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: 17.60 out of 20 (converted: 3.7/4) - 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.
 Dr. Alireza Basiri (x2 semesters)

Winter 2023

Fall 2022 - Fall 2023

• Advanced object-oriented programming with C# Spring 2022

Dr. MohammadAli Khosravifard

Spring 2021

 Digital Systems Design Dr. Nader Karimi

Fundamentals of programming with Python and C languages Fall & Spring 2019-2020
 <u>Dr. MohammadAli Khosravifard</u> & <u>Dr. Jalal Zahabi</u> (x2 semesters)

Technical & Research Experiences -

- Course projects
 - Smart Speed Bump A model of the smart bump with embedded system elements that modify its height with the speed
 of crossing vehicles The paper "Intelligent Traffic Control with Smart Speed Bumps" is under review.
 - 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

Language -

- English (IELTS (Academic): To be earned on April 18th)
- Persian (Native)

Skills -

Programming Languages and Frameworks

- C/C++ (multi-process and multi-threads programming, Linux kernel module) <u>Sololearn</u>
- 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)
- O.S. (Windows, Ubuntu, Windows Server, Android, IOS, Alpine, CISCO)

Certificates

- Seeds for the future Huawei Physical certificate
- 8th Winter Seminar Series (WSS) Sharif University of Technology 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. MohammadAli Khosravifard

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Dr. Alireza Basiri

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