Mahsa Tahghigh
CONTACT

📍 **Shiraz, Iran**

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☏ **+989174461834**

◎ [ResearchGate](#)

◎ [Website](#)

EDUCATION

❖ Master of Science (M.Sc.), Electronic Engineering-Integrated Circuit Design   *2019-2021*

Islamic Azad University of Shiraz, Shiraz, Iran.

GPA: 18.90/20 (4/4)

Thesis Topic: "Design of Bit Alignment Circuit in Pipeline Analog to Digital Converters by a Full Adder Circuit".

Thesis Grade: 17.99/20

Supervisor: Dr. Nabiollah Shiri

> ➢ Selected Courses
> - Linear Integrated Circuits (18/20)
> - Integrated Data Converters (19/20)
> - Laser Electronic (19.50/20)
> - Optoelectronics (20/20)
> - Radio Frequency Integrated Circuits (19/20)
> - Nano Electronic (18/20)

❖ Bachelor of Science (B.Sc.) in Electrical and Power Engineering,   *2013-2017*

Islamic Azad University of Shiraz, Shiraz, Iran.

GPA: 15.59/20 (3.09/4).

RESEARCH INTERESTS

- Digital Arithmetic Circuits
- Computer Architecture and Systems
- Digital System Design
- Embedded System
- Approximate Computing and Theory
- Image Processing
- Digital Signal Processing
- Low Power Design

HONORS AND AWARDS

- **Ranked** third among the Electrical Engineering students based on GPA at Islamic Azad University Of Shiraz, Iran   *2019-2021*
- **Awarded** tuition fee waiver scholarship for being among top 5% Integrated Circuit Design class.   *2020-2021*

PUBLICATION

❖ **Peer-reviewed Journal**

➢ Ayoub Sadeghi, Nabiollah Shiri, Mahmood Rafiee, **Mahsa Tahghigh**, "*An efficient counter-based Wallace-tree multiplier with hybrid full adder core for image blending*", *Frontiers of Information Technology & Electronic Engineering, June2022,* *DOI: 10. 163/FITEE.2100432*

❖ **Under preparation for Peer-reviewed Journal**

➢ **Mahsa Tahghigh**, Nabiollah Shiri, "*A novel and high accuracy 3-bit structure of ripple carry adder circuit embedded in bit alignment in pipeline ADC by using of efficient full adder* ", Will be submitted in September 2022, Microelectronic Journal.
➢ **Mahsa Tahghigh**, Nabiollah Shiri, "High performance and low power Wallace tree multiplier using approximate full adder", Will be submitted in September 2022,

ACADEMIC EXPERIENCE

- ➢ **Teaching Assistant**: instructor of HSPICE tool for the courses related to integrated circuits.   *2020-Current*

- ➢ **Research Assistant**: in [Bio-IC Lab](Bio-IC Lab)   *2020-Current*

- ➢ **Experienced in Coordination and Team Performance:**
  Main Responsibilities: Preparing the professors' presentations, Participation in teaching the discussed topics, Examples: `Mass Spectroscopy` and `Polarized light` for Optoelectronics course.   *2020-Current*

SKILLS AND QUALIFICATIONS

- ➢ Tools:
  - HSPICE (Professional)
  - MATLAB (Intermediate)
  - Cadence Virtuoso Layout Suite (Intermediate)
  - Advanced Design System (ADS)
  - Pspice (Intermediate)
  - Proteus Design Suite (Intermediate)
  - Visio (Professional)

LANGUAGE SKILLS

- TOEFL Internet based (IBT) 99.

REFERENCES

- ❖ **Dr. Nabiollah Shiri** (Assistant Professor), Department of Electrical and Electronic Engineering, Islamic Azad University of Shiraz, Iran.
  Email: nabi.shiri@gmail.com

- ❖ **Dr. Rahim Ghayour** (Full Professor), Department of Electrical and Electronic Engineering, Islamic Azad University of Shiraz, Iran.
  Email: rghayour@shirazu.ac.ir

- ❖ **Dr. Zahra Karami** (Assistant Professor) and head of Electrical and Electronic Engineering, Islamic Azad University of Shiraz, Iran.
  Email: zahrakaramih63@gmail.com