

# **Contact Info**

**%** +98 936 171 6090

M peymanvahidi1998@gmail.com

in linkedin.com/in/heispv

github.com/heispv

# Language Skills

English Advanced

• IELTS: L(6.5), R(6.5), W(6.5), S(7)

Turkish Advanced

Persian Native

# **Computer Skills**

Advanced Python Advanced TensorFlow Intermediate **PyTorch** NumPy Advanced Advanced **Pandas** Advanced Matplotlib Keras Advanced Scikit-learn Intermediate Git Intermediate SQL Intermediate MATLAB Intermediate

# Peyman Vahidi

Chemical Engineering Graduate
Deep Learning Enthusiast

### **About Me**

Deep Learning Enthusiast with 3+ years of experience in developing various ML models for different applications. Curious about Data-Centric AI and Computer Vision.

#### Research interests:

- Computer Vision
- Deep Learning
- Medical Imaging
- Artificial Intelligence

## **Education**

### **B.Sc. Chemical Engineering**

Ferdowsi University of Mashhad, Mashhad, Iran Sep 2017 – Jul 2022

- Cumulative GPA: 3.81 of 4
- Thesis title: Direct Synthesis of Dimethyl Ether from Syngas Supervisor: Dr. Elham Yasari
  - Modeled, simulated and optimized a Fix Bed Reactor using Python
  - Used an interactive GUI to have a better understanding of some variables' effects on the final results

# **Work Experience**

## **Python Tutor**

Self-employed Jun 2022 – Sep 2022

Taught the basics of Python programming language to participants in various competitions related to web development, mobile app development, data science, and software engineering

- Demonstrated class managing and communication skills in an interactive environment with students
- Supervised students' progress and amplified their performance using a dynamic teaching method

## **Certifications**

Al For Medical Diagnosis

Introduction to Machine Learning in Production

**Structuring Machine Learning Projects** 

**Deep Learning Specialization** 

**Sequence Models** 

**Convolutional Neural Networks** 

Improving Deep Neural Networks:
Hyperparameter Tuning, Regularization
and Optimization

**Neural Networks and Deep Learning** 

**Machine Learning** 

# **Projects**

**Chest X-Ray Medical Diagnosis** 

- Used transfer learning to retrain a DenseNet101 model
- Measured diagnostic performance by computing AUC for the ROC curve
- Visualized model activity using GradCAMs technique

Brain Tumor Auto-Segmentation for Magnetic Resonance Imaging (MRI)

- Used standard data preparation techniques for MRI datasets
- Created a 3D U-Net model to segment tumor regions into three different classes and visualized it

#### 101 Different Food Classification

- Accelerated model training by 3x using mixed precision training
- Used prefetching and multithreaded loading and preprocessing to improve data loading speed
- TensorBoard callback used to address various hyperparameters' effects

#### International Students' Tutor

Self-employed Sep 2019 – Mar 2021

Tutored various chapters of "Basic Principles and Calculations in Chemical Engineering" and "Thermodynamics" courses to international student

- Ensured students' progress in the curriculum through 1:1 support
- Provided effective online classroom management during COVID-19

#### **Teaching Assistant**

Ferdowsi University of Mashhad Feb 2019 – Feb 2022

Heat Transfer (I) (3 semesters)
 Supervisor: Dr. Seyed Mostafa Nowee

Thermodynamics (I) (2 semesters)
 Supervisor: Dr. Mahdi Pourafshari Chenar

 Basic Principles and Calculations in Chemical Engineering (2 semesters)

Supervisor: Dr. Hamed Karkhanechi

### **Honors and Awards**

- Ranked 2<sup>nd</sup> in GPA among 60 students
   *Ferdowsi University of Mashhad* Jul 2022
- Received full scholarship from Ferdowsi University of Mashhad
   Sep 2017
- Ranked within the top 1.2% in Iranian University Entrance Exam among 149,000 participants
   Aug 2017

### References

Dr. Hamed Karkhanechi
 Email: karkhanechi@um.ac.ir

Dr. Seyed Mostafa NoweeEmail: <a href="mailto:nowee@um.ac.ir">nowee@um.ac.ir</a>

Dr. Elham Yasari
 Email: elhamyasari@um.ac.ir

Dr. Mehdi Karimi
 Email: mehdikarimi@um.ac.ir