

PROFESSIONAL EXPERIENCE

Machine Learning Researcher | *Maastricht University* | Maastricht, The Netherlands

Mar 23 - Aug 23

- MSc thesis research on Cross-Lingual Transfer Learning and Explainable Classification with Large Language Models for Propaganda analysis in Persian domain.
- Trained a multilingual chat version of the LLaMa model. This model exhibited strong performance across various languages.
- Performed data mining and processing on over 600GB of raw data, approximately 1 billion tweets, for subsequent model training and analysis.
- Developing novel methodologies for explainable classification using large language models.

ML & Software Researcher | *VISLab* | *University of Amsterdam, The Netherlands*

Sep 22 - Feb 23

- Designed and developed **Yerbamate**, a modular Python project structure and AI framework for experimentation.
- Created a robust framework that promotes code reusability and maintainability by implementing software engineering best practices of modularity and separation of concerns.
- The framework supports all popular Python libraries, including PyTorch, Jax, NumPy, Pandas, and Huggingface; and enables sharing and re-use of code components such as models, trainers, and data loaders across projects.

Teaching Assistant | *Maastricht University* | *Maastricht, The Netherlands*

Oct 21 - Apr 22

- Courses: Computer Science I & II, Software Engineering, Data Structures and Algorithms
- Effectively communicated with students and helped them grasp complex concepts and apply them in their coursework.

Fullstack Developer | *TUMS Rehabilitation* | *Tehran, Iran*

Dec 20, Jun 21

- Developed a telehealth system facilitating patient-physiotherapist interactions, including exercise scheduling and feedback, through a [React web application](#) for practitioners and a [Kotlin Android](#) app for patients, all interconnected by a NodeJS GraphQL MongoDB [backend](#).

Lead Android Developer | *Noviantis* | *Remote, France*

Jan 19 - Oct 20

- Developed a cloud gaming platform for remote gameplay on Android devices. The project involved the application of scrum methodology and modern software engineering design patterns to build responsive applications for Android and Android TV platforms.

Startup Founder and Lead Android Developer | *TreeCo* | *Tehran, Iran*

2014 - 2018

- Developed and launched multiple applications for the Iranian market, including [Aftabe](#), a game with +1M installs.
- Led a project with 98% crash-free users, incorporating responsive UI/UX, Google Cloud services and analytics, Retrofit API, real-time online gameplay with SocketIO, and a secure encrypted coin system.

SELECTED PROJECTS

- **Weather Nowcasting with GANs** (2022). Trained state-of-the-art Generative Adversarial networks (GANs) for real-time weather forecasting and video prediction. Our results showed that GANs outperformed in generating more realistic-looking frames, but regression models yielded a numerically lower loss value.
- **Magnetoencephalograph (MEG) Classification** (2022). Developed Convolutional Neural Network (Conv1D, Conv2D) and Transformer (Axial Attention) models to classify brain states from MEG time series data. Our experiments yielded the best results with the Conv1D model.

EDUCATION

Maastricht University, The Netherlands

Aug 2023

MSc in Artificial Intelligence

Coursework and Gradelist(/10): Advanced Concepts in Machine Learning: 9, Deep Learning: 9, Computer Vision: 9, Computational Statistics: 7, Autonomous Robotics Systems: 7, Intelligent Search & Games: 7, Foundations of Agents: 9, Multi-Agent Systems: 10

Isfahan University of Technology, Iran

Sep 2019

BSc in Software Engineering

SKILLS

Languages:

- *Native:* Persian
- *Fluent:* English

Programming:

Python, Java, Kotlin,
C, C++, JavaScript
TypeScript, R

AI/ML Libraries:

PyTorch, NumPy,
Pandas,
PyTorch-Lightning,
Keras, TensorFlow,
Sklearn

Data Eng:

ETL, Apache Parquet,
AirFlow, NoSQL
Cassandra, Redis, SQL
MongoDB, Postgres

Software Eng:

Clean Coding, Software
Design Patterns, OOP,
Functional
Programming, Scrum,
Agile, Git, GraphQL,
RESTful API, Jira

DevOps:

Linux (Debian, Arch),
Bash, Zsh, Docker,
Kubernetes, OpenShift,
CI/CD, Cloud
Solutions (GCP, AWS)