# Helia Vafaei, Computer science student

Tehran, Iran, +98 (991) 290-9125, helia.vafaei2080@gmail.com

LINKS	LinkedIn, GitHub, Personal website	
EDUCATION		
Oct 2020 – Sep 2024	<ul> <li>B.Sc. in Computer science, Iran University of Science and Technology</li> <li>Among the top 4 universities in Iran according to OS University Rankings</li> <li>GPA: <ul> <li>Last two years: 3.55/4.0 (17.14/20.0 on Iranian Scale)</li> <li>Overall: 3.51/4.0 (17.16/20.0 on Iranian Scale)</li> </ul> </li> </ul>	Tehran, Iran
Sep 2016 – Set 2020	<b>Diploma in Mathematics and Physics, Roshangaran High School</b> Overall Grade: <b>3.91/4.0</b> ( <b>19.34/20</b> on Iranian Scale)	Tehran, Iran

## RESERCH INTEREST

Software Engineering
Artificial Intelligence
Software Verification and Testing
Programming Languages and Compilers
Empirical Software Engineering
Software Models and Architectures
Object-Oriented Analysis and Design

# **SKILLS**

# **Programming Languages:**

Python, React, HTML, CSS, JavaScript, C++, C#, C, SQL

## **Libraries and Frameworks:**

React, Bootstrap, .Net, Django, Keras, TensorFlow, Numpy

#### **Environmental and Tools:**

Git, Azure Devops, Linux, Bash, Postman

#### SELECTED PROJECTS

#### NoWaste:

• Participated as a <u>Front-end</u> developer in developing NoWaste, a web application aimed at minimizing food waste by connecting restaurants and cafes with surplus food to potential consumers.

- Designed and implemented RESTful APIs to facilitate efficient data exchange between frontend and backend systems.
- Dockerized the application to streamline deployment and ensure consistency across development and production environments.
- Developed and maintained CI/CD pipelines, automating testing, building, and deployment processes to enhance development efficiency and ensure robust application delivery.

#### Anti-spoofing algorithm:

- The project was for checking whether a face in the video is alive or not.
- In this project, two different models, including a feature-based and a deep learning model, were used.
- For the feature-based model, SVC was used.
- For the deep model, VGG16 and some extra un-pretrained layers were used.
- The data came from CASIA-FASD.

## Computer system security project:

• The main aim of <u>this project</u> is retrieving information from the victim device using Bash in Linux and displaying it in a simple website.

# Software quality measurement and it's quantification:

• By running this project, the quality of a software can be measured quantitatively. In the software quality article, factors are presented that depend on a number of criteria, but the criteria is qualitative, so we use a number of metrics to achieve a quantity.

## HONORS AND CERTIFICATION

Oct 2024	Ranked within the Top 10% among about 100 in my class in GPA
	at Iran University of Science and Technology
Jul 2022	Ranked within the Top 1% among about 155000 in Iranian University Entrance Exam
Oct 2023	Programming for Everybody (Getting Started with Python), Coursera
Jul 2022	Algorithms on Strings, <u>Coursera</u>
Mar 2022	Algorithms on Graphs, Coursera
Dec 2021	Data Structures, <u>Coursera</u>
Nov 2021	Algorithmic Toolbox, Coursera

## **ACADEMIC EXPERIENCE**

#### **Honorary Member**

 Voluntary work in Computer Engineering Scientific Association at Iran University of Science and Technology (CESA IUST) – Fall 2023

## **Teaching Assistant**

- Data transmission Instructor: Dr. Marzieh Sheikhi Winter 2024
- Artificial intelligence Instructor: Dr. Arash Abdi Fall 2023
- Database design Instructor: Dr. Hossein Rahmani Winter 2023
- Fundamentals of Computer Programming Instructor: <u>Dr. Marzieh Davoodabadi Farahani</u> Fall 022
- Advanced Computer Programming Instructor: <u>Dr. Sauleh Eetemadi</u> Winter 2022
- Advanced Computer Programming Instructor: <u>Dr. Sauleh Eetemadi</u> Fall 2021

#### **WORK EXPERIENCE**

# Jul 2024 – present Teacher, Farzanegan High School

- Farzangan High School is one of the high schools of the National Organization for the Development of Talents (<u>SAMPAD</u>).
- I have been working as programing computer teacher.

## Aug 2023 – Sep 2023 Front-end Developer, Megamouj-e Iranian

- Iranian Megamoj Company is a first-class manufacturing and industrial knowledge-based company in the field of telecommunications and computers.
- My main responsibilities included designing and developing various sections of the Eskab (School Service System) website.

# **LANGUAGES**

Persian: Native Proficiency

**English :** Full Professional Proficiency IELTS Score: To be taken soon

## **REFERENCES**

#### Dr. Sauleh Eetemadi:

- Assistant Professor in Department of Computer Engineering of IUST
- sauleh@iust.ac.ir

## Dr. Mehrdad Ashtiani:

- Assistant Professor in Department of Computer Engineering of IUST
- m\_ashtiani@iust.ac.ir

# Dr. Marzieh Malekimajd:

- Assistant Professor in Department of Computer Engineering of IUST
- malekimajd@iust.ac.ir