

**PROFESSIONAL SKILLS**

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- Computer skills: Excel, Access, Word, PowerPoint, Azure Data Studio, Bloomberg Terminal, SAP
- Programming: Python (NumPy, Pandas, Scipy, Scikit-learn, TensorFlow, PyTorch, BeautifulSoup, NLTK), R (Tidyverse, RANN), PostgreSQL, SAS
- Visualization and Statistical Software: Tableau, Python (Matplotlib, Seaborn, Plotly, Wordcloud), R (Ggplot2), SAS
- Big Data: Hadoop, Hive, Spark
- Analytics, Statistical Analysis, Machine Learning, Financial Modeling, Quantitative Analysis, Security Analysis, Problem Solving, Valuation, Research

**PROFESSIONAL EXPERIENCE**

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**FIVERR** Chicago, IL  
**Freelance Data Analyst** Jun 2020 - Present

- Provided data processing, data visualization, and data extracting insights from customer requests using Python, R and SAS
- Applied time series analysis, predictive analysis, and supervised learning (model preparation, classification problems) by applying machine learning algorithms (Logistic and Linear Regression, Decision Trees, Random Forest, SVM) for utilizing dataset
- Strengthened predictions by developing hyperparameter optimizations for the dataset and established suggestions for clients to get better predictions in the future

**IVYLINE CAPITAL GROUP, LLC.** Lancaster, PA  
**Apprenticeship Equity Analysis** Sep 2018 – May 2019

- Developed complex portfolio management strategies and effectively applied them to security analysis within the investment industry
- Created a successful investment portfolio that used the investment strategy with derivative analytical plan to invest \$10 millions paper money on a Think or Swim platform on performed equities: XOM, EOG, GM, BA, and TSLA to gain \$1.731 millions in 9 month
- Utilized derivative and statistical analysis effectively to evaluate the return investment in equity options and portfolio management

**ANALYTICS PROJECT EXPERIENCE**

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**AMAZON FINE FOOD REVIEW** Jan 2021

- Utilized Sparse Matrix by using Python packages (NumPy, Pandas, Scipy) to design recommendation systems based on food item popularity and users' ratings
- Applied text processing with NLTK package and Scikit-learn packages (TfidfVectorizer, CountVectorizer, Gensim) to develop the sentiment analysis that predicts positive and negative reviews by utilizing machine learning technique (Logistic Regression and Bernoulli Naïve Bayes)
- Created clustering model with K-mean to extract top words that impact the sentiment analysis and applied t-SNE to plot those words with Plotly package
- Developed deep learning model to learn the dataset better with ANN and RNN – LSTM by applying TensorFlow.Keras and tuning model to gain higher accuracy scores, which are 3% accuracy improvement compared to traditional models

**AIRPLANE CRASHED** Nov 2020

- Utilized Python packages (Pandas, NumPy, Seaborn, Matplotlib) to develop a story of the airplane crashed trending based on time, regions, operators, and aircraft
- Built clustering models (K-Mean, Hierarchical, DBSCAN) to cluster airplane crashed and texting on the dataset by utilizing machine learning technique (Scikit-learn) and evaluated the best model based on a loop function of Silhouette Coefficient scores
- Applied dimension reduction (PCA, t-SNE, UMAP) to visualize accuracy results

**FASHION MNIST** Nov 2020

- Created unsupervised learning/ clustering models (K-Mean, Hierarchical, Gaussian Mixture, DBSCAN) by utilizing machine learning package (Scikit-learn) to cluster the common images
- Evaluated the best model based on a loop function of Silhouette Coefficient scores
- Applied dimension reduction (PCA, t-SNE, LDA, UMAP) to visualize accuracy results
- Developed a 3D plot by applying Plotly

**LENDING CLUB'S LOAN DATA FROM 2007 TO 2011** Oct 2020

- Built a model in Python to improve a loan prediction repayment and analysis to the next level by utilizing machine learning technique (Scikit-learn) and by incorporating a strategy for hyperparameter tuning (GridSearchCV) to Random Forest Classifier and Gradient Boosting Classifier, which gained almost 12% higher accuracy scores than traditional models
- Developed data story efficiently and effectively by cleaning out the unnecessary features and pointing out the core variables that have impacts on loan prediction model
- Clarified the best models that fit the dataset with high accuracy scores

**EDUCATION**

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**DEPAUL UNIVERSITY, KELLSTADT GRADUATE SCHOOL OF BUSINESS** Chicago, IL  
**Master of Science in Business Analytics: Data Science** Jun 2021

- Dean's Scholarship
- GPA 3.78 / 4.00
- Vice President of Kellstadt Business Analytics Organization

**THINKFUL, INC.** Chicago, IL  
**Data Science Program Certificate** Feb 2021

**LIBERTY UNIVERSITY, SCHOOL OF BUSINESS** Lynchburg, VA  
**Bachelor of Science in Business Administration: Finance** May 2018