JASON DUNLEAVY

DATA SCIENTIST

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Skills

PROGRAMMING LANGUAGES
Python
SQL
HTML
Bash

PACKAGES
Pandas
NumPy
Scikit-learn
BeautifulSoup
Matplotlib
Seaborn
Selenium
TensorFlow/Keras
Spark/PySpark
Streamlit
Bokeh
SQLAlchemy
Plotly

MACHINE LEARNING
Linear Regression
K-Nearest Neighbors
Logistic Regression
Naive Bayes
Tree-Based Methods
Ensemble Methods
Clustering
Dimensionality Reduction
Natural Language Processing
Artificial Neural Networks
Transfer Learning
Time Series

OTHER
Git/GitHub
PostgreSQL
Google Cloud Platform
Heroku
Jupyter
PyCharm
Alteryx
Tableau
UiPath/RPA
ABBYY FlexiCapture
Microsoft Office

Experience

Metis
New York, NY
Data Scientist
Jan. 2021 to Mar. 2021

Participated in 12-week Data Science Bootcamp to design, build, deploy, and present multiple predictive models. Selected projects include:

Artificial Neural Networks: Predicting Daily Stock Rating

- Streamlined millions of data points of financial statement, market, forecast, and analyst rating history for over 3,000 publically-traded companies
- Utilized Google Cloud Platform to train, test, and refine a multilayered Neural Network architecture
- On a scale of one (strong buy) through five (strong sell), final predictive model performed with a mean absolute error of 0.73
- Designed a Streamlit web app and deployed it via Heroku, enabling users to visualize stock performance and obtain that day's stock rating

Natural Language Processing: COVID-19 Financial Statement Disclosures

- Web-scraped COVID-19 disclosures from all S&P 500 companies' pandemic-era financial statements
- Employed topic modeling (via non-negative matrix factorization and Latent Dirichlet allocation) and sentiment analysis (via VADER) to create an interactive Tableau dashboard to identify and analyze trends

Classification: Big Four vs. Other

- Created and queried a PostgreSQL database to obtain data on public companies and their financial statement auditors
- Tested multiple classification models (KNN, Logistic Regression, Naive Bayes, Decision Trees, Random Forests, XGBoost, and ensemble methods) to obtain a final auditor-prediction model with an F1 score of 89 percent

Linear Regression: Predicting Electricity Usage

- Utilized web scraping (Selenium and BeautifulSoup) to gather data from dynamically generated web pages
- Implemented various modeling techniques such as feature engineering, autoregression, and lasso regularization
- Final model predicting monthly electricity usage in the State of Louisiana performed with an r-squared of 90 percent and a mean absolute error of 243 MWh

PricewaterhouseCoopers, LLP
New Orleans, LA
Assurance Associate
Sept. 2018 to Nov. 2020

- Developed revenue analytic workflow and dashboard for audit client's newly implemented ERP system, resulting in the identification of a material weakness
- Appointed as a Digital Champion on nationwide Renewable Energy Audit Transformation team, designing effective and impactful audit tools through an iterative human-centered design process
- Served as office Digital Personal Trainer, upskilling partners and staff in digital tools including Alteryx, Tableau, UiPath, and ABBYYFlexiCapture
- Coordinated client's business valuation as part of annual Goodwill Impairment testing, improving process to include sensitivities over regulatory and business uncertainties
- Seniored various audit areas, effectively coaching new-hires and off-shore teams, resulting in high-quality and on-time audit opinions
- Outperformed peers at annual career roundtable, receiving the highest possible performance ranking

Professional Licenses

Certified Public Accountant · New York State Board of Education
Licensed in the State of New York

CFA Level I Candidate · CFA Institute
Registered to sit for May 2021 Level I exam

Education

Tulane University - A.B. Freeman School of Business
Sept. 2013 to May 2018

Master of Accounting 2018
Bachelor of Science in Management - Finance 2018
GPA: 3.8
Honors: Cum Laude