David S. Roth

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A passionate, curious-minded and hardworking ML Engineer / Data Scientist. Likes solving big, messy problems with big, messy data. Excited about bringing good ideas from representation learning over text, images and graphs to production scale.

Currently a second year MS student at NYU's Center for Data Science

(May '23 Exp.)

SKILLS

- Languages Python (10 yrs), SQL (6 yrs), Java (2 yrs) Scala (1 yr), C++ (<1 yr)
- ML/Data Science PyTorch, TensorFlow, NumPy, Pandas, DGL, huggingface
- · Data Engineering Beam, Dataflow, Airflow, Luigi, Spark
- Cloud Experience with declarative infra and CI/CD on AWS and GCP.

EXPERIENCE

Spotify

New York, NY

Data Scientist I (Part-Time)

September 2022 - December 2022

• Delivered usage analytics and case-studies for partners in publishing, licensing and editorial.

Zillow

New York, NY

Capstone Researcher (Internship)

September 2022 - December 2022

- Evaluated methods for scalable inductive representation learning over large, sparsely connected multi-modal graph data.
- Wrote training, evaluation and experiment tracking pipeline using Deep Graph Library, Ray and PyTorch Lightning.

Spotify

New York, NY

Data Science / Machine Learning Engineering Intern

June 2022 - September 2022

- Wrote featurization code to perform text vectorization and measure cosine-similarity on 30M+ daily records using TensorFlow/Beam/Luigi.
- Assessed error rates on lyric content across languages and markets. Designed and oversaw annotation trial to evaluate quality control approaches.

KPMG Data & Analytics

New York, NY

Associate Data Scientist

January 2019 - August 2021

- *Health Insurance Client:* Built data pipelines to compute cohort statistics for demographic subsets of claims data and provide visualizations for analyst-facing dashboards.
- Financial Services Client: Data Engineer on greenfield credit card offering at major NYC financial institution.
 Worked on small, agile team to rapidly build and scale fault-resistant data processing pipeline capable of handling 10+ million daily transactions using Airflow, PySpark and BigTable.
- GDPR NLP: Leveraged RoBERTa embeddings to improve recall on semantic search over regulatory documentation relating to the EU's General Data Protection Regulation laws.

KPMG Cognitive Automation Labs

New York, NY

Summer Intern

June 2018 - August 2018

Built feature generation pipeline to perform cleaning, tokenizing and part-of-speech tagging on text data.

EDUCATION

NYU Center for Data Science

2021 - 2023

M.S. Data Science (Exp.)

NYU Courant Institute of Mathematical Sciences

2014 - 2018

B.A. Computer Science

NYU Leonard Stern School of Business

2014 - 2018

B.S. Statistics

INTERESTS

Multi-instrumentalist and full-stack musician (writer/performer/producer) \(\bigsi_{\text{rothie}} \)_rothie_