Daniel Pfeffer

Summary

Manager of Data Science at Eversana with PhD in Astrophysics. Interested in using data driven analytics to help improve lives.

SKILLS

Programming: Python (numpy, pandas, scikit-learn), SQL, C, Matlab, Mathematica, Bash, Tensorflow, Keras

Analytical Techniques: Machine Learning, Linear Algebra, Statistics, Data Analysis, Data Visualization (Python, Power BI)

EXPERIENCE

Eversana, Philadelphia (Formally HVH Precision Analytics) -

Data Science Manager

November 2022 - PRESENT

Senior Data Scientist

July 2021 - November 2022

Data Scientist

January 2020 - July 2021

- Manage and lead a team of Data Scientists and Data Analysts working on multiple projects
- Developed tools to derive insights from Electronic Medical Records
- Extracted insights from administrative claims healthcare data to track patient characteristics and their journey through the healthcare system.
- Created predictive models using machine learning and statistical techniques to find undiagnosed patients with rare diseases.
- Developed and deployed analytics and machine learning models on administrative claims data deployed on a SaaS platform.

Johns Hopkins University, Baltimore, MD –

Graduate Research/Teaching Assistant

August 2014 - September 2019

- Trained convolutional neural network to predict the underlying galaxy-brightness distribution of a line intensity map.
- Used Markov chain Monte Carlo and Nested Sampling to identify relevant influencing forces on dark matter interactions.

- Built a model to estimate flux of cosmic rays and proved its validity by correctly predicting observed flux.
- Implemented new anomaly-detection techniques to search for unresolved gamma ray sources.
- Led teams of up to 11 teaching assistants to help teach courses for up to 300 undergraduates.

Speculating Stocks, Indiana, PA –

Web Developer

June 2010 - August 2012

- Developed back-end tools to automatically scrape websites for stock information and news. Prototyped social media features such as followers, likes, and shares to increase engagement on a financial-news oriented website.
- Created and managed SQL databases to store constantly updating stock information.

EDUCATION

Johns Hopkins University - Ph.D. of Physics and Astronomy

August 2014 - September 2019, Baltimore, MD

Johns Hopkins University — M.A. of Physics and Astronomy

August 2014 - June 2016, Baltimore, MD

Case Western Reserve University - B.S. of Mathematics and Physics

August 2010 - June 2014, Cleveland, OH

Graduated Summa Cum Laude

Publications

Daniel N. Pfeffer, Patrick C. Breysse, and George Stein. Deconfusing intensity maps with neural networks. 2019.

Daniel N. Pfeffer, Ely D. Kovetz, and Marc Kamionkowski. Ultrahigh-energy cosmic ray hotspots from tidal disruption events. Mon. Not. Roy. Astron. Soc., 466(3):2922-2926, 2017.