Rory Hartong-Redden

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Summary

data scientist, physicist, coder, and all-around nice guy

Skill Summary

Languages: Python, MATLAB   **Dev Tools:** Git, Heroku, AWS
Data: Pandas, SQLAlchemy, SQL   **Machine Learning:** Keras, scikit-learn, XGBoost

Work Experience

- **Startup.ML**   San Francisco, CA
  Machine Learning Fellow   *Dec 2015–Present*
    - Trained industry-standard machine learning models for currency trading
    - Backtested and optimized trading algorithms

- **Harold Washington College**   Chicago, IL
  Adjunct Faculty   *Feb 2015–May 2015*
    - Gave 2 lectures a week for a descriptive astronomy course

Projects

- **Personal**   Chicago, IL
  Home   *May 2015–Present*
    - Participated in the Walmart, Yelp, and Winton Kaggle competitions
    - Learned object-oriented programming with Ruby and Python
    - Deployed a Twitter clone in Rails to Heroku by following the *Ruby on Rails Tutorial*
- **Master's Thesis: Faraday Waves Experiment**   Santa Barbara, CA
  Krechetnikov Fluid Physics Lab, Dept. of Mechanical Engineering   *Dec 2013–Jun 2014*
    - Implemented a novel 3D fluid surface measurement using MATLAB for image processing
- **Bachelor's Thesis: Drop Splash Experiment**   Santa Barbara, CA
  Krechetnikov Fluid Physics Lab, Dept. of Mechanical Engineering   *Jul 2009–Oct 2010*
    - Performed stereo triangulation in MATLAB, reduced the the 3D data, and searched for patterns using my theory of pattern identification
    - Published a peer-reviewed article[1] on the experimental and theoretical advances I developed that may have solved a 100-year puzzle in fluid dynamics
- **Transient Optical Sky Survey**   Santa Barbara, CA
  Lubin Lab, Dept. of Physics   *Sep 2008–Jun 2009*
    - Collaborated on the MATLAB/C data pipeline that processed 1GB of images per night

Education

- **University of California, Santa Barbara**   Santa Barbara, CA
  MS Mechanical Engineering   *Dec 2014*
- **Northwestern University**   Evanston, IL
  Graduate study in Physics & Astronomy   *Sept 2010–Mar 2012*
- **University of California, Santa Barbara**   Santa Barbara, CA
  BS Physics & BS Mechanical Engineering   *June 2010*
    - Graduated with honor in both degrees, GPA: 3.7/4.0
    - Dean's List 11/12 quarters.

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[1] Hartong–Redden, R. & Krechetnikov, R. *Pattern identification in systems S(1) symmetry.* Phys. Rev. E. 2011.