

# 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 cloud 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>

Link to the code: <https://github.com/Maryam-Ah/Insurance-Charges-Prediction-App-with-Azure-and-Streamlit/tree/master>

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

**Machine Learning Engineer, Omdena**

**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

[www.linkedin.com/in/maryam-ahmadi-58a666181](https://www.linkedin.com/in/maryam-ahmadi-58a666181)

### Address & Phone

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## TECHNICAL SKILLS

### ● Programming

#### Languages/Frameworks:

Python, C#, Java, SQL, Java, HTML, CSS, Bootstrap

### ● Cloud-based Services: Azure

ML, Heroku, Streamlit, Tableau, PySpark, Labelbox, SqlDBM, QuickDBD

## EDUCATION

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

**Bachelor of Computer 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

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

**2019 May - 2020 Aug**

- Working with cloud-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, Rah Sazan, 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 Developer, 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.

**Web Developer, Simpact Company, 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 skills

- 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