

Education

- **Bachelor of Science** in Computer Engineering 2019-2023
[Isfahan University of Technology](#) (IUT)
Intelligent computer systems (tuition waived)
CGPA: 17.66 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 [Amirkabir University of Technology](#) (Tehran Polytechnic), [Isfahan University of Technology](#) (IUT), [Shahid Beheshti University](#) (SBU), and [Khaje Nasir University of Technology](#) (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) | ▪ Data Structure (19/20) | ▪ Database & Lab. (17/20) |
| ▪ Digital Systems Design & Lab. (20/20) | ▪ Robotics & Lab. (18/20) | ▪ Microprocessor & Lab. (18/20) |
| ▪ Computer Network 1&2 & Lab. (18/20) | ▪ A.P. & Lab. (17/20) | ▪ 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 Winter 2023
[Dr. Amir Khorsandi](#)
 - Database Lab. Fall 2022 – Fall 2023
[Dr. Alireza Basiri](#) (x2 semesters)

- Advanced object-oriented programming with C# [Dr. MohammadAli Khosravifard](#) Spring 2022
- Digital Systems Design [Dr. Nader Karimi](#) Spring 2021
- Fundamentals of programming with Python and C languages [Dr. MohammadAli Khosravifard](#) & [Dr. Jalal Zahabi](#) (x2 semesters) Fall & Spring 2019 – 2020

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) - [LinkedIn Learning](#)
- C# (ADO .NET Core MVC, windows forms, IIS Express, Message brokers (RabbitMQ)) - [Sololearn](#)
- SQL (Microsoft SQL Server, Postgresql, ADO .NET) - [Sololearn](#)
- 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) – [Sharif University of Technology](#) – Physical certificate
- Developing Your Emotional Intelligence - [LinkedIn Learning](#)

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/](https://hashemi.iut.ac.ir/) -- Mail: hashemim@iut.ac.ir
- **Dr. Alireza Basiri**
Assistant professor, ECE Department, Isfahan University of Technology, Iran
Website: <https://basiri.iut.ac.ir/> -- Mail: basiri@iut.ac.ir