

JesFord

Senior Data Scientist

contact

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206.446.6874

website

jesford.github.io

GitHub

[@jesford](https://github.com/jesford)

tech skills

♥ Python

*pandas, numpy, scipy,
pytorch, keras, xgboost,
scikit-learn, jupyter,
seaborn, matplotlib,
prefect, dash, plotly*

Git & GitHub

Bash

SQL

C/C++

Travis-CI

AWS & GCP

Sphinx

HTML/CSS

LaTeX

OS X

Linux

volunteering

Women in Data Science
SLC Ambassador, 2019–now

Salt Lake PyLadies
Meetup Organizer, 2017–now

Women in Sci. & Tech.
Member, 2018–2020

publications

9 peer-reviewed [papers](#) (5
1st-author) & >30 conference
presentations (8 invited).

education

Ph.D. in Physics, 2015
University of British Columbia

B.Sc. in Physics, 2008
Minor in Mathematics
University of Nevada, Reno

profile

Experienced Data Scientist with a passion for applied machine learning and open source software. I bring a practical product driven mindset, an obsession with best practices, and a demonstrated ability to collaborate effectively across teams to achieve goals. I am a regular conference speaker at events including [PyCon](#), PluralsightLIVE, and VisInPractice.

experience

2018–current **Recursion**

Salt Lake City, UT

Senior Data Scientist 11/2019–current

Data Scientist 4/2018–11/2019

- Trained, optimized, and benchmarked deep neural networks (CNNs and graph NNs) to solve problems in drug discovery.
- Technical lead on teams that productionized the first machine learning models at Recursion, responsible for directing a small team of data scientists, and providing regular updates to VPs.
- Model interpretability including saliency maps, GradCAM, DeepDream.
- Pioneered use of MCMC for Bayesian parameter fitting of experimental data, and developed new visualizations to inform biologists.
- Owned creation of cleaned & standardized labelsets from noisy data, enabling comparison of ML models across data science teams.
- Designed & built custom Google Cloud database for storing ML models, metrics, labels, and predictions; created resources for data science users.
- Led data science team to adopt software best practices for reproducible research and clean production quality code.

2016–2018 **Backcountry.com**

Park City, UT

Data Scientist

- Led design, execution of tests to optimize sales via customer segmentation, product taxonomy, contact method/timing.
- Cross-channel attribution; customer lead scoring; incremental sales.
- Built & deployed interactive dashboards using Plotly Dash.
- Automated processes and pulled disparate data to database summary tables to reduce reporting time for analysts by 99%.
- Built Python package for easily interfacing with Oracle DB from Python, removing multi-tool headache for analytics teams.
- Wrangled messy data from Oracle, Adobe Analytics, Google Trends, Social Media, 3rd-party APIs; enforced data quality across departments.
- Founded and led tutorial and workshop series to elevate technical skills.

2015–2016 **eScience Institute, University of Washington**

Seattle, WA

Data Science Postdoctoral Fellow

- Author of Python package for statistical modeling of galaxy clusters.
- Machine Learning algorithms for hazardous asteroid detection.
- Mentor for the Data Science for the Social Good summer program.

2009–2015 **University of British Columbia**

Vancouver, BC

Research Assistant / PhD Student

- Complex modeling, uncertainty estimation, sampling, parallel processing.

2007

NASA Jet Propulsion Laboratory

Pasadena, CA

Summer Undergraduate Research Fellowship