Maryam Ahmadi

Data Scientist | Machine Learning Engineer | Software Engineer

PROFILE: Data Scientist with +4 years of programming experience in Python, C#, Java, SQL and end-to-end Machine Learning techniques to build large-scale data, algorithms, and analytics applications and deploy the model with could platforms such as Azure ML, Heroku and Streamlit.

PROJECTS

Smart City

I created a model that predicts the number of vacancies for shelters in the city of Toronto. I had to extract, and wrangle data from various sources/formats, and clean it, do feature engineering, and data visualization using Matplotlib and Seaborn. I applied different regression techniques such as LinearRegression, DecisionTreeRegressor, RandomForestRegressor, LinearSVR, VotingRegressor, Ridge, Lasso and NN and finally built a back-end of the web application using Flask Framework and deployed it on Heroku.

My model has been used in the Region of Peel.

Link to the project: https://smart-city-toronto.herokuapp.com/

link to the code: https://github.com/Maryam-Ah/Predicting-Empty-Shelter-for-the-city-of-Toronto---Regression-Model/blob/master/Predicting%20Empty%20Shelter.ipynb

Build and deploy machine learning web app using Azure, Streamlit and Heroku

I built a web application that supports online (one-by-one) prediction using a trained machine learning model and pipeline. This project contains three steps:

- Train, validate and develop a machine learning pipeline using Azure ml.
- Build a front-end web application with the functionality of online prediction with the Streamlit open-source framework.
- Deploy the web app on Azure and Heroku. Once deployed, it will become publicly available and can be accessed via Web URL.

Link to the project: https://insurance-prediction-app.herokuapp.com

 $\textbf{Link to the code:} \ \ \texttt{https://github.com/Maryam-Ah/Insurance-Charges-Prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Streamit/tree/master-prediction-App-with-Azure-and-Azure-App-with-Az$

Other projects are available in my GitHub profile: https://github.com/Maryam-Ah?tab=repositories

AREAS OF EXPERTISE

- Train and develop machine learning models with Python, Azure ML and Streamlit
- Implementing Regression, classification and clustering techniques, Image Segmentation, Object Detection.
- Data exploration, sampling, training data generation, feature engineering, model building, and performance evaluation.
- Expert in using Python libraries e.g. Scikit-learn, Pandas, Numpy, Matplotlib, Seaborn, Tensor flow/pytorch, Keras, PyCaret, Flask.
- Relational database design and implementation.

PROFESSIONAL EXPERIENCE

Omdena, *Machine Learning Engineer*

2020 Jun - Present

• Developed a classifier to identify if a shopping product is sustainable or not with deep learning.

Personal Info

E-mail

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LinkedIn

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Address & Phone

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TECHNICAL SKILLS

- Programming
 Languages/Frameworks:
 Python, C#, Java, SQL, Java, HTML, CSS, Bootstrap
- Could-based Services:
 Azure ML, Heroku, Streamlit,
 Tableau, PySpark, Labelbox,
 SqlDBM, QuickDBD

EDUCATION

Masters of Computer
Engineering - Algorithms and
Computations, University of
Tehran. Iran - 2015

Technology Engineering,University of Bonab, Iran - 2011

CERTIFICATIONS

- Machine Learning University of Toronto - 2020
- **Big Data Management** University of Toronto 2020
- Foundation of Data Science
 University of Toronto 2020
- Statics for Data Science University of Toronto 2020
- Python for Data Science and Machine Learning
 Bootcamp – Udemy ,2019
- Master SQL For Data Science – Udemy, 2020

- Used CNN, YOLO and Inception Network for prediction, Lablebox for image annotation and Azure ML and Streamlit for the model deployment.
- Write production-quality code to build models and deploy them into production
- Deploy trained ML models with Azure ML, Streamlit, Heroku, Flask and Docker

Hudson's Bay Company, *Email Developer*, *Toronto*

2019 May - 2020 Aug

 Working with could-based solution platforms such as RichRelevance to apply Recommendation algorithms on the emails and writing programming code, either from scratch or by adapting existing HTML code and graphics packages.

Database Developer, *Iran*

2019 Jan - 2019 Mar

- Map out the conceptual design for a planned database.
- Install and test new versions of the database management system (DBMS).
- Write database documentation, including data standards, procedures and definitions for the data dictionary (metadata).
- Work closely with IT project managers, database programmers and multimedia programmers.

Freelance Web Designer, Toronto

2017 Sep - 2019 Jan

- Implement industry leading HTML 5/CSS frameworks, including Bootstrap.
- DOM manipulation with jQuery and optimize websites for SEO, performance and analytics.

Simpact Company, *Web Developer*, *Toronto*

2016 Jun - 2016 Sep

- Designs and develops user-centered websites for the Faculty and its department.
- Design and implement relational databases using SQL Server.

Data Scientist soft skill examples

Ability to work well with others as well as individually.

- Critical thinking and problem-solving skills.
- Adaptability and propensity to learn new coding languages and programs.
- Communication skills and ability to boil down complex subjects to simple terms