

## 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

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

## 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

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

## Languages

<b>English:</b> Full Proficiency	<b>IELTS Score (Academic): 7.5</b>
<b>German:</b> Limited Working Proficiency	
<b>Persian:</b> Native Proficiency	

## References

- **Dr. Mohammad Hossein Sargolzaei**  
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- **Dr. Mehri Mehrjoo**  
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- **Dr. Farahnaz Mohanna**  
*Ph.D. in Electrical Engineering (Data Processing), University of Surrey, The United Kingdom, 2002*  
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