

Sina Ojaghi

Sabbatical PhD Students



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📍 P23, Marvi , W Kamali , Pounak, Tehran, Iran

📅 19/09/1995

🛡 Educational Exemption

🌐 sinaoj.com

🌐 Sina Ojaghi

📧 SinaOjaghi

🏠 Sina Ojaghi

🎓 EDUCATION

Ph. D. in Computer Engineering (Computer Architecture)

University of Tehran
2020 – present | Tehran, Iran
GPA: 18.05 (3.61 / 4)

Master of Computer Engineering (Computer Architecture)

Islamic Azad University Science and Research Branch
Thesis Title: Design and implementation of an intelligent voice assistant for domestically produced smart cars in Iran.
2017 – 2019 | Tehran, Iran
GPA: 18.45 (3.69 / 4)

Bachelor of Computer Engineering (Computer Architecture)

Hamedan University of Technology
Thesis Title: Secure transmission of audio data under a secure protocol for use in smart homes.
2013 – 2017 | Hamedan, Iran
GPA: 16.34 (3.27 / 4)

🌐 LANGUAGES

English ●●●●●
Persian ●●●●●

🧠 SKILLS

VHDL Programming ●●●●●
Matlab Programming ●●●●●
Python ●●●●●
Arm Programming ●●●●●
System Verilog ●●●●●
Programming C & C++ & Java ●●●●●

👤 PROFILE

As a Ph.D. student in Computer Architecture at the University of Tehran, I am dedicated to research and teaching, having taught at Hamedan University of Technology and the University of Tehran. In addition to my academic role, I serve as the IT Manager at HamVta Arya Co. and a hardware programmer at Afra Turbine Energy Co., where I apply my technical skills to practical challenges. Driven by a passion for innovation, I am deeply engaged in research projects and seek further study opportunities to advance hardware security and explore spiking neural networks for sustainable technologies.

📖 PUBLICATION AND RESEARCH

- **Design and Implementation of Remote Side-Channel Attacks and Countermeasures on Spiking Neural Networks**
University of Tehran
2024
Ph.D. Proposal
- Maleki, Pouria, Abbas Ramazani, Hassan Khotanlou, **Sina Ojaghi**, Milad Mousavi, Alexey Kalinin, and Amir Mosavi. "Object Detection for Vehicles with Yolo". 2024 IEEE 22nd World Symposium on Applied Machine Intelligence and Informatics (SAMI): IEEE, 2024.
<https://ieeexplore.ieee.org/document/10432884>
- Maleki, Pouria, Abbas Ramazani, Hassan Khotanlou, and **Sina Ojaghi**. "Iranian Vehicle Images Dataset for Object Detection Algorithm." Journal of AI and Data Mining 12, no. 1 (2024): 127-36.
https://jad.shahroodut.ac.ir/article_3164.html
- **Ojaghi, Sina**, Farzan Barati, and Somaye Jafari jassbi. "Modeling of Az52 Flow Curve at High Temperature by Implicating the Genetic Algorithm Method." Paper presented at the 3rd International Conference on Electrical, Computer and Mechanical Engineering papers, 2020 .
<https://civilica.com/doc/1128854/>
- **Ojaghi, Sina**, Farzan Barati, and Somaye Jafari jassbi. "Stress-Strain Modeling of an Al-Mg Using an Artificial Neural Network." Paper presented at the 3rd International Conference on Electrical, Computer and Mechanical Engineering papers, 2020.
<https://civilica.com/doc/1128855/>

🏆 AWARDS

- **13th place among the candidates in the 2020 PhD entrance exam for Computer Architecture.**
- **1st place in the M.S. class of 2017, Computer Architecture, Islamic Azad University, Science and Research Branch.**
- **2nd place in the B.S. class of 2013, Computer Architecture, Hamedan University of Technology.**
- **1st place in the ACM Competitions, Hamedan province, 2018.**

👜 PROFESSIONAL EXPERIENCE

Instructor Artificial Intelligence (AI) and Research Methods (RM)
Hamedan University of Technology (Sep 2021 - Oct 2023)

Hardware Programmer
Afra Turbine Energy Co. (Sep 2022 - Present)

Secretary and speaker of Cyber-Physical Systems society of Iran
CPSSI (Mar 2022 - Present)

Ideation, design and implementation of targeted internship site
Hamedan University of Technology (2016 - 2019)

Verification Calculator II & III & RISC-V
Dr. Siamak Mohammadi (2021 - 2022)

Training and replacing the heavy part of the circuit with a neural network and accelerating the circuit
Dr. Mehdi Modaresi (2021)

Teaching Assistant (T.A.)
University of Tehran (M.S. & Ph.D.)
● Hardware Security and Trust
● Functional Verification of HDL
● Models Performance Evaluation
● Computer network (B.S.)

Hamedan University Of Technology (B.S.)
● Microprocessor and Assembly language
● Computer Architecture
● Logic Circuits
● Discrete Mathematics
● Data Transfer and Telecommunication