Education

- **University of California, Santa Barbara** Santa Barbara, CA
  MS Mechanical Engineering *Dec 2014*
  - Tech stack: MATLAB, SolidWorks, LaTeX
  - 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 $225\,\mathrm{cm}^2$
- **University of California, Santa Barbara** Santa Barbara, CA
  BS Physics & BS Mechanical Engineering *June 2010*