SHIVA TAHERZADEHLARI

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PROFILE

I am a data scientist with recent work experience at Equitably.ai company. In this role, I collaborated with **Publicis Media Group**, and optimised marketing spend for **IKEA** by 0.7%. This role was an extension of my master's degree in data science at City University, where I graduated with distinction. Proficient in **Python** and its associated libraries (Pandas, Numpy, Scikit-learn, Scipy, PyTorch, TensorFlow, Keras, Matplotlib, Seaborn), I also have expertise in, **MLOps**, **Version Control (GitHub), SQL**, **Excel**, **Tableau** and the **MS Office Suite**. Additionally, I have a strong track record in **statistical analysis**, **machine learning modelling,** and **data visualisation**.

WORK EXPERIENCE

Equitably.ai Company, London, UK **Data Science Intern** Jun 2023 – Sep 2023

- Collaborated with Publicis Media Group and worked with 4 years IKEA's complex sales data. Performed marketing mix modelling (MMM) and advertising budget allocation optimisation.
- Conducted data pre-processing, feature engineering, Granger Causality analysis to analyse causal relationships directly and indirectly with sales and focused on 25 most important touchpoints.
- Applied timeseries prediction using Random Forest, LSTM, and MLP models for 1-week sales forecasting, performed hyperparameter tuning, feature importance and residual analysis.
- Carried out incremental analysis and understood media channels had 1.046% positive impact on sales.
- Implemented simulation of paid medial touchpoints using Gradient Ascent optimization method, optimized advertising budget allocation by 0.7%.
- The impact of my work was so significant that Equitably.ai is now showcasing it as a key product offering to prospective clients (https://equitably.ai/return-on-marketing-investment/).

Daewoo (Home Appliance) Company, Isfahan, Iran **Data Analyst Intern** Jun 2020- Nov 2020

- Served as part of a data science team to design an analytical project, and pre-processed large complex 5 years sales data from various sources using Python.
- Cooperated in group effort of 3 data scientists to apply statistical methods and machine learning algorithms, including as Random Forests, and presented actionable insights to stakeholders through storytelling.

EDUCATION

City, University of London, London, UK **MSc Data Science** Sep 2022 – Jan 2024

- Modules passed with distinction: Machine Learning, Big Data, Neural Computing, Natural Language Processing, Visual Analytics, Principles of Data Science, Semantic Web Technologies and Knowledge Graphs.
- Grade: Distinction.

Sep 2016 - Sep 2020

K.N. Toosi University of Technology, Tehran, Iran **BSc Industrial Engineering**

- Passed project management, operations research, and statistics as core modules with distinction.
- Grade: 2:1.

TECHNICAL SKILLS

Programming Languages: Python (proficient), SQL (proficient), MATLAB (intermediate).
Software Packages: Microsoft Office (Excel, Word, PowerPoint).
Tools and Libraries: Git, Tableau, LightweightMMM, Google Cloud Platform, Colab, Pandas, Numpy, Scikit learn, Sklearn, Pytorch, TensorFlow, Scipy, Seaborn, Matplotlib, NLTK, PySpark, XGBoost, HuggingFace, Geopandas, Plotly Express, Folium, Gensim.

PROJECTS

NLP - Sentiment Analysis on IMDB Reviews May 2023 - May 2023

- Achieved the best-performing neural network model on predicting the sentiment of reviews with 92% accuracy.

- Managed text pre-processing including tokenization, removing irrelevant expressions and stop words, stemming, and lemmatization. Applied Logistic regression, SVM, LSTM and Distill-Bert.
- Experimented with 4 word embedding methods being TFID, Word2Vec, Countvectorizer, and Glove word embedding methods. Identified choice of model has more effect on performance than choice of variable extraction.

Big Data - Parallel Data Processing and Machine Learning in the Cloud May 2023 - May 2023

- Parallelized and Scaled 8k images dataset and deployed on Google Cloud platform exploiting PySpark and TensorFlow/Keras.
- Measured the performance with and without parallelization and increased the speed by optimization up to 20%.

Mental Health at Work Dec 2022 - Dec 2022

- Explored a mental health survey dataset, investigated the relationships between variables. Forecast mental health condition causing disruption at work or not operating 3 ML models. Provided actionable insights for well-being of employees.
- Executed pre-processing including 7 key steps being dealing with missing values, correcting value inconsistencies, removing duplications, outlier detection, and attribute selection using correlation analysis, and CHI2, and dimension reduction (MCA).
- Implemented Random Forest, Decision Tree, and XGboost classification ML algorithms with Decision Tree outperforming others with 2% difference in accuracy. Applied Grid-Search for hyperparameter tuning.

VOLUNTEER EXPERIENCE

City University of London, Women++ In Computing **Founding Member** Apr 2023 - Present

- Pioneered creation of Women++ in Computing group in City, University of London for first time, demonstrating a strong commitment to advancing diversity and inclusion within technology industry.
- Organized more than 5 impactful initiatives, including events, workshops, and mentorship programs, fostering an inclusive environment, and providing valuable resources for women in technology.