**Yucel YAVUZ**

**Data Scientist**

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**SUMMARY**

Self-starter with an analytical mindset who has worked for 10+ years with cross-functional teams to ensure the accuracy and integrity of data; and that end products provide useful insights. 5+ years’ experience in SQL, Database Management System (DBMS), data visualization (Tableau/Power BI), data extraction, data manipulation and data analysis with Python libraries like NumPy, Pandas, Scikit-Learn, SciPy, Matplotlib, and Seaborn. Proficient at building robust Machine Learning & Deep Learning models with Scikit-Learn, Keras and Tensorflow and their deployment via AWS SageMaker and Streamlit. A highly motivated and enthusiastic individual with broad and proven experience spanning 15+ years; a highly articulate and effective communicator who works well with people at all levels; an effective problem-solver and team player with a track record of delivering solutions under pressure and adapting to new situations and challenges to best enhance the organizational goals; and strong program-management and organizational skills with the ability to achieve goals within given deadlines.

**WORK EXPERIENCE**

**Nioya Tech LLC, Virginia (Remote/Part Time)       Jan 2022 – Present**

**Data Scientist**

* Skilled in developing models using techniques such as Logistic Regression, Linear Regression, Random Forests, Gradient Boosting, Cluster Analysis, Association Rule, Bayesian Algorithms, Neural Networks, Deep learning frameworks such as TensorFlow, Keras.
* Worked on many projects such as Customer segmentation, Churn Prediction, Sentiment Analysis, Image Classification, Sentence similarity, Document classification, Car & House price Prediction, Keras Regression & Classification, Customer Retention with SQL and Tableau.
* Extracted knowledge and insights from different data types using scientific methods, algorithms, and systems and learned the essential skills expected from a data scientist.
* Ensuring the data that supports the project recommendations is verified, analyzed, and modeled effectively in collaboration with other team members using Enterprise Decision Analytics tools.
* Applied methodologies, Python, NumPy, SciPy, Matplotlib, Pandas, Seaborn and building data pipelines for features extraction, data cleaning, and features scaling and their model deployment with Streamlit and AWS SageMaker.
* Hands-on experience with accessing, cleaning, and converting secure clinical datasets for preprocessing to build Natural Language Processing models.
* Applying real-world data cases for identifying, analyzing, and interpreting trends and creating interactive dashboards using Tableau/PowerBI to understand insights of the business.

**Bowery Farming, Kearny, NJ Sep 2018-Present**

**Data Scientist - Operations Manager**

* Developed a data analysis dashboard that increased the business productivity by 25% while maintaining overall responsibility for the shift's performance, including safety, quality, delivery, and cost.
* Created a machine learning model by comparison of 7 Machine and 1 Deep Learning Model to predict yield expectation based on historical data that increased yield rate 10%.
* Collected and analyzed data to proactively identify shipping opportunities and improved layout plans which resulted in 20% post-packaging storage room efficiency and 15% customer satisfaction.
* Created a Grow Room position segmentation algorithm to identify locations that are near to posing a maintenance risk; as well as predicting location breakability scores that increase maintenance productivity 15%.
* Determined and implemented methods to reduce packing loss by introducing new packing and harvesting best practices that reduced packing loss 20%.
* Created a great team culture where employees worked efficiently while ensuring production compliance with company quality, sanitation, and food safety standards [2019 and 2020 SQF (Safe Quality Food) results were 98% and 2021 SQF result was 99% - Excellent].
* Provided coaching, teaching, and mentoring to a diverse and engaged team that resulted with an 8% decrease in attrition rate and 20% increase in employees’ productivity.
* Created Team Lead/Employee Development Tool and led training program that helped promote 6 employees and Team Leads to a higher role.
* Manage the operation team to ensure that the farm runs on time, from seeding to harvesting, packaging to cleaning and delivery by thinking out of the box and introducing new approaches.

**Teleplan, Mechanicsburg, PA Jan 2017- Sep 2018**

**Data Scientist - Supply Chain**

* Developed a supply chain dashboard to oversee and manage the overall supply chain process to maximize efficiency and minimize cost of organization's supply chain process resulting in $150K profit across 8 months.
* Managed and monitored (more than 40) suppliers’ qualification and performance to ensure they meet company's requirements while preparing their supplier scorecards quarterly that increased supplier procurement efficiency to 92.67%.
* İntroduced new approaches and models for supply chain processes such as workflows, cycle times, position responsibilities, and system flows that resulted in 99.88% cycle count efficiency.
* Monitored forecasts and quotas to identify changes or to determine their effect on supply chain activities.
* Collaborated with other departments (procurement, engineering, and quality) to identify and qualify new suppliers.
* Identified opportunities to reuse or recycle materials to minimize consumption of new materials, minimize waste, or to convert wastes to by-products.

**Turkish Army, Ankara/Turkey Aug 2001-April 2016**

**Operations and Analytics Manager**

* Prepared the resource development plan and planned the structure of the force. Spearheaded 10+ important projects which saved $ 300K from budget.
* Used data analysis and regression models, created projections for future army requirements.
* Created, managed, maintained analytically rigorous data for operations research analysis assignments entailing unique problems and documented all processes and research.
* Prepared and presented routine and on-demand technical reports, analysis, and visualizations to provide data-driven solutions, insights, and actions to management with data storytelling in an agile environment.
* Organized teamwork and detailed performance expectations to subordinates. Cultivated relationships within the team to foster a positive morale, improve retention rates and create a team culture.
* Gathered, assembled, and analyzed organizational needs: prepared statistical and narrative reports for superiors.

**PROJECTS**

* **Yield Prediction Machine & Deep Learning Project:** Prediction of crop yield considering 9 different features and exploring other parameters affecting yield improvement. Skills: AdaBoosting, Gradientboosting, XGBoosting, Random Forest, Decision Tree, Ridge & Lasso Regression, Neural Network algorithms, Streamlit.
* **Customer Segmentation & Cohort Analysis Machine Learning Project:** Categorization of Customers to maximize the value of each customer to the business. Skills: RFM, K-Means, Hierarchical Clustering
* **Employee Churn Analysis Machine Learning Project:** Predicting who will leave the company. Skills: RF, Gradient Descent Boosting, K-Means, KNN, Streamlit
* **Fraud Detection Machine & Deep Learning Project:** Predicting whether a credit card transaction is fraudulent. Developed a new approach in dealing with unbalanced datasets and made the scores at least 2.5% better. Skills: Log Regression, Random Forest, Neural Network algorithms, SMOTE, Streamlit
* **Car Price Prediction Exploratory Data Analysis (EDA) and Machine Learning Project (Including Model Deployment with Streamlit and Flask):** Building a price prediction model using features of cars such as make & model and body type. Skills: Data Cleaning, Data Wrangling, Feature Engineering and Analysis, Pandas, Seaborn, Streamlit, Streamlit
* **Operations and Maintenance Dashboard:** Productivity Dashboard for Operation and Maintenance Teams to improve process efficiency by using SQL, PowerBI and analytics approaches (RCA - Root Cause Analysis)
* **State-Level COVID-19 Analysis of the United States of America:** Creating a dashboard to track COVID-19 cases in the United States. Skills: TABLEAU
* **Women Clothes Review Sentiment Analysis Deep Learning Project:** Using Natural Language Processing (NLP) techniques to find whether the product is recommended or not according to the written thoughts of the customers. Skills: EDA, Feature Selection, Text Mining, Word Cloud, Classification with ML and Keras, Tensorflow
* **Demand Prediction Deep Learning Project:** Predicting the number of future bikeshare given the historical data of London bike shares. Skills: Multivariate Time Series Forecasting With RNN, Bidirectional LSTM, Scikit-learn, Keras, Tensorflow, Data visualization
* **US Army Anthropometric Survey Machine Learning Project:** Predicting the race of soldiers using their anthropometric measures. Skills: Support Vector Machines (SVM), DecisionTrees, Random Forest, XGBoost.

**HARD SKILLS**

Data Analysis | Business Intelligence | Machine Learning | Natural Language Process (NLP) | Deep Learning | Statistics | Numpy | Pandas | Matplotlib | Seaborn | Yellowbrick | Sci-kit Learn | Tensorflow | Keras | NLTK | Python | SQL | HTML & CSS | MS SQL Server | Tableau | PowerBI | Google Sheets | Git | GitHub | ClickUp | MS Excel | Streamlit | AWS SageMaker | Sklearn | RCA - Root Cause Analysis) | Data Visualization | RFM Analysis | Cohort Analysis | SMOTE

**SOFT SKILLS**

Teamwork | Leadership | Time Management | Communication | Problem-Solving & Analytic Thinking & Creativity | Attention to Detail | Research | Adaptability | Accountability

**EDUCATION**

* April 2016 – August 2016 U.S. Army War College, Carlisle, PA

**International Fellows Academic Prep Course**

* Sept. 2014 – April 2016 Turkish National Defense University, Ankara /Turkey

**PhD education in Technology Management (Pending)**

* April 2008 – August 2010 Turkish Army War College, Istanbul/Turkey

**Master of Arts in Organizational Management and Leadership**

* July 2006 - April 2008 Turkish National Defense University, Ankara /Turkey

**Master of Science in Technology Management**

* July 1995 - August 1999 Turkish National Defense University, Ankara /Turkey

**Bachelor of Science in Systems Engineering**

**CERTIFICATIONS & AWARDS**

* Data Analysis with SQL and Python and Data Visualization with Python
* Machine Learning, Deep Learning and NLP
* The Ultimate MySQL Bootcamp
* Power BI A-Z: Hands-On Power BI Training for Data Science & Tableau
* Six Sigma Green Belt (CSSGB)
* Certified Management Executive (CME
* Project Management - Lean Process Certified
* Infantry Officer Basic Course (2000 - Ranked 2nd out of 201 cadets)
* Employee of the Month in Teleplan (2017)
* Employee of the Month in Bowery (2019/2020/2021/2022)

**LANGUAGES**

**Turkish**: Native

**English**: Advanced