# John O'Donnell

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## Education

**The University of Texas at Dallas** *MBA | Business Analytics*                January 2017 – March 2019

**The University of Texas at Arlington** *M.S. Petroleum Geoscience*                August 2016 – May 2018

**Texas A&M University** *B.S. Geoscience*                August 2012 – May 2016

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## Experience

**Data Scientist II** Mindbody + *ClassPass*                June 2021 – Present

- Leads in statistical experimentation for new products and initiatives
  - Utilizes both formal and quasi-experimentation
  - Dives deep into the causal behavior driving the detected effects to understand the impact of the treatment
- Designed and led experiments resulting in:
  - Increase in trialer revenue by 50%
  - Increase in early life user revenue by 25%
  - Increase in fee revenue by 25%
  - Increase in trialer CVR by 5%
- Segments users with Machine Learning based upon behavior:
  - User segmentation helps us better understand users on our platform and how to improve their personal experience
  - These segments are used in recommendations, experimentation, and promotional targeting
- Increased number of identified fraudulent accounts by > 300%
  - Engineered creative and interpretable features around fraudulent behavior
  - Build an outlier detection model using engineered featured and isolation forest
- $2M+ in novel fraud use cases identified by exploring large datasets:
- Augmented and maintained model relating a users perceived value, tenure, and churn
  - Model used to interpret the impact of certain action on user churn/tenure
- Daily use of Postgres in an OLAP environment for complex data wrangling, ETL familiarity
- Builds interactive dashboards in Tableau for internal stakeholders

**Geoscientist** *Oasis Petroleum*                June 2018 – March 2021

- Performed various cluster analyses to define subsurface reservoirs strongly correlated with oil production
  - Resulted in tiering of undeveloped assets and stronger project evaluations, used in business development
- Built many supervised models to predict oil production at various points in the life of a well, with the primary goal being interpretability/inference
  - Results of models changed development strategy and reduced well cost
  - Utilized random forest to better understand non-linear relationship between production and capital spend
- Created meaningful and intuitive visualizations that conveyed complex geologic relationships in an intuitive manner
- Used various machine learning models to predict missing/rare data points greatly reducing costs and risk of acquisition
- 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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## Personal Projects:

- Text Classification with NLP, iterated with various methods ranging from Naive Bayes + bag of words to Deep Learning with custom word embeddings
- Movie Recommendation engine using SVD, resulting in a customized home page for each subscriber
- Customer Churn prediction with Random Forest, achieved high accuracy with actionable insights from model

## Relevant Skills:

- Proficiency in Python and SQL (5+ years)
- Experience with version control (Git)
- Strong web scraping experience (Scrapy)
- Strong time-management skills and a curious, proactive mindset
- Strong knowledge of machine learning algorithms and their various applications
- Strong communication skills, ability to navigate complex environments and explain them in an intuitive, succinct manner