

IMAN YOUSEFI

✉ imanyouseefi@gmail.com 🌐 iman-yousefi.github.io 📧 iman-yousefi 📄 imanyousefi

EDUCATION

Master of Science in Artificial Intelligence and Robotics Engineering

Sep 2023 – Expected Dec 2026

Azad University, Tehran North Branch — GPA: 17.78/20 ($\approx 3.8/4.0$)

Tehran, Iran

- **Thesis:** *Uncertainty-Aware Pseudo-Label Selection for Extreme Few-Shot Brain Tumor Segmentation*
- Developing a semi-supervised few-shot brain tumor segmentation framework leveraging self-supervised learning and uncertainty-aware pseudo-label selection.

Bachelor of Science in Electronics Engineering

Sep 2018 – Jul 2023

Azad University, Tehran North Branch — GPA: 17.07/20 ($\approx 3.6/4.0$)

Tehran, Iran

RESEARCH INTERESTS

- Multimodal Machine & Deep Learning
- Computational Neuroscience
- Medical Image and Signal Processing
- Brain-Computer Interface (BCI)
- Computer Vision & Pattern Recognition
- Natural Language Processing (NLP)

PUBLICATIONS

Yousefi, I., Jabbaryzadeh, R., Sabeti, M., Taghavi, M., Moradi, E., & Boostani, R. (2026). Multimodal Machine Learning Framework for Subject-Independent Sleep Apnea Detection. *Submitted to Medinformatics* (Under Review).

RESEARCH & ACADEMIC EXPERIENCE

Multimodal Machine Learning Framework for Subject-Independent Sleep Apnea Detection

Jun 2026

- Designed a multimodal ML framework analyzing ECG, EEG, and SpO₂ signals, utilizing temporal feature engineering and Leave-One-Subject-Out validation for clinically generalizable detection.

EEG Motor Imagery Classification

Jun 2025

- Developed an end-to-end BCI pipeline implementing an attention-enhanced EEGNet with CSP feature extraction and mixed-precision training for motor imagery classification.

Efficient Deep Multi-Task Learning Structure for COVID-19 Disease Detection

Aug 2024

- Built a TensorFlow/Keras CNN pipeline featuring Gaussian denoising, custom regularization, and scheduling for automated COVID-19 CT scan classification.

Schizophrenia Detection from EEG Signals using CNNs

Feb 2024

- Converted time-series EEG recordings into image-based representations to train Convolutional Neural Networks for automated schizophrenia diagnostic prediction.

A Motivational Chatbot Trained on the Ted Lasso Series Script Dialogues

Feb 2025

- Fine-tuned a GPT-2 causal language model using PyTorch and Hugging Face Transformers to generate context-aware, empathetic responses from scripted dialogue.

Text Classification using BERT & 20newsgroup Dataset

Jan 2025

- Fine-tuned a pre-trained BERT model for multi-class text classification, implementing custom preprocessing and tokenization pipelines.

Underwater Object Detection using Deep Learning

Sep 2024

- Implemented deep computer vision detection architectures optimized with image enhancement algorithms to identify targets under low-visibility underwater conditions.

SKILLS

Programming: Python, MATLAB, Embedded C, SQL, ~~LaTeX~~
Deep Learning & ML: PyTorch, TensorFlow, Scikit-learn, Hugging Face, NumPy, Pandas
Signal Processing & Medical AI: MNE-Python, PyEDFlib, OpenCV
Software & Web Tools: Git, FastAPI, PostgreSQL, SQLAlchemy, WordPress, HTML/CSS
Hardware & Embedded Systems: Arduino, ATmega Microcontrollers, Medical Device (ECT) Calibration
Languages: Persian (Native), English (Proficient)

PROFESSIONAL EXPERIENCE

Medical Equipment Technician (Part-time) <i>Farsun Ara Co.</i> Assembled and calibrated Electroconvulsive therapy (ECT) devices.	Jul 2020 – Present <i>Tehran, Iran</i>
Web Designer & Developer (Remote) <i>Hanatech Inc.</i> Designed, developed, and currently maintain a responsive corporate website using modern web tools.	Jan 2026 – Present <i>Halifax, Canada</i>
IT Support Assistant & Front Desk Receptionist <i>Fardis Hotel</i> Developed synchronization systems to improve software reliability and optimize front desk operations.	Dec 2021 – Sep 2023 <i>Tehran, Iran</i>
Smartphone Repair Technician <i>ReStore Mobile Repair</i> Diagnosed and repaired smartphone hardware and software.	Apr 2021 – Dec 2021 <i>Tehran, Iran</i>

CERTIFICATES & MEMBERSHIPS

Certificates:

- TOEFL iBT (Score: 107/120) — ETS (Dec 2025)
- Mathematics for Machine Learning — Coursera

Memberships:

- Artificial Intelligence Association, Azad University – Tehran North Branch
- Former Member, National Full-Contact Team

HOBBIES

- Playing guitar, weight training, board games, and watching tech and science documentaries.