

## **PROFESSIONAL OBJECTIVE**

To leverage my strong analytical skills, advanced statistical knowledge, and expertise in machine learning to drive data-driven insights and develop innovative solutions as a data scientist. With a passion for uncovering patterns and extracting valuable information from complex datasets, my objective is to contribute to an organization's strategic decision-making, optimize processes, and deliver actionable recommendations that result in improved business performance.

## **SKILLS SUMMARY**

- Data Analysis and Modeling: Proficient in conducting data collection, cleaning, analysis, and modeling using Python, SQL, and Excel. Experienced in feature engineering, model selection, and training, as well as utilizing statistical techniques and machine learning algorithms for accurate predictions and insights
- Natural Language Processing (NLP): Implemented comprehensive NLP projects using Python, TensorFlow, and PyTorch. Utilized deep learning algorithms (BERT, LSTM) to perform sentiment analysis, automatic labeling of customer feedback, reviews, and social media data
- Data Pipelines and Integration: Developed and deployed data pipelines using Apache Airflow, integrating diverse data sources like customer feedback platforms, social media APIs, and internal databases to create a unified data ecosystem
- Statistical Analysis and Forecasting: Proficient in performing exploratory data analysis (EDA), time series analysis, forecasting, and statistical modeling using techniques such as ARIMA, SARIMA, exponential smoothing, and regression analysis. Utilized evaluation metrics (MAE, MSE, RMSE) to validate model performance
- Regression analysis of cross-section, panel and time series data, analysis of limited dependent variable models, simultaneous equations models, seemingly unrelated regression and analysis of production-cost flexible form functions
- Experimental Design and A/B Testing: Conducted A/B testing and controlled experiments to evaluate the impact of training programs and interventions. Proficient in using statistical programming languages (R or Python) and libraries (SciPy, statsmodels) for analyzing experimental data
- Database Management: Developed and maintained data models, databases (SQL, PostgreSQL), and systems for efficient data storage, retrieval, and analysis
- Cloud Technologies: Utilized cloud-based solutions such as Amazon Web Services (AWS) and Google Cloud Platform (GCP) for scalable data processing, storage, and infrastructure requirements
- Programming Languages and Tools: Experienced in working with R, Python, MS SQL, SAS, SAS/BASE, SAS/SQL, Microsoft Office. Familiarity with tech stack including GraphQL, bash scripting, PHP, JavaScript, MATLAB, Stata, Eviews, AWS, and Azure
- Operational Tasks: Skilled in project prioritization, scoping, and model execution for effective project management and delivery
- Supervised machine learning and predictive modeling: Application regularized generalized linear models (LASSO and Ridge)
- Used H2O package (SAS, R and Python) to estimate regression models for outcomes following exponential distributions
- Set up H2O & RStudio Server on Amazon Web Services, SPSS and Tableau
- Used cluster analysis, spatial and geographical regression analysis, nearest neighbor regression, logistic regression analysis

## **WORK EXPERIENCE**

### **Sr. Data Scientist,**

Head of Corporate Online Training Division at Agrobank JSCB Headquarters, Tashkent, UZ

Aug 2021 – May 2023

- Implemented and utilized a comprehensive tech stack, including Python, TensorFlow, and PyTorch, for the NLP modeling project. Leveraged state-of-the-art deep learning algorithms such as BERT and LSTM to achieve accurate sentiment analysis and automatic labeling of customer feedback, reviews, social media posts, and survey data
- Developed and deployed data pipelines using Apache Airflow to ensure smooth and efficient data collection, preprocessing, and storage. Integrated various data sources, including customer feedback platforms, social media APIs, and internal databases, to create a unified data ecosystem.

- Conducted data collection and analysis using various methods such as online tests, impulse surveys, and random interviews among customers, employees, and senior management. This enabled the measurement of employee satisfaction, engagement, and overall job satisfaction
- Developed key metrics to assess employee performance and satisfaction, providing valuable insights for performance evaluation and improvement strategies
- Established a systematic predictive modeling approach to evaluate employee performance and calculate lifetime ROI based on historical key performance indicators (KPIs) and role-specific metrics such as relevant skill sets, experience, and training. This approach effectively identified high-performing employees, addressed performance gaps, and offered targeted feedback and training opportunities
- Assumed the role of product manager for a staffing model aimed at determining the optimal number of business trainers required to effectively serve staff in various regions
- Conducted A/B testing and controlled experiments to evaluate the impact of training programs and interventions on employee performance and job satisfaction. Used statistical programming languages such as R or Python, along with tools like SciPy and statsmodels, to analyze experimental data and derive statistically significant conclusions.
- Achieved a 60% reduction in on-premise trainings by developing and integrating monitoring, evaluation, and business planning strategies and programs. Additionally, increased training ROI by 85%
- Successfully managed a team of two developers on multiple projects, including the creation of data pipelines, dashboards, visualizations, and automatic generation of quarterly reports. Conducted analysis to identify trends, patterns, and correlations in employee performance data.
- Implemented advanced analytics models utilizing both real-time data from social media APIs and batch scoring techniques
- Utilized forecasting techniques to predict employee retention and trends. Generated descriptive statistical reports, lift curves, PTI benefits, elasticity analyses, and conducted statistical tests to gain deeper insights

#### **DATA SCIENTIST** at Target Corp via Induci inc., FL, USA

July 2019 – July 2020

- Collaborated closely with the IT department to design and implement scalable and robust infrastructure for the data analytics projects. Leveraged cloud-based solutions, such as Amazon Web Services (AWS) and Google Cloud Platform (GCP), to handle large-scale data processing and storage requirements.
- Perform exploratory data analysis (EDA) to gain insights into sales patterns, trends, and seasonality. Utilize statistical techniques and visualization tools to identify patterns, anomalies, and correlations within the time series data.
- Develop forecasting models to predict future sales based on historical patterns. Utilize time series analysis techniques such as ARIMA (Autoregressive Integrated Moving Average), SARIMA (Seasonal ARIMA), or exponential smoothing methods like Holt-Winters to generate accurate sales forecasts.
- Assess and validate the performance of forecasting models by comparing predicted sales values with actual sales data. Utilize evaluation metrics such as Mean Absolute Error (MAE), Mean Squared Error (MSE), and Root Mean Squared Error (RMSE) to quantify the accuracy of the models.
- Identify and incorporate relevant external factors or predictors that may impact sales, such as promotions, marketing campaigns, holidays, or economic indicators. Integrate these factors into the forecasting models to improve their accuracy and robustness.
- Conduct time series decomposition to separate the underlying components of sales data, such as trend, seasonality, and residual components
- Optimize forecasting models by tuning model parameters, adjusting the model structure, or exploring ensemble techniques
- Integrated and feature engineered large datasets from remote servers using SQL
- Modelled customer segmentation by exposure characteristics
- Collaborate with cross-functional teams, such as sales, marketing, and finance, to provide actionable insights and recommendations based on sales analysis. Communicate findings and results effectively to stakeholders using data visualizations, reports, and presentations

#### **RESEARCH ASSISTANT** at LSU, LA, USA

August 2016 - May 2020

- Taught ECON 2010 and ECON 2030 undergrad courses
- Peer-reviewed IJFR Journal submissions as an editorial team member in the area of finance, econometrics, applied economics and financial statistics

- Written a number of research papers using dynamic models, such as VAR model variations (BVAR, SVAR, TVAR, VECM), RBC, DSGE (dynamic stochastic general equilibrium) models, and using linear probability models

**DATA ANALYST** at land management and real estate cadaster, Andizhan, UZ

May 2014 - August 2019

- Conducted data collection and analysis of land-related information, such as property boundaries, ownership records, land values, and zoning regulations using tools such as Python, SQL, and Excel
- Developed and maintaining data models, databases (SQL, PostgreSQL), and systems to efficiently store and retrieve land information
- Conducted feature engineering, model selection and model training and evaluations to predict housing prices
- Identified patterns, relationships, and anomalies in the data
- Created databases, assigned access permissions, designed and created database views
- Conducted data extraction, data cleaning, preparation, visualization using different files, data sources and tools such as Tableau, Power BI, or matplotlib
- Utilized ArcGIS to analyze spatial data and map land and real estate information. Created thematic maps using shapefiles, spatial analysis, and geospatial modeling to analyze land characteristics, identify land parcels, and map boundaries
- Identified and resolved data discrepancies, outliers, or inconsistencies in the land and real estate data
- Collected and analyzed labor statistics, estimated trends in housing demand and supply
- Conducted market research and analyzed real estate market trends, property values, and investment opportunities

## **EDUCATION**

- Louisiana State University, LA, USA  
**Master's in Applied Economics**
- Louisiana State University, LA, USA  
**Graduate Certification in Advanced Econometrics**
- The University of Westminster, London, UK  
**Bachelor's in Economics and Applied Finance**

## **LANGUAGES**

English, Uzbek, Turkish, French (elementary)

## **ACHIEVEMENTS**

Regional Math Olympiad champion (2009, 2010)

Merit-based full scholarship (the University of Westminster)

Graduate assistantship/scholarship (Louisiana State University)