John O'Donnell

14707 Julie Meadows Lane, Humble, TX 77396
(936) 537-0533
Johnodonnell123@gmail.com
Project Website: johnodonnell123.github.io

Education

Flatiron School: Data Science Bootcamp — April 2020 - Jan 2021

IBM: Data Science Professional Certificate — February 2020

The University of Texas at Dallas *Master of Business Administration* — January 2017 – March 2019

The University of Texas at Arlington *Master of Petroleum Geoscience* — August 2016 – May 2018

Texas A&M University *Bachelor of Science in Geology* — August 2012 – May 2016

Experience

Data Scientist *ClassPass* — June 2021 – Present

- Daily use of SQL in a Postgres OLAP environment
- Developed similarity models for class genres used in recommendation system
- Aided in testing new products / strategies with A/B testing
- Built interactive dashboards in Tableau

Geoscientist *Oasis Petroleum* — June 2018 – March 2021

- Responsible for organization, analysis, and presentation of large, multidisciplinary, disparate datasets for over 15,000 oil and gas wells, each with monthly production values for oil/water/gas numbering in the millions of rows of data
- Analysis completed exclusively in Python with Jupyter Lab using packages including NumPy, Pandas, Sci-kit Learn, SHAP, math, and Plotly
- Using data visualization packages such a Plotly, created meaningful and intuitive visualizations that conveyed complex relationships in a concise manner that drove large-scale change in our development program
- Used log data and geologic maps (> 200,000 records) to create cluster analysis workflows defining geologic rock types that translate into higher/lower productivity in areas around the petroleum basin
- Extensive experience with tree-based ensemble methods such as Random Forest to untangle complex relationships between geologic and engineering datasets, leading to a more nuanced perspective of our asset and how to develop it
- Experience with Shapley analysis to further explain the relationships interpreted by tree-based methods
- Created and presented material stepping through complex machine learning algorithms and findings to senior management teams and non-technical staff to build confidence in results of the models built

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Relevant Academic Coursework:

- Calculus 1-3
- Differential Equations
- Newtonian Mechanics for Engineering
- Electricity and Magnetism for Engineering
- Quantitative Risk Analysis
- Financial Management
- Advanced Engineering Economy
- Enterprise IT Architecture
- Information Technology for Management
- Data Visualization
- Managing Digital Strategy
- Corporate Finance
- Business Economics
- Interactive and Digital Marketing

Relevant Skills:

- Proficiency in Python and SQL
- Experience with version control software (Git)
- Strong time-management skills and a curious, proactive mindset
- Working knowledge of machine learning algorithms and their various applications
- Ability to work in a multidisciplinary team, understand difference sources of data as well as their biases and uncertainties
- Strong communication skills, ability to navigate complex environments and explain them in an intuitive, succinct manner