Mohammad Hossein Habibpour

Data Scientist

habibpour.programming@gmail.com
(+98)9129241998
11 Gharbi (West) Alley, Shemiran No, Hengam Street, Resalat Square, Tehran, Iran

DoB: 2002-10-09 | Marital Status: Single | Military Service: Educational Exemption

Profile Summary

Results-driven Data Scientist with over 1 year of hands-on experience specializing in image processing, deep learning, and classical machine learning techniques. Proficient in Python programming and skilled in leveraging frameworks such as PyTorch, TensorFlow, and YOLO (Ultralytics) for developing efficient and accurate models. Experienced in statistical modeling, data visualization, and predictive analytics, with a strong background in data preprocessing and exploratory data analysis.
Successfully delivered projects including facial recognition, medical image classification, age and gender prediction from images, infertility treatment analysis, object detection and tracking with YOLO, emotion recognition from audio, speech-to-text systems, and voice assistant development using Ollama. Demonstrated ability to optimize code for improved accuracy and computational efficiency.
Familiar with tools and technologies such as Jupyter Notebook, Excel, PostgreSQL, and Git for version control. Solid understanding of statistical analysis, simulation, and probability distributions applied to real-world data problems. Excellent collaboration and communication skills, enabling effective teamwork across cross-functional departments. Passionate about applying data-driven strategies and innovative approaches to solve complex challenges.

Education

October 2021 - October 2023

Associate in Computer Science

Branch: Software Engineer
Institute/University: Islamic Azad university
Tehran, Iran
GPA: 17.5

Work Experience

July 2024 - Present

Data Scientist

Hoodad Tech
Tehran, Iran

Tasks and Achievements

1. Developed and implemented deep learning models using PyTorch and TensorFlow for facial recognition and medical image classification, achieving high accuracy and robustness in real-world scenarios.
2. Designed and trained predictive models for age and gender estimation from images, improving model efficiency through code optimization and data augmentation techniques.
3. Applied YOLO (Ultralytics) for object detection and heatmap tracking projects, enabling precise real-time tracking and analysis of multiple objects in video streams.
4. Built and deployed speech-to-text systems and emotion recognition models from audio data, enhancing user interaction capabilities in voice-based applications.
5. Utilized Python, Jupyter Notebook, and Git for data preprocessing, model development, version control, and collaborative project management.
6. Optimized machine learning pipelines for computational efficiency and accuracy, reducing training time and resource consumption without compromising performance.

Skills

Machine Learning | Deep Learning | Yolo | Python Programming | Data manipulation & analysis | Natural language processing | Statistical Modeling | Data Visualization | SQL | Data Wrangling

Language

English

4.5

Reading **Intermediate**

Writing **Intermediate**

Speaking **Intermediate**

Listening **Intermediate**

Certificates

August 2022

Machine Learning and Data Science Specialist (2024)

Institute: 7learn

Link: https://7learn.com/course/data-science-expert

2020

Python

Institute: TopLearn

Link: https://toplearn.com/c/o2V3

Projects

2024

Face recognition and identification

For: Hoodad Tech

- Developed a face recognition system by extracting facial features using deep neural networks and performing matching with cosine similarity, achieving robust identification across various conditions.
- Implemented age and gender prediction models using PyTorch-based neural networks, delivering accurate demographic classification from facial images.
- Built an emotion recognition pipeline combining YOLO object detection for face localization with DeepFace for emotion classification, enabling real-time facial expression analysis.
- Applied advanced preprocessing and feature extraction techniques to improve model performance in face recognition and emotion detection tasks, leveraging state-of-the-art deep learning frameworks.

2024

Object identification and tracking with YOLO and Ultralytics

For: Hoodad Tech

- Developed and deployed an object detection and multi-object tracking system using Ultralytics YOLO, enabling real-time identification and tracking of objects in video streams. Trained custom YOLO models for object detection and implemented inference pipelines for robust performance on test data.
- Designed and visualized heatmaps to analyze population density and crowd movement patterns, providing actionable insights for high-density area monitoring and event management.
- Utilized Python and Ultralytics for efficient model training, inference, and tracker configuration, ensuring flexibility and scalability for various real-world scenarios.

2023

Developing a voice assistant system with speech-to-text and text-to-speech capabilities using Ollama

For: MySelf

- Developed a local voice assistant system using Ollama, enabling speech-to-text and text-to-speech functionalities on a personal computer.
- Integrated the Whisper library for accurate speech recognition, converting spoken input into text for further processing.
- Utilized pyttsx3 for high-quality text-to-speech conversion, providing clear and natural-sounding responses from the voice assistant.
- Configured and deployed language models within Ollama to create a fully functional offline voice assistant, ensuring data privacy and accessibility without internet connectivity.

Social Network

linkedin.com/in/mohammad-hossein-habibpour-4a23a6208

MohammadvHossein