

Seyyed Mohammad Masoud Parpanchi

Data scientist at Artificial Intelligence Department of [SystemGroup](#) , Vanak, Tehran, Iran.

[Github](#) | [Linkedin](#) | [Kaggle](#)

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EDUCATION

M.Sc. in Computer Engineering - Artificial Intelligence and Robotic, Sep 2021 – Aug 2024
Department of Computer Engineering, Shahid Rajaei Teacher Training University (SRTTU), Tehran, Iran.

M.Sc. Thesis: “Using convolutional neural network and neural graph network to increase the accuracy of image classification”

GPA: 17.05 out of 20

B.Sc. in Computer Engineering - Software, Sep 2016 – Mar 2021
Department of Computer Engineering, Imam Khomeini International University (IKIU), Qazvin, Iran.

B.Sc. Thesis: “Cancer detection using synchrotron data and Machine Learning”

GPA: 15.80 out of 20

WORK EXPERIENCES

Data Scientist – SystemGroup : [detailed info](#) Jan 2022 – Present

Data Scientist - Hamtech : [detailed info](#) Jul 2020– Nov 2022

Junior Data Scientist – Shenasa : [detailed info](#) Oct 2019 – Jul 2020

Machine learning Intern – Shenasa : [detailed info](#) Jan 2019 – Sep 2019

RESEARCH INTERESTS

- SLMs (Small language models) and LLMs (Large Language models)
- Machine learning models on Edge devices
- Machine Learning
- Privacy in Machine Learning
- Machine learning models optimizations
- AI for healthcare

Technical SKILLS

Machine learning

Pytorch, Keras, Langchain, Ollama, vllm, PaddlePaddle, huggingface, numpy, pandas, matplotlib, seaborn, NLP, Computer vision, Sklearn, plotly, OpenCV,

Programming Languages

Expert in Python / Good in Javascript, java, Web Design and Programming: Nodejs.

Other Skills

Linux/Ubuntu, Kanban, Git, Gitlab, Rasa, Flask, Fastapi, Github, SQL/NoSQL database, Vector databases, BeautifulSoup, Selenium, Docker orchestration, Docker, RagBased Chatbots

HONORS AND AWARDS

Top 1% in the Iranian university entrance exam: Achieved top 1% ranking among 200,000 participants in the Iranian university entrance exam for a bachelor's degree in Mathematics. Fall 2015

Achieved an 'A' grade in the following courses in Msc: Optimization, Computer Vision, Neural Networks, Machine Learning, Multi-Agent Systems, Hardware in AI, and Evolutionary Computing. 2021-2024

Advanced ASR Data Collection and Model Development: Developed crawlers to collect approximately 4000 hours of audio data and trained an ASR model, [open-sourced on GitHub \(shenasa-ai/speech2text\)](#). **+200 stars on GitHub.** Fall 2021

Pioneering Persian ASR Model: Created the best open-source Persian ASR model (2021), hosted on Hugging Face ([masoudmzb/wav2vec2-xlsr-multilingual-53-fa](#)) and GitHub ([Hamtech-ai/wav2vec2-fa](#)) Fall 2021

Kaggle Community Recognition: Recognized as a Notebook and Discussion expert, contributing insights to the Kaggle community. Summer 2020

Kaggle Competition Excellence: Summer 2020

- **Predict Future Sales: Ranked 1955/14937**
- **Categorical Feature Encoding Challenge: Ranked 109/1338**
- **University of Liverpool - Ion Switching: Ranked 1013/2618**
- **Bengali.AI Handwritten Grapheme Classification: Ranked 1292/2059**

High-Efficiency RAG-Based Chatbot: Designed a customer service chatbot for high concurrency, handling 12 simultaneous responses on a single 3090ti GPU. Summer 2024

Optimized Persian OCR for Multi-Platform Use: Developed a lightweight Persian OCR system, optimized for efficient performance on both CPU and GPU setups. Summer 2023

PUBLICATIONS

Seyyed Mohammad Masoud Parpanchi, A. Bosaghzadeh, "Enhance GNNs Image classification accuracy by setting node feature using CNNs" (In Progress).

Z. khiyali, Seyyed Mohammad Masoud Parpanchi, A. Bosaghzadeh, "A Comprehensive Analysis of Dropout and Fine-Tuning in CNN-Driven Graph Neural Networks" (In Progress).

TEACHING EXPERIENCES

Teacher Assistant of “Machine Learning”, Imam Khomeini International University, Qazvin, Iran.	Winter 2020
Teacher Assistant of “Machine Learning”, Imam Khomeini International University, Qazvin, Iran.	Fall 2020
Mentor of “Machine learning summer internship: Text processing for hate-speech and Economical text analysis”, Hamtech Company, Tehran, Iran.	Summer 2021
Mentor of “Machine learning summer internship: Cryptocurrencies prediction”, Hamtech Company, Tehran, Iran.	Summer 2022

LANGUAGE SKILLS

English: Fluent / Persian: Native / Turkish: Familiar

REFERENCES

Dr. M. Khaligh Razavi (My Manager at Hamtech): Postdoc in Massachusetts institute of technology (MIT) USA 2017, .Ph.D. degree in Cognition and brain science, Cambridge , United Kingdom 2014.	S.MahdiRazavi@gmail.com Scholar
Dr. H. Nili (My Manager at SystemGroup): Ph.D. degree in Electrical and Electronic Engineering, <i>University of Southampton</i> , United Kingdom, 2012.	hosseinni@systemgroup.net
Dr. Ammar JalaliManesh (My Manager at Hamtech): Ph.D. degree in Industrial Engineering, The Amirkabir University of Technology, Iran Tehran, 2015. Faculty member Iranian Research Institute for Information Science and Technology.	unes.jalali@gmail.com scholar
Dr. A. Bosaghzadeh(My M.Sc. Supervisor): Associate Professor of Computer Engineering, Ph.D. degree in Artificial intelligence, University of the Basque Country, Spain, 2014.	a.bosaghzadeh@sru.ac.ir scholar