Sepideh Tajik

CONTACT INFORMATION

- **Email address:** sepidetajik@yahoo.com
- **Phone number:** (+98)921-346-4409

EDUCATION

M.Sc. in Information Technology   *Sep 2021 – Sep 2024*
Amirkabir University of Technology (Tehran Polytechnique)   Tehran, Iran

Overall GPA: 17.41/20 (87.05/100)
Important Courses:

- Advanced data base	19/20	- Data analytics	17.5/20
- Data mining	18.75/20	- Digital image processing	17.25/20

Final project:
   Machine Learning for an optimal IOT
   control in smart homes

B.Sc. in Computer Engineering   *Sep 2016 – July 2021*
Khajeh Nasir University of Technology, Tehran, Iran
Final project:
   Implementing an E-learning PWA with interactive approach
   Grade achieved: 19.5/20

High School Diploma of Mathematics at Farzanegan (Sampad)   *Sep 2013 – July 2017*

PROJECTS

Learning Management System (LMS)   *Sep 2024 – Nov 2024*
Developed a scalable LMS using **ASP.NET Core** and **React**, featuring role-based dashboards for teachers and students, efficient database querying with **EF Core**, and a dynamic enrollment approval system. Enhanced performance with optimized LINQ queries and secure JWT authentication.

Network intrusion detection   *Feb. 2022 – May 2022*
   Implemented a network intrusion detection project using deep neural networks in Tensorflow environment and manipulated the parameters to optimize the results
   Course: Data Analysis And Extraction

Wind turbine damage detection   *Feb. 2022 – May 2022*
   Implemented an AI model to detect damages on the surface of wind turbines using YOLO v4 model
   Course: Data Analysis And Extraction

Nudity detection project   *March 2022 – May 2022*
   Implemented a simplified NSFW detection model using OpenCV
   Course: Digital Image Processing

AES algorithm implementation   *Oct. 2021 – Dec. 2021*

  Learned to work with Xilinx ISE and implemented the AES algorithm using this application

Fraud detection with graph analytics   *Sep. 2020 – Nov. 2020*

  Implemented a fraud detection algorithm using NETWORKX and Graphx libraries in Spark environment

  Course: Big Data

Fake news detection   *March 2020 – May 2020*

  Studied the BERT model and implemented a simple fake news detector using BERT Model

  Course: Artificial Intelligence

Banking system database   *Nov. 2019 – Dec 2019*

  Designed a database model for a banking system using Microsoft Visio and implemented it in SQL

  Course: Design Principles of Data Base

WORK EXPERIENCE

Internship, Nasirbp   *Feb. 2021 – May 2021*

  Worked on advancing medical image analysis

English Instructor, Mokalemeh English Language Institute   *Dec. 2020 – Jan. 2021*

Taught the Top Notch books

TEACHING EXPERIENCE

Teaching Assistant, Khajeh Nasir University Of Technology   *2nd semester of 2020 – 2021*

  Course: Artificial Intelligence

  Graded students' assignments, and prepared booklets and assignments weekly

Teaching Assistant, Khajeh Nasir University Of Technology   *1st semester of 2020 – 2021*

  Course: Artificial Intelligence

  Graded students' assignments, and prepared booklets and assignments weekly

PUBLICATION

  Sepideh Tajik, Alireza Rezvanian, (Under Preparation). "An Improved Cellular Edge Detection Technique
  Integrating Cellular Learning Automata And Conventional Methods."

LANGUAGES
English
  IELTS   *August 2023*
  Overall: 7
  Reading: 7 | Listening: 7.5 | Speaking: 7 | Writing: 7
French
  Intermediate Level
German
  Elementary Level

TECHNICAL SKILLS

Backend Development: ASP.NET Core, C#, RESTful API Development, Microservices, SignalR, MediatR, Clean Architecture, Dependency Injection (DI), Identity Server, JWT Authentication

Databases: SQL Server, PostgreSQL, Sqlite, Database Design, Query Optimization

Frontend Development: HTML/CSS, Vue.js, React.js, Axios

AI & Machine Learning: Python, TensorFlow, scikit-learn, Computer Vision, NLP, Data Preprocessing, OpenCV

Programming Languages: C#, Python, JavaScript

Other Tools: Git, Swagger/OpenAPI, Redis, RabbitMQ

CERTIFICATE AND COURSES

Deep Learning Specialization – Coursera (Andrew Ng, DeepLearning.AI)

Develop Web Applications with ASP.NET Core – Microsoft Learn

SQL for Data Science – Coursera (UC Davis)

Data Science and Machine Learning Bootcamp with Python – Udemy

REFERENCES

- **Dr. Saeed Sharifian Khortoomi**
  Associate Professor
  Department of Electrical Engineering
  Amirkabir University of Technology
  sharifian_s@aut.ac.ir
- **Dr. Amir Khorsandi**
  Assistant Professor
  Department of Electrical Engineering
  Amirkabir University of Technology
  a_khorsandi@aut.ac.ir

- **Dr. Alireza Rezvanian**
  Assistant Professor
  Department of Computer Engineering
  University of Science and Culture
  rezavian@usc.ac.ir

PROFESSIONAL SUMMARY

I'm a curious and motivated developer with a Master's degree in IT. I enjoy tackling new challenges and finding creative solutions to problems. I'm always eager to learn new technologies and improve my skills, and I love working on projects that push me to grow. Whether it's building scalable APIs or exploring machine learning technichs to real-life problems, I'm passionate about creating solutions that make a difference.