# Rory Hartong-Redden

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## Summary

data engineer and scientist

## Tools

| | |
|---|---|
| Python, SQL, Git, Bash, Java | Cloudera Hadoop, Oozie, Airflow, Kafka, Flume |
| Spark, Postgres, Elasticsearch, PostGIS, Hive | Jupyter Notebooks, Sublime Text, Vim |

**Python Stack:** Conda, Pandas, PySpark, matplotlib, scikit-learn, Keras, requests, Flask, pytest

## Work

- **Runtastic (acquired by adidas)** — Linz, Austria
  *Data Engineer* — Oct 2018–Present
  - Data stack: RabbitMQ, Hadoop, Flume, Spark, Hive, Microsoft SQL Server, Qlik
  - Led the design and deployment of a "People You Might Know" data product using Spark, scikit-learn, SparkML, and Elasticsearch
  - Payed off technical debt and simplified the setup while maintaining uptime of company dashboards

- **Allstate** — Menlo Park, CA
  *Data Scientist* — Jul 2016–Sep 2018
  - Worked with the Stanford Intelligent Systems Lab, co-authored a paper on our research "Real-time Prediction of Intermediate-Horizon Automotive Collision"
  - Geospatial analysis of telematics and location data with Python and Spark

- **Startup.ML** — San Francisco, CA
  *Machine Learning Fellow* — Dec 2015–Apr 2016
  - Algorithmic trading of Bitcoin, using Postgres and Python on Heroku, way before it was cool

- **Harold Washington College** — Chicago, IL
  *Adjunct Faculty* — Feb 2015–May 2015
  - Shared my research experience and enthusiasm for Astronomy with my students

## Projects

- **Master's Thesis** — UC Santa Barbara
  *Krechetnikov Fluid Physics Lab* — Dec 2013–Jun 2014
  - Incorporated a recent image processing technique for cheap 3D high speed mm-resolution measurement over a surface area of $225\,\mathrm{cm}^2$

- **Bachelor's Thesis: Drop Splash Experiment** — Santa Barbara, CA
  *Krechetnikov Fluid Physics Lab, Dept. of Mechanical Engineering* — Jul 2009–Oct 2010
  - Published a peer-reviewed article on the experimental and theoretical advances I developed that may have solved a 100-year-old puzzle in fluid dynamics

## Education

- **University of California, Santa Barbara** — Santa Barbara, CA
  *MS Mechanical Engineering* — Dec 2014

- **University of California, Santa Barbara** — Santa Barbara, CA
  *BS Physics & BS Mechanical Engineering* — June 2010