europass

Ehsan Mokhtari

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Github: https://github.com/sherlannn

Gender: Male **Date of birth:** 22/06/1997 **Nationality:** Iranian

ABOUT MYSELF

I am a Data Science Master's student at the University of Sapienza with a strong background in Computer Engineering. My expertise includes Python, R, Machine Learning, Neural Networks, and Computer Vision. I've worked on projects including predictive modeling, time series forecasting, and various NN implementations. Through startup competitions and training camps, I've developed strong problem-solving, collaboration, and leadership skills.

EDUCATION AND TRAINING

[10/2023 – Current] **M.Sc Data Science**

University of Sapienza https://www.uniroma1.it/it

City: Rome | **Country:** Italy |

[2016 – 2021] **B.Sc Computer Engineering**

University of Tabriz https://www.tabrizu.ac.ir/

Address: 29 Bahman Blvd, 5166616471, Tabriz, Iran |

WORK EXPERIENCE

[10/2020 – 12/2020] **Software Engineer Internship**

Rural Cooperatives Organization of Iran https://www.corc.ir/

City: Marand | **Country:** Iran

Gaining experience in software development, hardware integration and troubleshooting, which resulted in enhancing my technical skills in real-world projects and teamwork.

LANGUAGE SKILLS

Mother tongue(s): Azerbaijani , Persian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** C1

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

PUBLICATIONS

[2020] **Color Image Encryption Algorithm Based on Three-Dimensional Chaotic Economic Map**

Reference: Dr. Mohammad Asadpour, Ehsan Mokhtari

5th international conference on applied research in computer, electrical and information technology / Avicenna international community college LLC, Georgia

DIGITAL SKILLS

My Digital Skills

Programming Languages (Python, R, C/C++, Matlab) | Data Analysis & Manipulation (SQL, Numpy, Pandas) | Data Visualization (Matplotlib, Seaborn) | Machine Learning Frameworks (Scikit-learn, TensorFlow, Keras, PyTorch) | Deep Learning & Neural Networks | Database Management Systems(PostgresSQL, Neo4j, MongoDB) | Image Processing (OpenCV) | Natural language Processing | Operating Systems (Linux, Windows) | Version Control (Git) | Project Management Tools (Trello) | Microsoft Office

PROJECTS

[12/2024 – 01/2025] **University Project : Virtual Piano Using Hand Gesture Recognition**

Developed a computer vision-based virtual piano using hand gesture recognition. Implemented multiple approaches, including contour-based detection, difference-based tracking, and MediaPipe Hands for real-time finger movement detection. Optimized accuracy, computational speed, and real-time note playback using MIDI integration.

[10/2024 – 12/2024] **University Project : Graph Neural Networks for Road Safety Modeling**

Developed a Graph Neural Network (GNN) model to predict traffic accidents by analyzing spatial-temporal patterns in road networks. Integrated road slope data as a novel feature to enhance predictive accuracy. Conducted data preprocessing, feature engineering, and model optimization, achieving an improved ROC-AUC score (82.62% → 83.22%) and higher precision in accident prediction.

[11/2024 – 01/2025] **University Project: Putative Disease Gene Identification and Drug Repurposing for High Blood Pressure**

Utilized bioinformatics and network medicine to identify HBP-related genes and repurpose existing drugs. Built a disease interactome using PPI and GDA data, applied machine learning algorithms for gene prediction, and conducted enrichment analysis. Identified 100 putative genes and validated drug candidates using clinical trial data.

[12/2023 – 12/2023] **Building ensemble ML model to predict shot success in the Kobe Bryant shot selection dataset using various algorithms.**

This project employs machine learning algorithms to predict Kobe Bryant's shot success in the NBA, covering data preprocessing, EDA, feature engineering, and algorithm implementation, with a final step exploring a voting ensemble for enhanced accuracy.

Link: https://github.com/sherlannn/Data_Science/tree/main/Kobe_Bryant_Shot_Selection

[2022] **Building different NN models to predict cryptocurrency price**

Applied API data to forecast cryptocurrency prices through diverse neural networks.

Link: https://github.com/sherlannn/Data_Science/tree/main/Cryptocurrencies_Price_Prediction

[2022] **Punkypops NFT Project**

Implementing 8750 unique, programmatically-generated NFTs with distinct metadata for each using Node.js, analysing metadata for assigning price for each NFT according to its attributes using Python, storing on IPFS decentralized data-storage platform, deploying on Polygon blockchain as ERC-721 tokens using smart contracts and Solidity, publishing on opensea.io marketplace.

Link: https://opensea.io/collection/punkypoops

CERTIFICATES AND COURSES

Data Scientist with Python / Machine Learning Scientist with Python / Advanced Deep Learning in Python / Data Analysis and Visualization with Python / Image Processing with Keras and OpenCV / Advanced SQL for Data Science

Scientific Computing with Python / Natural Language Processing and Feature Engineering for NLP in Python / Essential Math and Applied Algorithms for Machine Learning

TRAINING CAMPS AND COMPETITIONS

[11/2024 – 11/2024] **BESTech'24 Rome Competition**

Developed a ChatGPT-based assistant for the BESTech'24 competition, focused on occupational law. The chatbot answered legal queries and analyzed work contracts, helping users access relevant legal information easily.

[07/2024 – 07/2024] **Sapienza-KPMG Forecasting 2024 - Training Camp**

Competed in the Sapienza-KPMG Forecasting 2024, focusing on predicting sales volume using time series data. Applied Machine Learning and Time Series Forecasting techniques, considering factors like seasonality and trends. Used Time-Fold Cross Validation to improve accuracy in forecasting the next four months of sales.

[2024 – 2024] **dock3 - The Startup Lab 7th Edition**

Participated in dock3's Startup Lab competition, initially exploring physiognomy in fashion and HR, then pivoted to building a platform for matching candidates to jobs based on their skills. Due to time constraints and resource challenges, the project remained unfinished, but it offered valuable insights into startup development and team collaboration.

COMMUNICATION AND INTERPERSONAL SKILLS

Capable of both teamwork and individual-work / Strong communication and collaboration skills / High responsibility / Problem-solving / Leadership / Flexibility