

Ben Polzin

DATA SCIENTIST

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SKILLS

Python, SQL, Machine Learning, Deep Learning, Structured Transparency, Predictive Analytics, Natural Language Processing, Computer Vision, Automation, Optimization, TensorFlow, AWS, Athena, SageMaker, Hadoop, Spark, numpy, pandas, scikit-learn

EDUCATION

TensorFlow Developer Certificate,
Google, Jun 2021

Deep Learning Specialization,
Coursera, May 2021

Diploma, Data Science,
BrainStation, Oct 2020

B.S. Petroleum Engineering,
Colorado School of Mines, May
2016

PROFESSIONAL EXPERIENCE

Data Scientist | The Intelligence Exchange

2021 - Present, Des Moines, IA (Fully Remote - Chicago Headquarters)

- Primary focus in applying data mining techniques, doing statistical analysis, utilizing advanced data science and artificial intelligence including but not limited to machine learning, deep learning, transfer learning, and building high quality analytic solutions that can be executed on our platform.
- Applying structured transparency solutions including homomorphic encryption, differential privacy, secure multi-party computation, and federated learning using PySyft, Grid, and TenSEAL.
- Implementing TensorFlow Deep Learning workflows and optimizing our forecasting approach.

Learning Assistant | Trilogy Education

2021, 2U/Trilogy Education, Des Moines, IA (Fully Remote)

- Learning Assistant for the new FinTech program. Mentored and assisting students with any course-related issues they may have.
- Curriculum included SQL, Python, numpy, pandas, sci-kit learn, TensorFlow, machine learning, cryptocurrency, time series analysis, and financial analysis.

Teaching Assistant | Data Science Diploma Program BrainStation

2020 - 2021, BrainStation, Des Moines, IA (Fully Remote)

- Hosted live code along sessions to reinforce fundamental data science and machine learning concepts including Python, Pandas, sci-kit learn, TensorFlow, AWS, SQL, R, and Tableau.
- Assisted in coordination and delivery of lesson material and projects as well as providing marks, feedback, and mentorship to students.

Production Engineer | Newfield Exploration / Encana Corporation

2016 - 2019, Houston, TX

- Engineer responsible for production operations of nearly 500 producing wells in the Uinta Basin of North Eastern Utah including leading a field team of 4 leads and 20 lease operators.
- Maintained stability of operations and merged data workflows throughout the Encana/Newfield merger.
- Leveraged extensive data analysis to return 30 temporarily shut-in wells back to production as well as identified and prioritized future capital projects.
- Spearheaded multiple process improvement projects from inception to implementation including a revamped and enhanced data ETL pipeline and data analysis dashboard.

PORTFOLIO PROJECTS

Time Series Analysis with TensorFlow, ARIMA and Prophet

- Demonstrated the entire time series analysis workflow (data exploration, cleaning, preprocessing, windowing, and forecasting) and utilized the ARIMA and Facebook Prophet model for advanced predictions with cutting edge machine learning tools.

Natural Language Processing and Optical Character Recognition with TensorFlow and BERT

- Demonstrated the entire NLP workflow with BERT (data loading, preprocessing, tokenization, transfer learning, and predictions) and OCR with pytesseract achieving model accuracy improvement from 75% to 94%.

Computer Vision with TensorFlow

- Demonstrated the entire computer vision workflow (data loading, preprocessing, model tuning, optimization, and predictions) achieving model accuracy improvement from 75%-90%.

MyGamePass | BrainStation Diploma Capstone Project

- Recommender system for video games built with both collaborative and content-based filtering by cosine similarity.