# **Mahbod Issaiy**

#### **EDUCATION**

Allame Tabatabaei High School, Tehran — Diploma in Math

2010 - 2014

**Tehran University of Medical Sciences,** Tehran— Doctor of Medicine

2014 - 2022

#### **Certificates**

Mathematics for Machine Learning Specialization
AI for Medicine Specialization
Machine Learning Specialization
How Diffusion Models Work Course
LangChain for LLM Application Development Course
ChatGPT Prompt Engineering for Developers Course
Machine Learning Course
Statistics Course
Epidemiology Course

### **Publications**

Primary costal hydatid cyst resembling urolithiasis: A case report

Clinical and Brain Imaging Findings of Children with Acute Ataxia: Ten Years of Experience at a Major Pediatric Referral Center

Delayed-onset heparin-induced thrombocytopenia complicated with saddle embolus

Plasma cell leukemia presenting as spontaneous tumor lysis syndrome with hypercalcemia

#### **SKILLS**

Medical Research

**Statistics** 

Mathematics

Programming (C, C++, C#, Python, Matlab/Octave)

Data Analysis (SPSS, Python)

Machine Learning (Matlab, Python)

Deep Learning (PyTorch)

Statistical Analysis (SPSS, Python)

2D and 3D Design

Microcontroller Programming

IoT

Digital Circuit Design

**FPGA Programming** 

#### **ACHIEVEMENTS**

12th Rank (region 1) at 1393 Nationwide University Entrance Exam

#### **LANGUAGES**

Persian (Native) English (Full Proficiency) French (Beginner level)

## **Projects**

- Breast cancer pathology image classification using CNNs
- Chest X-ray image classification using transfer learning
- Chest-Xray image segmentation using a pre-trained model and AutoEncoder architecture
- Heart segmentation in MRI images using a 3D UNet model
- ECG arrhythmia classification using a 1D CNN network
- Virtual patient simulation using ChatGPT
- Automatic title/abstract screening using ChatGPT
- Unsupervised title/abstract rating for screening using information theory
- Fine-tuning GPT2 and ViT collectively to generate radiology report auto-completions