JesFord

Senior Data Scientist

contact

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206.446.6874

website

jesford.github.io

GitHub

@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; incremental sales measurements.
- 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; worked across departments to enforce quality.
- 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