

# Mohammad Taslimi

📍 Tehran    ✉ Email    ☎ 0916 462 70 90    🏠 Homepage    in LinkedIn    🐙 Github

## Education

- BS**    **Sharif University of Technology**, Electrical Engineering    Sept 2020 – May 2025
- GPA: 18.41/20 (19.02/20 last five semesters) ([More about me](#))

## Honor and Awards

- Ranked **8th** among **49,000** in Region 3 and **169th** among **140,000** nationwide in the National University Entrance Exam.

## Research Interests

- Machine Learning
- Large Language Models (LLMs)
- Privacy in Machine Learning, Trustworthy and Reliable Machine Learning
- Computer Vision and Image Processing

## Professional Experience

- MCILab**, Large Language Model (LLM) team, [Dr. Amini](#)    Tehran  
April 2024 – present
- Enhanced a RAG-based chatbot's extraction pipeline by adding keyword search to the existing semantic search, creating a hybrid-search approach to improve information retrieval from the knowledge base, addressing Persian language challenges like informal queries and typos through preprocessing.
  - Created a web crawler and scraper to extract and format live data from web pages in Markdown, improving the FAQ dataset for real-time chatbot responses.
  - Designed a pipeline for text extraction from scanned documents and images using OCR, incorporating preprocessing and post-processing to enhance text quality, addressing recognition issues specific to the Persian language.
  - Engaged in prompt engineering, optimizing the LLM system prompt to ensure effective instruction adherence.
- Research on Federated Learning, Differential Privacy**, [Dr. Yassaee](#)    Tehran  
August 2023 – January 2024
- Our focus was on the privatization of the PowerSGD algorithm, a widely-used, practical and communication-efficient algorithm that currently lacks privacy features.

## Notable Projects

- RAG-based Chatbot**
- Developed a RAG-based chatbot which uses LLMs and a custom knowledge base to answer domain specific queries. For further information, check out the repository. [github.com/MoTa2380/chatbot-RAG](https://github.com/MoTa2380/chatbot-RAG)
  - Tools Used: Docker, Python (Django), PostgreSQL, Qdrant
- Music Recognition Using Audio Fingerprints**
- This project implements the Shazam algorithm for music recognition using audio fingerprints. For further information, check out the repository. [github.com/MoTa2380/Shazam](https://github.com/MoTa2380/Shazam)
  - Tools Used: MATLAB

## Notable Courses

---

### Graduate

|   |             |
|---|-------------|
| <b>Data Privacy (Differential Privacy)</b> , SUT, <b>19.4/20</b> , <a href="#">Dr. Yassaee</a>          | Fall 2023   |
| <b>Deep Learning</b> , SUT, <b>18.1/20</b> , <a href="#">Dr. Fatemizadeh</a>                            | Fall 2023   |
| <b>Computer Vision</b> , SUT, <b>17.8/20</b> , <a href="#">Dr. Mohammadzade</a>                         | Fall 2023   |
| <b>Privacy and Security in Machine Learning</b> , SUT, <b>17.9/20</b> , <a href="#">Dr. Sadeghzadeh</a> | Spring 2024 |
| <b>Deep Generative Models</b> , SUT, <b>current course</b> , <a href="#">Dr. Amini</a>                  | Fall 2024   |

### Undergraduate

|   |             |
|---|-------------|
| <b>Introduction to Machine Learning</b> , SUT, <b>20/20</b> , <a href="#">Dr. Amini</a>         | Spring 2023 |
| <b>Convex Optimization</b> , SUT, <b>19.6/20</b> , <a href="#">Dr. Yassaee</a>                  | Spring 2023 |
| <b>Computer Networking</b> , SUT, <b>current course</b> , <a href="#">Dr. Amini</a>             | Fall 2024   |
| <b>Linear Algebra</b> , SUT, <b>20/20</b> , <a href="#">Dr. Kazemi</a>                          | Fall 2022   |
| <b>Foundation of Cryptography and Security</b> , SUT, <b>18/20</b> , <a href="#">Dr. Ahmadi</a> | Spring 2024 |
| <b>Signals and Systems</b> , SUT, <b>19/20</b> , <a href="#">Dr. Amini</a>                      | Spring 2023 |
| <b>Digital Signal Processing</b> , SUT, <b>19/20</b> , <a href="#">Dr. Amini</a>                | Spring 2023 |

## Academic Services (Teaching Asistance)

---

**Introduction to Machine Learning**, Homeworks Designer, 1 time  
**Linear Algebra**, Head TA, 4 times  
**Convex Optimization**, Computer Homework Designer, 1 time  
**Signals and Systems**, Head of Theory Homeworks, 2 times  
**Probability and Statistics**, Homework Designer, 1 time  
**Communication Systems**, Homework Designer, 1 time

## Technologies

---

**Languages:** Python (Django, Pytorch, OpenCV, ...), Java, C++, SQL, MATLAB  
**Technologies:** Docker, Kubernetes, Gitlab-CI, ArgoCd, Linux (Ubuntu), git, Latex