# Alireza Mohammadzade

# **About Me**

As a Computer Engineering graduate with a strong penchant for creative innovation within the field, I look forward to bring my expertise in Data Science, Software Architecture, Open Innovation and Artificial Intelligence to the industry. With my eye set on roles such as a Data Scientist, Machine Learning Engineer or Deep Learning Engineer, I am currently seeking opportunities to collaborate with passionate professionals, leveraging my comprehensive skill set in advancing technology and enhancing business operations.

# **Education**

Imam Khomeini International University (IKIU)

B.S. in Computer Software Engineering | GPA: 16.76/20

Relevant Courses: Data Structures, Algorithms, Artificial Intelligence, OOP (Java)

**Experience** 

Quera Aug. 2023 - Nov. 2023

Data Scientist - Internship

Python, Mathematics, Power-BI, Scikit-Learn, Tensorflow, PyTorch, MySql, Neo4j, Git, GitHub

Graduation date: Apr. 2022

#### Responsibilities During this Bootcamp:

- Using advanced **Computational Mathematics** and **Data Visualization** tools like Microsoft Power-BI and Python to **analyze various data** and **draw inferences and testing them** using Statistical Hypothesis Testing.
- Creating a Python web scraper app to scrape useful data from CoinMarketCap website.
- Creating various databases to store and retrieve data using MySql and Neo4j.
- Integrating Machine Learning and Deep Learning algorithms into various projects, leveraging their predictive and analytical abilities to propel the process towards the objectives. From using clustering algorithms for effective market segmentation to deploying deep learning neural networks in complex recognition tasks.
- On each project we embarked on, I ensured a well-coordinated approach by facilitating **effective communication** among team members, encouraging everyone to share their unique perspectives. In an interdisciplinary field like data science, where varying skills from data collection, processing, visualization, model building to the interpretation of results are needed, harnessing the potential of every team member is critical. This practice promoted collective intelligence and enhanced creativity and problem-solving capacity.

Link to the Projects Source Code is available in Projects Section.

Link to the Bootcamp Certification is available in Certifications Section.

Stoshe Mar. 2021 - Jul. 2022

#### Full Stack Engineer

JavaScript, Node.js, React, Python, Bash, MongoDB, Django, Git, GitHub, Docker, Linux

- Collaborated on the development of a **data-intensive application**, which assisted in **automating the generation of motion videos** with emphasis on marketing advertisement videos. The goal was to deliver effective, time-saving solutions that seamlessly translate marketing needs into compelling video content.
- Developed an advanced **web scraper** using JavaScript, Node.js, Puppeteer, React and MongoDB to retrieve the data needed for video creation.
- Developed a website with Node.js, React, MongoDB and a professional Git/GitHub workflow.
- Automated CI/CD pipelines for unit and integration testing, as well as the deployment the web app, database and Nginx using Docker Compose, GitHub Actions and scripting.

# **Projects**

#### **Quera Data Science Bootcamp**

Repository of the Projects and Works Done During the Internship.

Aug. 2023 - Ongoing Python, MySql, Scikit-Learn, Tensorflow, Git

- In the project involving Customer Behavior Prediction and Sentiment Analysis, We used Natural Language Processing algorithms for predicting customer satisfaction based on user review comments about products, thereby personalizing customer interactions, enhancing customer engagement and contributing to the achievement of improving customer experience.
- In Cryptocurrency market analysis project, I used Supervised Learning algorithms predicting closing prices aiding in better investment in the future.
- In E-Commerce Products project, We created an image classifier to automate product categorization. Leveraging
  the power of Deep Learning, this image classifier can analyze product images and intelligently classify them into
  appropriate categories, without any manual intervention. This innovative solution dramatically increases operational
  efficiency, saves time, and effectively allocates resources that would otherwise be spent on the manual classification
  of products.

#### **AI4I 2020 Predictive Maintenance Dataset**

May. 2023

Predicting Machine Failure Type

Python, Pandas, Scikit-Learn

- Exploratory Data Analysis to gain insights for better understanding of data and objective.
- Using different **Supervised Classification** algorithms to classify types of Machine Failure and comparing them to choose best model.

## **Skills**

### Languages:

Python, C++, SQL, JavaScript, Bash

#### **Technologies & Tools:**

Scikit-Learn, TensorFlow, PyTorch, PySpark, Django, Node.js, MySql, MongoDB, Redis, Git, Linux, Docker, CI/CD

## Certifications

Task-Oriented Bootcamp in Data Science.