# Hamid Mahmoodabadi

# Machine Learning Engineer, Data Scientist

- Tehran, Iran
- +98 9122511147
- MahmoodabadiHamid@gmail.com
- Telegram Channel Contributing to the field since 2017
- in Linkedin Profile
- Github Account
- **a** Born 29st July 1993

## Personal Summary

Experienced machine learning engineer interested in AI field, delivering innovative solutions, and staying at the forefront of industry trends. Committed to contributing to data-driven decision-making in a dynamic, forward-thinking team.

#### Technical Skills:

- NLP, Computer Vision, Time Series Analysis
- Model Evaluation and Hyperparameter Tuning
- Feature Engineering and Data Preprocessing
- Programming Languages: Python
- Machine Learning Frameworks: PyTorch, TensorFlow, Scikit-Learn
- Data Manipulation: Pandas, NumPy
- Deep Learning: Neural Networks, CNNs, RNNs, LSTM, GRU, Transformers
- Natural Language Processing: NLTK, SpaCy
- Data Visualization: Matplotlib, Seaborn, Plotly, Dash, Bokeh
- Big Data Tools: Spark
- Version Control: Git, GitHub
- $\bullet$  SQL Databases: MySQL, Sqlite, Sqlserver
- A/B Testing and Experimentation

## Team Work Skills:

- Project management and team workspace tools: Jira, Trello
- Team leadership and talent development
- Effective communication and conflict resolution
- Cross-functional collaboration
- Outcome-oriented mindset and decision-making
- Change management and process improvement
- $\bullet$  Time management and prioritization
- Building trust and fostering a positive team culture
- Technical talent assessment and candidate screening
- Conducting interviews and evaluating technical skills
- Collaborative decision-making in hiring processes

# **EDUCATION**

2016 - 2018

MSc: Computer Science - Artificial Intelligence

MSC Department | Allameh Tabataei University, Tehran, Iran

- GPA: 16.5/20
- Thesis: Sentence-based Sentiment Analysis using Deep Recursive Tensor Neural Networks approach (Supervisor: Dr. Farzad Eskandari). [Link to PDF]

# 2012 – 2014 BSc: Computer Software Engineering

Computer Engineering Department | Shahab Danesh University, Qom, Iran

- GPA: 16.4/20
- Final project: Designing and Implementing Online Shopping Website from Scratch (Supervisor: Dr. Amin Ghazizahedi).

Interests

Machine Learning NLP Data Visualziation Computer Vision

# Publications and Research Experiences

Accepted by Springer (To be

Uber's Contribution to Faster Deep Learning, A Case Study in Distributed Model

Published) Training

Chapter in the Book: Advances in Data Clustering: Theory and Applications

Publisher: Springer

Author: Hamid Mahmoodabadi [Link to Draft]

Under ACL Rolling Review

PSA43K: A Fine-Grained Persian Sentiment Analysis Dataset

First Author: Hamid Mahmoodabadi [Link to Preprint]

Co-Author(s): Leila Afsar

Supervisor: Ahmed M. Abdelmoniem, Queen Mary University of London

 $2017 (July) \quad \textit{Evaluation the Effect of the Dimension Reduction on the Performance of Linear}$ 

and Non-linear Classifiers

The Second Annual Conference on Applied Research in Computer and IT Engin-

eering

First Author: Hamid Mahmoodabadi [Link to Paper]
Supervisor: Mohammadreza A. Oskoei, University of Essex

2023(July) Glossary of Data Science and Machine Learning Terms

Github Repository

Author: Hamid Mahmoodabadi [Link to Repository]

2019 - 2019 (6 Mon)

Research in Finance

Machine Learning Research Engineer | Department of Economics and Management, Sharif University of Technology, Tehran, Iran

- Creating a Model to Predict Time Series Data for 10 stock market shares
- Tools: Pytorch + Numpy + RNN(Recursive NN)

## WORK EXPERIENCE

2021 (Aug) - present

Securities and Exchange Organization of Iran

Machine Learning Engineer | Securities and Exchange Organization of Iran, Tehran, Iran

- Finding abnormal orders through the development of a Deep Learning solution
- Recognizing Rumors about the Stock Market in Social Media using their publishing network
- Fine-tuned LLM to develop a CRM-focused chat-bot based on previous question answers
- Developed a high-speed, web-based **data visualization** dashboard for efficient analysis and decision-making for upper managers and more than 1,000 users
- Created **real-time social media monitoring dashboard** for swift tracking of stock market trends
- Tools: Python, Pytorch, FAISS, LangChain, Pyspark, Dash, Plotly, Flask, NLTK, Numpy, Pandas, multi-threading

2020 (Jul) - present

NemadBinBot

Founder & Full-Stack Developer with Machine Learning Expertise | Sharif University of Technology, Tehran, Iran

- Design and implement a solution for the **conversion of Natural Persian Language**Requests Into SQL Queries using Natural Language Processing (NLP) techniques
- Designed and implemented **innovative software architectures** to enhance system efficiency and scalability.
- Designed and implemented a **high-performance MySQL database** capable of handling high-frequency read-write operations, ensuring data integrity and reliability.
- Developed a **high-speed web crawler** with advanced features, optimizing data extraction and storage processes for efficient and rapid data retrieval.
- Analyzed user activity logs and leveraged insights to iteratively enhance application usability
- Achieved **fantastic teamwork** and successfully attracted more than 10,000 users to the platform
- Tools: Python, Pytorch, TelegramBot, Mysql, NLTK, Plotly

2017 - 2021 (3 Years 7 Mon)

Taha Startup Studio

 ${\it Machine \ Learning \ Engineer \ (NLP) \mid Sharif \ University \ of \ Technology, \ Tehran,}$   ${\it Iran}$ 

- Development of Basic NLP Tools in both Persian and English Language
- Lead a team to Produce a Persian Sentiment Analysis Dataset (More than 43,000 sentences with 5 class tags)
- Sentiment Analysis Developer With the Dataset
- Tools: Python, Pytorch, TelegramBot, LSTM, GRU

Machine Learning Engineer (Image Processing)

- Create an Agent to Play Video Games
- Preprocessed input images and selected CNN architecture
- Optimized hyperparameters
- Applied data augmentation
- Optimized model performance
- Tools: Image Processing (Pytorch, Pygame)

2016 - 2017 (1 Years 3 Mon)

Sibe Sorkh

Co-founder and Developer | Mathematics and Computer Science Department, Allameh Tabataei University, Tehran, Iran

- Develop a **Pipeline** to Crawl, Clean, and Analyze Data From Web (more than 10.000 rows was been saved every day)
- Tools: Python, Scrapy, Requests, Selenium, BeautifulSoup, UrlLib

2012-2015 (3 Years 5 Mon)

Amin Intelliware

Game Developer | Qom, Iran

- Video game developer
- Augmented Reality programmer (ARToolkit, NYARToolkit and, Vuforia toolbox)

## Language Proficiency

English (TOEFL) Score: 100

Reading: 30, Listening: 26, Speaking: 17, Writing: 27

Persian Native

Azeri Professional