

PIZON SHETU

209-22 Whitehall Ter
Jamaica, NY 11427
(917) 340-3347

pizon.skhan@gmail.com
www.linkedin.com/in/pizon-shetu/
www.github.com/izinex/

PROFESSIONAL EXPERIENCE

Data Scientist – Webster Bank (June, 2022 – Present Stamford, CT):

- Spearheaded extraction of crucial historical credit approval data for development in-house **Probability of Default (PD)** and **Loss Given Default (LGD)** models, resulting in a projected \$1.5M annual savings by transitioning from costly Moody's models.
- Using **SQL**, **SAS** and **Python** perform end-to-end development, back-testing, and documentation of models across diverse portfolios, orchestrating internal and external data consolidation by filling missing data using 3rd-party data (TREPP) via nearest neighbor clustering (**KNN**).
- Aligned driver variables with default and loss patterns, ensuring effective representation of the bank's risk landscape in Commercial Real Estate (CRE) and Sponsor & Specialty (S&S) models. Collaborated closely with IT, data teams, and credit underwriters to seamlessly communicate and align key data elements with business needs, ensuring accurate reflection of product consumer requests in the final product.
- PD and LGD models developed on **Binned Variables Logistic Regression using Weights of Evidence**; Models performed with an ROC of **~89%** and **~70%** for PD and LGD respectively for CRE; ~70% and ~63% for S&S
- Conduct stress tests (model performance) and reviews of models, validating predictor variables' relevance with new data, and performed code reviews.
- Initiated the transition of legacy CECL models from SAS to Python, managing code conversion and exploring automation solutions with airflow.

Data Science Mentor – Springboard (2023 – Present, New York, NY):

- Assist Springboard students in their Data Science journey, providing coding support, goal setting guidance, and career advice during weekly video calls. Cover a wide range of topics including data wrangling, data visualization, exploratory data analysis, statistical inference, and machine learning.

Data Scientist – Whiterock.ai (Jan, 2022 – May, 2022 Manhattan, NY):

- Conducted exploratory data analysis (EDA) and performed Extract, Transform, Load (ETL) on large real-estate datasets to identify key insights and features on past and present markets, to feature engineer key risk drivers for home prices.
- Automated incoming data from BlackKnight and other various sources using Apache Airflow and Google Cloud Platform (GCP) reducing processing time by 20% and improving data quality.

Junior Data Scientist – ProMarketingHub (July 2020 – Oct 2021 Queens, NY):

- Utilized data-driven methods and performed ETL process on various datasets in Python to compile and define customer needs for a startup marketing firm, employing **k-Means clustering (unsupervised learning)** to segment customers and enhance targeted marketing.

EDUCATION

Springboard Data Science Bootcamp – Online (2021):

Completed a comprehensive program in the full Python Data Science Stack, including Data Wrangling, Statistical Inference, Supervised and Unsupervised Machine Learning, Deep Learning, SQL, A/B Testing, etc.

Queens College Bachelor's in Computer Science and Applied Mathematics - NY, Queens (2020):

Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Database Systems, Computer Architecture, Software Engineering, Internet/Web Technologies, Theory of Computation, Probability and Statistics, Bayesian Modeling, Linear Algebra, Linear Programming, Advanced Calculus, Machine Learning in R, Blockchain Mathematics.

PROJECTS

Convolutional Neural Network for Image Recognition – Classification

- Developed and implemented a neural network using the Keras API for bird species classification, achieving an impressive 94% accuracy in identifying 315 species. Further enhanced the model's performance through Transfer-Learning with VGG16, and hyper-parameter tuning, resulting in a 98% prediction accuracy.

New York Housing Price Prediction – XGBoost Decision Tree

- Cleaned 75K invalid and missing data points in Zillow's housing data using advanced imputation techniques (MICE), improving NYC housing market accuracy. Assessed predictive models (Linear Regression, RandomForest, KNN) using Mean Absolute Error. Optimized XGBoost achieved the highest accuracy through hyper-parameter tuning.

TECHNICAL SKILLS

Languages: Python, SQL, SAS, R, Java, C++, Excel, LaTeX

Technologies/Frameworks: Git, ABBYY, Databricks, Google Cloud Platform, Scikit-Learn, OpenCV, Pandas

Soft Skills: Strong Communication, Cross-functional Collaboration, Project Management, Mentoring