# Stephen Pardy

## CONTACT

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#### **EDUCATION**

Ph.D., AstronomyMay 2018Masters, AstronomyDecember 2015University of Wisconsin - MadisonDecember 2015

Relevant Coursework: HPC Applications in Engineering; Methods of Computational Math; Theory and Application of Pattern Recognition

Stebbins Award for significant research achievement.

Bachelor of Arts, Physics with an Astronomy Emphasis . . . . . . . . . . . . . May 2013 Macalester College

Dr. Sherman W. Schultz Memorial Award for academic excellence and outstanding research.

## **EXPERIENCE**

Stitch Fix Inc, San Francisco

Data Science Intern - AI Instruments Team .......................June 2018 - August 2018

- Modeled time-evolution of client like-rate on the "Style Shuffle" application using recommender systems designed in PyTorch. Project goal was for a five percentage-point increase in predictive power of the model.
- Edited and managed production ETLs using PySpark that combined client interaction data across multiple data sources and fed them to our recommender system.
- Analyzed A/B test results targeting increased client engagement using mixed effects models and SQL queries across over 200 million rows. Presented solution to business partners that will drive  $\sim 150\%$  increase in per-user engagement.

University of Wisconsin - Madison

Research Assistant ....... September 2013 - June 2018

- Lead publication of four papers and co-authored nine others with 230 citations.
- Designed and ran large computational models using distributed-memory systems.
- Managed, visualized, and analyzed results from multiple >100 Gb simulation datasets using custom-built python tools.
- Mentored undergraduate students on projects using pattern recognition and clustering methods applied to images and multi-dimensional datasets.

#### **SKILLS**

Main Languages: Python, Javascript

**Techniques:** Recommender systems, clustering, regression, PCA, machine learning

Tools: LATEX, Git, Jekyll, AWS, SQL

Packages: Pandas, numpy, scipy, Scikit-Learn, seaborn, D3.js, PyTorch