

Education

B.Sc. in Computer Engineering

Sep 2016 – Aug 2021

University of Sistan and Baluchestan, Iran

- **GPA:** 17.8/20 (3.57/4 on WES scale) - **Last two years GPA:** 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:** • Computer-aided Digital System Design (20/20) • Logic Circuits (20/20) • Embedded and Real-time Systems (20/20) • Signals and Systems (20/20) • Artificial Intelligence and Expert Systems (20/20) • Fundamentals of Computational Intelligence (19.39/20) • Graph Theory and Algorithms (19.54/20)

Research Interests

- Reconfigurable Architectures
- Hardware Accelerators and High-performance Computing
- DSP Architectures
- Embedded Systems
- Computer Architecture
- Healthcare Devices

Patents

- **Design and implementation of a wearable healthcare monitoring device for patients suffering from chronic lung diseases** *Expected to be submitted late-Sep 2021*
University of Sistan and Baluchestan, Iran
Dr. Mohammad Hossein Sargolzaei, Ali Abbasi

Experience

- **Teaching Assistant** *Sep 2018 – Jul 2020*
University of Sistan and Baluchestan, Iran
TA in: • Computer-aided Digital System Design • Logic Circuits • Digital Systems 2 • Computer Architecture
• Microprocessor and Assembly Language • Theory of Languages and Automata
- **Intern at the Center of Electronic Learning** *Feb 2020 – Apr 2020*
University of Sistan and Baluchestan, Iran
Helped facilitate online learning for students at the beginning of the COVID-19 pandemic on the Moodle platform
- **Private German Language Tutor** *Jan 2018 – Aug 2018*
Mashhad, Iran
Taught the German language at the elementary level as a private tutor
- **Private English Language Tutor** *Sep 2016 – Jan 2018*
Mashhad, Iran
Taught the English language at the intermediate level as a private tutor

Extracurricular Activities

- **Xilinx ISE Design Suite Tutorial ([Online Software Simulation](#) + [PDF](#))** *Mar 2020*
University of Sistan and Baluchestan, Iran
Developed an online simulation environment and a document for learning ISE Design Suite
- **iSpring Suite Tutorial (Video)** *Mar 2020*
University of Sistan and Baluchestan, Iran
Recorded several tutorial videos about making SCORM packages using iSpring Suite for online teaching during the COVID-19 pandemic

Selected Projects

- **Signal Processing**
FIR Filter Unit (VHDL)
DCT Unit (Verilog)
- **Cryptography**
AES Encryption Unit (Verilog)
DES Encryption Unit (Verilog)
Triple-DES Encryption Unit (Verilog)
- **Artificial Intelligence (C#)**
Genetic-based solution for Traveling Salesman Problem (TSP)
A* algorithm for a modified version of n-queen problem
- **Miscellaneous**
FPGA Implementation of a voltmeter using ADC128S102 IC (VHDL)
UART Module (VHDL)
Practical measurement of the impulse response and step response of an LTI guitar amplifier
C# Implementation of the CPU scheduling algorithms

Honors and Awards

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

Certificates

- **FPGA Softcore Processors and IP Acquisition ([View on Coursera](#))** *Aug 2021*
University of Colorado Boulder, Coursera
- **Hardware Description Languages for FPGA Design ([View on Coursera](#))** *Aug 2021*
University of Colorado Boulder, Coursera
- **Introduction to FPGA Design for Embedded Systems ([View on Coursera](#))** *Jul 2021*
University of Colorado Boulder, Coursera
- **MRI Fundamentals ([View on Coursera](#))** *Jul 2021*
Korea Advanced Institute of Science and Technology (KAIST), Coursera
- **Certificate of Participation: "Approaches to Scientific Reporting and Proposal Writing"** *Dec 2019*
University of Sistan and Baluchestan, Iran
- **Certificate of Participation: "Fiber Optics"** *Dec 2019*
University of Sistan and Baluchestan, Iran
- **Certificate of Participation: "(English) Teacher Training Course (TTC)"** *Jun 2017*
Silkroad Innovators Institute, Iran

Languages

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

Skills

- **Programming Language:** Verilog, VHDL, Arduino, Assembly Language, C++, C#
- **Engineering Software:** ModelSim, Altera Quartus Prime, Xilinx Vivado, Xilinx ISE Design Suite, Proteus Design Suite, CodeVisionAVR, Microsoft Visual Studio
- **Social Skills:** Teaching, Presentation, Team Working, Public Speaking

Hobbies

- Playing electric guitar
- Watching movies
- Playing basketball
- Playing badminton

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
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- **Dr. Mehri Mehrjoo**
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- **Dr. Farahnaz Mohanna**
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