Mohammad Soroush Esnaashari

Last update: Feb 2025

Website | Email | LinkedIn | GitHub | Kaggle | Medium

EDUCATION

Islamic Azad University Central Tehran Branch Tehran, Iran
Bachelor of Science in Industrial Engineering *2020 – 2024*
   GPA: 17.87/20 (3.65/4) - Last Two Years: 19.01/20 (3.92/4)
   Thesis: Artificial Intelligence and its Applications in Industrial Engineering
   Supervisor: Prof. Parisa Shahnazari-Shahrezaei

Imam Sadiq high school and pre-university Tehran, Iran
Diploma in Mathematics and Physics *2017 – 2020*

RESEARCH INTERESTS

- Operation Research
- Project Management
- Machine Learning
- Deep Learning
- Artificial Intelligence
- Data Science

EXPERIENCE

Scientific Association 2023 – 2024
Islamic Azad University *Central Tehran Branch*
- Participating as the Secretary of Research Affairs
- Hosting the first International Congress on the Development and Empowerment of Industries and Industrial Towns
- Hosting the second International Congress on the Development and Empowerment of Industry

Project Manager 2023 – 2024
Parsis Mandegar Royan *Tehran, Iran*
- Worked as a trainee for about two months (240 hours), specializing in software such as Microsoft Excel, Microsoft Project, Primavera and two other tools called Auto WBS, which is an extension for excel, and Project View, which is a web application suitable for DCC (document control center), which both of this tools were developed by my supervisor, Mohsen Sahraeian
- After completing the internship, I was invited to continue working, where I contributed to real-world projects, including developing a schedule for two of the National Iranian Copper Industries Company's mines

Children's English Educator Jan 2021 – Mar 2021
Educatech
- Passing the TTC course's exam with grade A
- Teaching English to the children which was a hard and memorable experience

SELECTED PROJECTS

Rice Image Classification | *TensorFlow · PyTorch* Feb 2025
- Built **CNN** models classifying 5 rice varieties (75K images) with 99% accuracy
- Leveraged ResNet50 transfer learning and data augmentation to optimize performance
- Deployed models (TensorFlow/PyTorch) and visualized metrics such as confusion matrices

Market Analyzing | *GitHub · Kaggle* Dec 2024
- Doing several preprocessing phases such as drawing some plots to finding patterns, finding some noises and delete them from the dataset
- Trying to find the most optimized algorithm to train the model, Linear Regression was identified, which later showed signs of overfitting
- Exploring alternative choices, I was ultimately able to find the most optimized algorithm to train the model in version 1.0

Customer Clustering | *GitHub · Kaggle* Nov 2024
- An Unsupervised Machine Learning project using several algorithms: K-means, DBSCAN and Gaussian Mixture Model(GMM)
- Emphasize on finding the best scaling method between StandardScaler and MinMaxScaler
- Using Silhouette Score as a parameter to evaluate algorithms' performance

Technical Skills

Software	Microsoft Excel, Microsoft Project, Primavera, Microsoft Office, AutoCAD
Programming Languages	Python, C++ (Limited)
Libraries	Scikit-Learn, PyTorch, TensorFlow, Keras, pandas, NumPy, Matplotlib, seaborn
Languages	Persian (Native), English (IELTS 6.5, Listening: 7, Reading: 6.5, Writing: 6, Speaking: 6.5)