

Education

B.Sc. in Computer Engineering

University of Sistan and Baluchestan, Iran

Iran
Sep 2016 – Aug 2021

- **GPA:** 17.8/20 (3.57/4 on WES scale) - Last two years 19.59/20 (**4/4 on WES scale**)
- **Thesis:** Design and implementation of a wearable healthcare monitoring device for patients (Grade 20/20)
Supervisor: Dr. Mohammad Hossein Sargolzaei
- **Selected Courses:** Signals and Systems (20/20) – Electrical and Electronic Circuits (20/20) – Computer-aided Digital System Design (20/20) – Embedded and Real-time Systems (20/20) – Logic Circuits (20/20) – Artificial Intelligence and Expert Systems (20/20) – Fundamentals of Computational Intelligence (19.39/20) – Microprocessor and Assembly Language (20/20) – Data Transmission (20/20) – Computer Networks (20/20)

Research Interests

- Reconfigurable Architectures
- DSP Architectures
- Hardware Accelerators and HPC
- Embedded Systems
- Computer Architecture
- Healthcare Devices

Patents

Design and implementation of a wearable healthcare monitoring device for patients suffering from chronic lung diseases

University of Sistan and Baluchestan, Iran
Dr. Mohammad Hossein Sargolzaei, Ali Abbasi

Expected to be submitted
mid-Sep 2021

Experience

Teaching Assistant

University of Sistan and Baluchestan, Iran

Sep 2018 – July 2020

- Teaching assistant in various courses including Computer-aided Digital System Design, Logic Circuits, Computer Architecture, Digital Systems 2, Microprocessor and Assembly Language, Theory of Languages and Automata

Intern at the Center of Electronic Learning

University of Sistan and Baluchestan, Iran

Feb 2020 – Apr 2020

- Helped facilitate online learning for students at the beginning of the COVID-19 pandemic on the Moodle platform.

Private German Language Tutor

Mashhad, Iran

Jan 2018 – Aug 2018

Private English Language Tutor

Mashhad, Iran

Sep 2016 – Jan 2018

Extracurricular Activities

Xilinx ISE Design Suite Tutorial (Software Simulation + PDF)

University of Sistan and Baluchestan, Iran

Mar 2020

iSpring Suite Tutorial (Video)

University of Sistan and Baluchestan, Iran

Mar 2020

Selected Projects

Signal Processing Units:

- FIR Filter (VHDL), DCT (Verilog), ...

Cryptography Units:

- AES (Verilog), Triple DES (Verilog), DES (Verilog), ...

Artificial Intelligence (C#):

- Genetic-based solution for Traveling Salesman Problem (TSP), A* algorithm for a modified n-queen problem, ...

Miscellaneous:

- FPGA Implementation of a voltmeter using ADC128S102 IC (VHDL), Practical measurement of the impulse response and step response of an LTI guitar amplifier, ...

Certificates

Introduction to FPGA Design for Embedded Systems <i>Part of MSc in Electrical Engineering, University of Colorado Boulder, Coursera</i>	Jul 2021
Hardware Description Languages for FPGA Design <i>University of Colorado Boulder, Coursera</i> <i>Part of MSc in Electrical Engineering degree at the University of Colorado Boulder</i>	Aug 2021
FPGA Softcore Processors and IP Acquisition <i>University of Colorado Boulder, Coursera</i> <i>Part of MSc in Electrical Engineering degree at the University of Colorado Boulder</i>	Aug 2021
MRI Fundamentals <i>Korea Advanced Institute of Science and Technology (KAIST), Coursera</i> A course covering the mathematics and physics behind Magnetic Resonance Imaging (MRI)	Sep 2021
Certificate of Participation: "Approaches to Scientific Reporting and Proposal Writing" <i>University of Sistan and Baluchestan, Iran</i>	Dec 2019
Certificate of Participation: "Wireless Networks Monitoring" <i>University of Sistan and Baluchestan, Iran</i>	Dec 2019
Certificate of Participation: "Fiber Optics" <i>University of Sistan and Baluchestan, Iran</i>	Dec 2019
Certificate of Participation in (English) Teacher Training Course (TTC) <i>Silkroad Innovators Institute, Iran</i>	Jun 2017

Skills and Hobbies

- **Principal:** Verilog, VHDL, Assembly x86, Signal Processing, Digital Circuit Design, Object-orientation, C++, C#, LaTeX
- **Software:** ModelSim, Altera Quartus Prime, Xilinx Vivado, Xilinx ISE Design Suite, Proteus, CodeVisionAVR, Arduino, Microsoft Visual Studio, Microsoft Office
- **Social Skills:** Teaching, Public Speaking, Presentation, Team Working
- **Hobbies:** Playing electric guitar, playing badminton, watching movies and animation

Honors and Awards

- Ranked top 7% among all students in computer engineering 2016 bachelor's program Jul 2021
- Ranked top 6% in the Iranian university entrance exam (Konkour) among more than 150,000 participants Aug 2016

Languages

English: Full Proficiency	IELTS Score (Academic): 7.5
German: Limited Working Proficiency	
Persian: Native Proficiency	

References

- **Dr. Mohammad Hossein Sargolzaei**
Ph.D. in Computer Hardware Engineering, University of Tehran, Iran, 2018
Assistant Professor, Faculty of Electrical and Computer Engineering, University of Sistan and Baluchestan, Iran
mh.sargolzaei@ece.usb.ac.ir
- **Dr. Mehri Mehrjoo**
Ph.D. in Electrical Engineering (Telecommunications), University of Waterloo, Canada, 2008
Associate Professor, Faculty of Electrical and Computer Engineering, University of Sistan and Baluchestan, Iran
mehrjoo@ece.usb.ac.ir
- **Dr. Farahnaz Mohanna**
Ph.D. in Electrical Engineering (Data Processing), University of Surrey, The United Kingdom, 2002
Associate Professor, Faculty of Electrical and Computer Engineering, University of Sistan and Baluchestan, Iran
f.mohanna@ece.usb.ac.ir