Amirreza Hosseini

Tehran, Tehran, Iran

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LinkedIn profile in

Personal Website: amiirhosseini.ir

Education -

■ Bachelor of Science in Computer Engineering

2019-2023

Isfahan University of Technology (IUT)

Intelligent computer systems (tuition waived)

CGPA: 17.61 out of 20 (converted: 3.71/4) - last year GPA 4/4

Project title: "Edge Computing Empowers Federated Learning in Resource-Constrained IoT Networks"

Supervisor: Dr. Amir Khorsandi

High School Diploma in Mathematics and Physics

2015-2018

Nokhbegan-e Tehran, Tehran, Iran

Awards and Honors -

- Accepted directly to the master's program as an Exceptionally Talented student in computer engineering
 at <u>Amirkabir University of Technology</u> (Tehran Polytechnic), <u>Isfahan University of Technology</u> (IUT), <u>Shahid</u>
 <u>Beheshti University</u> (SBU), and <u>Khaje Nasir University of Technology</u> (KNTU) without taking the entrance
 exam (konkour).
- Ranked within the top 2% among more than 150,000 participants in the annual Iranian University entrance exam for a bachelor's degree in Mathematics and Physics (Konkour).
- Ranked within the top 5% among more than 140,000 participants in the annual Iranian University entrance exam for a bachelor's degree in Foreign Languages (Konkour).
- Ranked within the top 15% in the first year and 10% in the second year of study among all students in the IUT ECE Department.
- Awarded an option to switch the major from Electrical Engineering to Computer Engineering based on excellent academic performance.

Selected Courses -

- Computer Architecture (20/20)
- Digital Systems Design & Lab. (20/20)
- Computer Network 1&2 & Lab. (18/20)
- Data Structure (19/20)
- Robotics & Lab. (18/20)
- A.P. & Lab. (17/20)
- Database & Lab. (17/20)
- Microprocessor & Lab. (18/20)
- Automata & Compilers (17/20)

Research Interests -

Computer Vision

- Embedded Systems
- Federated Learning

Professional Experiences -

Industrial Project

Software Developer

Summer 2022 – present

Azmoon Saz Mabna - Part-time

Tehran, Tehran, Iran

Worked on implementing the website platform for automatic calibrations. For many variations of instruments in the laboratory for migration from a paper-work base to an online-based platform. Use ASP .NET Core for implementation with MVC architecture.

Teaching Assistant

Isfahan University of Technology

Computer Architecture
 Dr. Amir Khorsandi

Database Lab.
 <u>Dr. Alireza Basiri (</u>x2 semesters)

Winter 2023

Fall 2022 - Fall 2023

• Advanced object-oriented programming with C# Spring 2022

Dr. MohammadAli Khosravifard

Digital Systems Design

Dr. Nader Karimi

Fundamentals of programming with Python and C languages
 Dr. MohammadAli Khosravifard & Dr. Jalal Zahabi (x2 semesters)

Fall & Spring 2019 - 2020

Spring 2021

Technical & Research Experiences —

Course projects

Arduino Radar Project — Arduino (UNO CH340) with an ultrasonic sensor and the servo motor with buzzers and RGB for detecting the distance of objects and giving feedback with serial monitor and UI. — GitHub code

Conference Papers

 "Intelligent Traffic Control with Smart Speed Bumps", The 7th International Conference on Internet of Things and Its Application (IoT 2023), University of Isfahan, Iran.

Language -

- English IELTS (Academic): 7 (L:7.5, R:7, W:6.5, S:6)
- Persian (Native)

Skills -

Programming Languages and Frameworks

- C/C++ (multi-process and multi-threads programming, Linux kernel module) Sololearn
- Python (PyTorch, socket programming, Pandas, NumPy, Matplotlib, Robotics) <u>LinkedIn Learning</u>
- C# (ADO .NET Core MVC, windows forms, IIS Express, Message brokers (RabbitMQ)) Sololearn
- SQL (Microsoft SQL Server, Postgresql, ADO .NET) <u>Sololearn</u>
- HTML (Bootstrap 5) CSS Adobe XD
- Verilog MATLAB Assembly

Hardware systems

- ATmega 16/32, NodeMCU, STM32 (f7 & f4 & f1), Arduino (Mega/UNO)
- Sensors (Servo Motors, Drivers, Ultrasonic, Gyroscope, RFID, etc.)

Computer skills

- Editors & IDEs (Visual Studio & VSCode, Pycharm, Code Vision, Arduino, STM32CubeMX, Keil, LaTeX)
- Proteus & ModelSim & ISE
- Git & GitHub Coursera Certification
- Wireshark & Mininet & Cisco Packet tracer & floodlight & GNS3
- Symbolab & Wolfram Alpha
- Virtual Machines & Emulators (Virtual Box and VMware, BlueStacks, GEM5)
- O.S. (Windows, Ubuntu, Windows Server, Android, IOS, Alpine, CISCO)

Certificates

- Seeds for the future Huawei Physical certificate
- 8th Winter Seminar Series (WSS) <u>Sharif University of Technology</u> Physical certificate
- Developing Your Emotional Intelligence <u>LinkedIn Learning</u>

References -

Dr. Amir Khorsandi

Assistant professor, ECE Department, Isfahan University of Technology, Iran Website: https://khorsandi.iut.ac.ir/ -- Mail: khorsandi@iut.ac.ir

Dr. Masoud Reza Hashemi

Associate Professor, ECE Department, Isfahan University of Technology, Iran Website: https://hashemi.iut.ac.ir/ -- Mail: hashemim@iut.ac.ir

Dr. Alireza Basiri

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