

Brian Farrelly

Data Scientist

Lemont, Illinois

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[LinkedIn](#) | [GitHub](#) | [Kaggle](#)

SKILLS

Statistics: Linear regression, Hypothesis testing, Network analysis, Predictive analytics/forecasting, Bayesian statistics, General Linear models, Random sampling methods, Missing data imputation, Tableau

Experimental Design: A/B Tests, Research proposals, Defining key metrics, Evaluation, Rollout plans

Machine Learning: Feature engineering / selection, Dimensionality reduction, Random Forest, XGBoost, Regularization methods, LASSO, Elastic Net, Ridge, Classification, Hyper-parameter tuning, K-means clustering

Tools: Python, scikit-learn, Pandas, NumPy, Seaborn, Matplotlib, TensorFlow/Keras, MySQL, Linux, Command Line

PROFESSIONAL EXPERIENCE

THINKFUL

Data Scientist - Jan 2020 - June 2020

- Implemented latest standards and best practices for Data retrieval, Data cleaning and Data analysis and statistical analysis to implement machine learning in software and business applications. Using Tableau for eda and visuals.

Used Voice Data Analysis as Diagnostic Tool for Parkinson's Disease | [GitHub](#)

- EDA and model analysis on UCI Irvine dataset. Using Random Forest and XGBoost as primary prediction models for voice data with UPDRS scale as target variable.
- Python, numpy, sklearn, pandas, matplotlib, seaborn, xgboost, statsmodel.api

Made a Predictive Model of unlabeled data of Fish Market for production streamlining | [GitHub](#) - May, 2020

- EDA and model analysis on kaggle dataset. PCA and plotly used for cluster analysis.
- Python, numpy, sklearn, pandas, matplotlib, seaborn, PCA, TSNE, scipy, Kmeans, Dbscan

Implemented Medical Image Analysis using convolutional deep learning network | [GitHub](#) - June, 2020

- EDA Stored on a mounted google drive with 1300 training files for normal, 1300 viral pneumonia files and 1300 bacterial pneumonia files. The data is loaded into a generator and that generator is used to train the model.
- Python, keras, tensorflow, tensorflow keras, Conv2D, plotly, pandas

Windstream | Chicago, Illinois

1 year

Development Engineer

- Administered and developed billing Software written in Perl DBI. Designed a new billing process for VOIP retail and wholesale products. Overhauled and streamlined billing process to allow for better audit controls.
- Deployed RAID-1 Linux Slackware servers used for providing VOIP services. Implemented Linux-HA to provide a high-availability failover solution for the VOIP SER registration services.

Computer Associates | San Diego, CA

5 years

Software Engineer

- Created java middleware products and PHP interfaces. Familiar with Apache Tomcat.
- Implemented IPsec standard for our VPN product, Created vulnerability tests for Windows and Linux/Unix platforms

EDUCATION

DEPAUL UNIVERSITY

Bachelor of Science, Computer Science