Daniel Mendoza

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Summary

Petroleum engineer with 4 years of programming experience in Python, and 2 years of experience in machine learning and Bayesian statistics seeking an opportunity to use this skillset and deliver effective data-driven solutions and extract valuable insights from data.

Education

Colorado School of Mines / B.S. in Petroleum Engineering

August 2015 - May 2018

Aims Community College / A.S. in Engineering Prerequisites

August 2013 - May 2015

Skills

- Programming Languages: Python and VBA. Minimal experience with R, Julia, JavaScript, and C++
- Python Libraries: Tensorflow, Tensorflow Probability, Dash, Pandas, Numpy, Scipy, Matplotlib, Plotly, others
- Software: Microsoft Office, Kappa-Workstation modules, PHDwin
- Spoken Languages: English and Spanish
- **Technical Skills**: Parameter inference and forecasting using Bayesian methods, Bayesian model checking and advanced computation, can implement various machine learning models (generative, GLMs, LVMs, Hierarchical models, PPCA, Sparse linear models, GPs, HMMs, etc.) for multiple tasks, can build interactive data dashboards, and process data.

Experience

Integrated Petroleum Technologies / Reservoir Engineer

March 2018 – May 2021

- Developed multiple full-field oil and gas numerical simulation models to forecast production for unconventional and conventional resources using multiple data sources for reservoir, geologic, and fluid characterization
- Collaborated with drilling and completions engineers, geologists, state and federal regulatory agencies, numerous clients, and management for successful permitting and completion of water disposal wells
- •Created multiple web-scrapping algorithms to gather oil and gas data used in economic analyses, permitting water disposal wells, and to make multiple geospatial maps

Programming Projects

May 2021 - Present

- Developed multiple tutorials to teach introductory machine learning algorithms and Bayesian computational methods including an in-depth analysis on the Metropolis-Hastings and Hamiltonian Monte Carlo algorithms.
- Sentiment classification using naïve bayes and logistic regression to rate customer product reviews (additional projects and machine learning tutorials are on display on dmendozac90.github.io)