SINA OJAGHI

Sabbatical PhD Students

DoB: 19/9/1995

Marital Status: Single

Military Service: Educational Exemption

As a Ph.D. student in Computer Architecture at the University of Tehran, my academic journey has been deeply committed to research and education. Having served as an instructor at both Hamedan University of Technology and the University of Tehran, I've contributed significantly to my students' academic growth while honing my teaching and research skills. Currently, I balance my roles as IT Manager at HamVta Arya Co. and a hardware programmer at Afra Turbine Energy Co., applying my technical expertise to tackle real-world challenges. At my core, a passion for discovery and innovation propels me forward. My extensive involvement in research and development projects underscores my dedication to advancing computer architecture. I'm now seeking a study opportunity to enhance my research capabilities further, aiming to offer groundbreaking insights into hardware security and the applications of spiking neural networks in sustainable technologies.

Contact

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P23, marvi , W kamali , Pounak, Tehran, Iran

Education

PhD in Computer Engineering

Branch: Computer architecture
Institute/University: Tehran university
Tehran, Iran
GPA: 18.05 (3.61 / 4)
2020 - Present

Master of Computer Engineering

Branch: Computer architecture
Institute/University: islamic azad university science and research branch
Tehran, Iran
GPA: 18.45 (3.69 / 4)
2017 - 2019

Bachelor of Computer Engineering

Branch: Computer architecture of digital systems
Institute/University: Hamedan University of Technology
Hamedan, Iran
GPA: 16.34 (3.27 / 4)
2013 - 2017

Research

Design and Implementation of Remote Side-Channel Attacks and Countermeasures on Spiking Neural Networks
Publisher : University of Tehran
Ph.D Proposal

Design and manufacture of audio processor for smartening domestically produced vehicles
Publisher : Islamic Azad University, Science and Research Branch
Master Thesis

Transfer voice data under secure protocol and use it in smart homes
Publisher : hamedan university of technology
Bachelor Thesis

Object Detection for Vehicles with Yolo
Publisher : 2024 IEEE 22nd World Symposium on Applied Machine Intelligence and Informatics (SAMI)
January 2023
Link : https://ieeexplore.ieee.org/document/10432884

Iranian Vehicle Images Dataset for Object Detection Algorithm
Publisher : Journal of AI and Data Mining
May 2023
Link : https://jad.shahroodut.ac.ir/article_3164.html

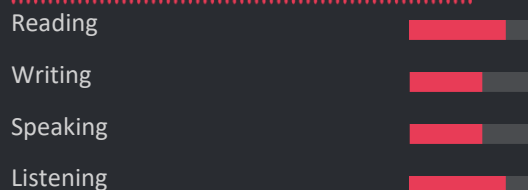**Stress-strain modeling of an Al-Mg using an artificial neural network**
Publisher : 3 rd International Conference on Electrical, Computer and Mechanical Engineering
Link : https://civilica.com/doc/1128854/

Modeling of AZ52 flow curve at high temperature by implicating the genetic algorithm method
Publisher : 3 rd International Conference on Electrical, Computer and Mechanical Engineering
Link : https://civilica.com/doc/1128855/

Honors

- **the rank of 13 PhD among the candidates in the field of computer architecture in 1399 (2020)**

- **first rank in the master's degree among the students of Islamic Azad University, Science and Research Branch, entered in 2017**

- **second rank in the undergraduate level among the students of Hamadan University of Technology, entered in 2013**

- **first place in ACM competitions in Hamedan province**
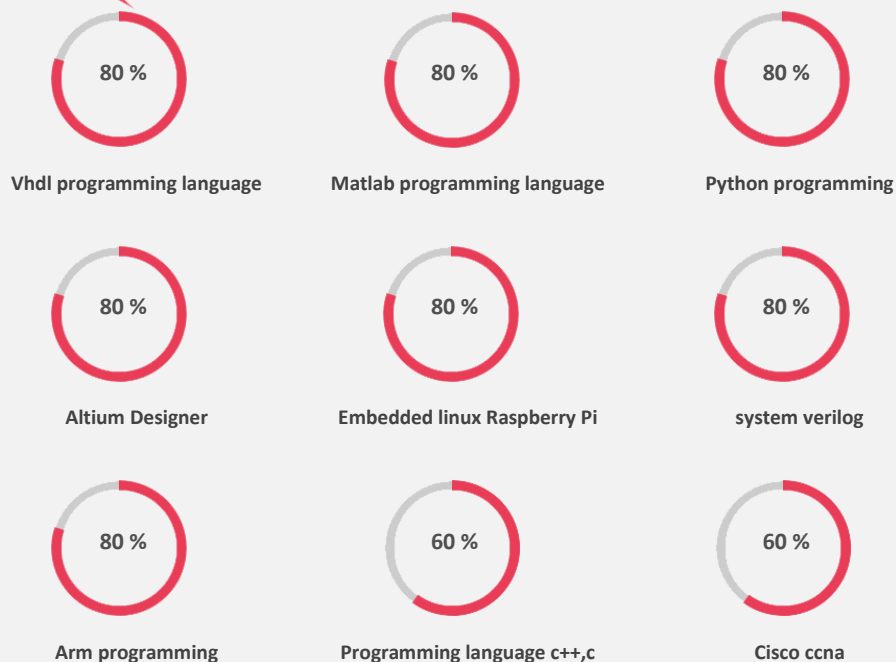
- **score 513 on the Tolimo language test**

Skills

80 %	**80 %**	**80 %**
Vhdl programming language	Matlab programming language	Python programming
80 %	**80 %**	**80 %**
Altium Designer	Embedded linux Raspberry Pi	system verilog
80 %	**60 %**	**60 %**
Arm programming	Programming language c++,c	Cisco ccna

Certificates

- **Selecting plans and projects as the top project of the computer department of Hamedan University of Technology to enter the Elcamp exhibition in Hamedan province**

- **Selection of plans and projects as the top project of the computer department of Hamedan University of Technology to enter the exhibition of research, technology and market technology of Hamedan province**

- **Selection of plans and projects as the top project of the Computer Department of Hamedan University of Technology Smartening of smart hospitals to lead to a conference on the role of economic prosperity in the prevention of social crimes**

Projects

Ideation, design and implementation of targeted internship site

For : Hamedan University of Technology

2016

The site we designed worked for about 3 years at the university and then became inaccessible due to the more comprehensive Golestan system.

Link : http://intern.hut.ac.ir

Verification Calculator II & III & RISC-V

For : Dr. siamak mohammadi

January 2021

This verification includes: circuit performance simulation and design of a Stimuli production platform and Golden Model design and Checker design and Scoreboard design and implementation of Coverage techniques

Training and replacing the heavy part of the circuit with a neural network and accelerating the circuit

For : Dr. Modaresi

June 2021

Investigation and detection of hardware malware in AES-T300 RS232-T400

For : Dr. siamak mohammadi

June 2021

Automatic annotation of photos with genetic algorithm in MATLAB environment

For : Hamedan University of Technology

2017

computer vision lesson project and this project was used to identify the status of the signature and the owner of the signature in banking operations.

Data transfer in FPGAs (UART) in VHDL language in ISE environment

For : Hamedan University of Technology
2015
Data transfer lesson project

MIPS processor design with some commands in VHDL language in ISE environment

For : Hamedan University of Technology
2009
Computer architecture lesson project

Work Experience

Instructor artificial intelligence
Hamedan University of Technology

Hamedan, Iran

September 2021 - October 2023

Tasks and Achievements :

■ Department of Computer and IT Engineering and Department of Electrical Control and Electronics Engineering

Secretary and speaker of Cyber-Physical Systems society if iran
CPSSI

Tehran, Iran

March 2022 - Present

Tasks and Achievements :

■ link: https://cpssi.ir/

IT Manager
HamVeta Co.

Tehran, Iran

September 2023 - June 2024

Tasks and Achievements :

■ Developing and implementing IT policies and procedures to streamline processes and enhance security

R & D
Nabz

Tehran, Iran

November 2019 - April 2020

Tasks and Achievements :

■ link : https://nabzgroup.com/

T.A. Functional Verification of HDL Models (Master & PhD)
University of Tehran

Tehran, Iran

September 2021 - Present

T.A. Computer network (Master & Bachelor)
University of Tehran

Iran

T.A. Computer architecture (bachelor of science)
Hamedan university of technology

Hamedan, Iran

December 2015 - December 2016

Instructor research methods
Hamedan University of Technology

Hamedan, Iran

September 2021 - October 2023

Tasks and Achievements :

■ Department of Electrical Control and Electronics Engineering and Department of Computer and IT Engineering

Hardware Programmer
Afra Turbine Energy Co.

Hamedan, Iran

September 2022 -

Present **Tasks and**

Achievements :

■ Designed and implemented embedded software for microcontroller-based hardware systems

■ Developed firmware updates to improve functionality and performance of hardware devices

Idea developer and senior consultant of targeted internship site
hamedan university of technology

Hamedan, Iran

September 2016 - January 2019

Tasks and Achievements :

■ link: http://intern.hut.ac.ir/

T.A. Hardware Security and Trust (Master & PhD)
University of Tehran

Tehran, Iran

January 2023 - Present

T.A. Performance Evaluation (Master & PhD)
University of Tehran

Tehran, Iran

December 2021 - Present

T.A microprocessor and assembly language (bachelor of science)
Hamedan university of technology

Hamadan, Iran

September 2015 - June 2016

T.A. logic circuits (bachelor of science)
Hamedan university of technology

Hamedan, Iran

December 2015 - June 2016

T.A. Discrete Mathematics (bachelor of science)
Hamedan university of technology

Hamedan, Iran

December 2015 - June 2016

Teaching microprocessor and assembly language
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

September 2016 - June 2017

Teaching Digital Electronics
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

December 2016 - June 2017

Teaching algorithm design
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

December 2015 - June 2016

Supporter, group manager
Qalam Chi Educational Foundation

Hamedan, Iran

September 2015 - May 2017

Teaching computer
School Dar ol Fonoon Hamedan

Hamedan, Iran

September 2014 - May 2016

Teaching Data transfer and telecommunications
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

December 2016 - June 2017

Teaching Computer architecture
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

February 2015 - January 2017

Teaching logic circuits
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

September 2014 - December 2015

Teaching c programming language
Computer Science Association in Hamedan University of Technology

Hamedan, Iran

September 2014 - December 2015

Laptop and computer software and hardware repairs
DPC

Hamedan, Iran

May 2013 - September 2014

Teaching IOT
School Khadije kobra tehran

Tehran, Iran

September 2017 - May 2019

References

Dr. Siamak Mohammadi
Computer department group manager Tehran University
smohammadi@ut.ac.ir

Dr. Ahmad Khonsari
Member of the Scientific Council of the IPM Basic Knowledge Research Institute
ak@ipm.ir

Dr. Somaye Jafar Ali Jasbi
Computer department group manager islamic azad university science and research branch
s.jassbi@srbiau.ac.ir

Dr. Ahmad Khademzade
Deputy of Iran Telecommunication Research Center and member of the Scientific Council of Islamic Azad University, Science and Research Branch
a_khademzadeh@azad.ac.ir

Dr. Ehsan Aerabi
PhD student of Gronoble University of Technology and former faculty of Hamedan University of Technology
e_aerabi@comp.iust.ac.ir

Dr. Mir Hossin Dezfoulial
Computer department group manager Bu ali sina university
dezfoulian@basu.ac.ir