Rory Hartong-Redden

October 30, 2024 | Boulder, CO | roryhr@gmail.com | linkedin.com/in/rory-hartong-redden | roryhr.com

Summary

Machine Learning Engineer with over 7 years of experience in data science, data engineering, statistical analysis, and software engineering. Core competencies: Python, ML, and statistical analysis, complemented by 3 years of management experience. Throughout my career I've focused on solving the right problem the right way, understanding my data, writing excellent code, and being a good teammate.

Skills

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

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Professional Experience

- **Fast Radius (SyBridge)**   Boulder, CO
  Technical Manager and Senior Data Scientist   *Aug 2021–May 2024*

    – Led a 3-person data science team, partnering with product and engineering teams to develop and deploy key software products featured in our IPO documents
    – Ensured API uptime of our revenue-critical service, facilitating $10M in monthly instant quotes
    – Crafted SQL queries to collect data, monitor model accuracy, and answer business questions
    – 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
    – Provided statistical analysis and visualization analysis for R&D projects with manufacturing IoT time series data

- **Fast Radius**   Chicago, IL
  Data Scientist   *Feb 2020–Aug 2021*

    – Tech stack: Python, Flask, Docker, AWS ECS, Datadog, Metabase
    – As the founding data scientist and machine learning engineer I was responsible for building costing and quoting APIs that were backed by regression ML models
    – Predicted shipping costs using mixed integer programming to pack boxes as input for the UPS API
    – 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
    – Led the design and deployment of a "People You Might Know" feature to bootstrap a social network and improve the retention rate
    – Built a data exchange prototype with Apache Kafka and a production system with AWS S3
    – Built an ETL pipeline to anonymize customer data to comply with GDPR regulations

- **Allstate**   Menlo Park, CA
  Research Analyst   *Jul 2016–Sep 2018*

    – Tech stack: Python, pandas, TensorFlow, Spark, Julia, PostGIS, Keras
    – Trained machine learning models and analyzed telematics and crash data to predict risk
    – Co-authored a research paper titled "Real-time Prediction of Intermediate-Horizon Automotive Collision" with the Stanford Intelligent Systems Lab

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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*