

# Jacob Der



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## Profile

I am a budding data scientist with experience using popular data science toolkits like Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, and PyTorch.

## Work Experience

### Data Analyst/Engineer

*Verified Nutrition*

07/2020 – 01/2021 | Los Angeles

- Designed, implemented, and maintained data pipelines with Python, Snowflake
  - Tested REST API requests with Postman
  - ETL with Python
  - Warehousing with Snowflake
- Performed exploratory analysis and regression on business data
- Did customer segmentation and reported on various groups

### Teaching Assistant

*University of Southern California*

08/2018 – 05/2020 | Los Angeles

## Certificates

### Python for Data Science and Machine Learning Bootcamp

*Instructor - Jose Portilla*

## Skills

### Programming

- Python, Jupyter notebook, SQL
- Versioning with Git and Github

### Machine Learning

- Regression, classification, clustering with Scikit-learn
- Deep learning with PyTorch and Keras/Tensorflow

### Mathematics

*Linear algebra, probability and statistics, calculus, graph theory*

## Projects

### Full Portfolio on my Website [🔗](#)

### Fake News Detection [🔗](#)

- Trained naive Bayes classifier to detect fake news, according to the headline
- Preprocessed data using a library I developed
  - Cleaned and combined text datasets
  - Put data into a bag-of-words representation

### Student Performance Prediction [🔗](#)

- Used Scikit-learn to predict student performances on exams
- Used chi-squared testing for feature selection
  - Created visualizations with Seaborn
  - Trained random forest model for final predictions

### Image Classifier [🔗](#)

Used PyTorch to construct a convolutional neural network for image classification

## Education

### MA in Mathematics

*University of Southern California*

08/2018 – 05/2020 | Los Angeles

### BA in Mathematics

*San Francisco State University*

08/2014 – 05/2018 | San Francisco

## Interests

Rock climbing | Philosophy | Cooking | Jazz

Fiction | Old School Runescape