

# Roghayeh Rafieisangari

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## CONTACT

**Address:** Shiraz, Iran/ **Email:** roghayeh.rafieisangari@gmail.com/ **Phone:** +989172519232/ **website:** bio-ic.com

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## EDUCATION

- **Master of Science:**
    - Electrical Engineering- Control, 2019-2021, Islamic Azad University of Shiraz, Shiraz, Iran.
    - **GPA:** 4/4.
    - **Thesis topic:** "Heart diseases diagnosis using fuzzy-control systems and ECG signal"/ **Supervisor:** Dr. Nabiollah Shiri/ **Thesis Grade:** 17.74/20
  - **Bachelor of Science:**
    - Electrical Engineering-Control, 2014-2018, Fasa University, Fasa, Iran.
    - **GPA=**3.6/4.
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## SKILLS

- **Tools:** HSPICE, MATLAB and Simulink, Cadence, Xilinx ISE Design Suite, Advanced Design System (ADS), Visio, AVR, ARDUINO, Delta PLC, Siemens PLC, Siemens Tia portal, AutoCAD Electrical, WINCC Flexible./ **Hardware Languages:** VHDL
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## CERTIFICATES

- MATLAB (90/100). Advanced Electronics (77/100). Siemens PLC SIMATIC S7-300 (96/100). Siemens PLC SIMATIC S7-400 (97/100). Delta PLC (99/100). Building Management Systems (BMS) (96/100).
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## HONORS AND AWARDS

- Ranked 4<sup>th</sup> GPA in B.Sc. (2014-2018)
  - Ranked 1<sup>st</sup> GPA in, B.Sc. (first, second and Last 4 semesters, 2014-2018).
  - Ranked 1<sup>st</sup> GPA in M.Sc. (2019-2021)
  - Director/Member of Fasa University Electrical Engineers Scientific Community in B.Sc. (2016-2018).
  - Selected as research assistant/researcher in Bioelectronics Integrated Circuits Lab (2021-Current).
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## RESEARCH INTERESTS

- Control, Power Systems and Optimization techniques. Neural Networks, ANFIS. Industrial Automation and Instrumentation. Biomedical Signal and Image Processing. Analog, Digital and Mixed-Signal Integrated Circuits. Very Large Scale Integration Design.
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## RESEARCH

1. Roghayeh Rafieisangari, Nabiollah Shiri, A Neural Network-Based Error Correction in the First Stage Residue of Pipeline Analog to Digital Converters, International Journal of Circuit Theory and Applications (IJCTA), June 2023 (Being published by end of March 2024).
2. Roghayeh Rafieisangari, Nabiollah Shiri, A variable-threshold adaptive neuro-fuzzy inference system for heartbeat classification, Artificial Intelligence in Health Journal, February 2024 (Being published by end of March 2024).

3. Roghayeh RafieiSangari, Ali Ranjbar, Nabiollah Shiri, An Approximate-Based Neural Network for the Most Significant Bit error correction in Pipelined Analog to Digital converters, Measurement Journal, Elsevier (In preparation).
  4. Ali Ranjbar, Roghayeh Rafieisangari, Nabiollah Shiri, A Novel Digital 12-Bit Pipelined ADC Calibration Technique Using FPGA, IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS – II (In preparation).
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### TEACHING AND RESEARCH Activities

- Teaching Assistant, Electromagnetism, under supervision of Dr. Salman Baroumand, Fasa University (2016-2018).
  - Teaching Assistant, Linear Algebra, under supervision of Dr. Fatemeh Jamshidi, Fasa University (2016-2018).
  - Teaching Assistant, Modern Control Systems, under supervision of Dr. Fatemeh Jamshidi, Fasa University (2016-2018).
  - Research assistant, under supervision of Dr. Jamshidi, Fasa University (2018).
  - Teaching Assistant, Advanced Engineering Math, under supervision of Dr. Farshad Pesaran, Islamic Azad University of Shiraz (2020).
  - Teaching Assistant, Industrial Automation, under supervision of Dr. Farshad Pesaran, Islamic Azad University of Shiraz (2020).
  - Teaching Assistant, Advanced Instrumentation, under supervision of Dr. Farshad Pesaran, Islamic Azad University of Shiraz (2020).
  - Teaching Assistant, Advanced Digital Electronics, under supervision of Dr. Nabiollah Shiri, Islamic Azad University of Shiraz (2022-2023).
  - Teaching Assistant, Analog to Digital Converters, under supervision of Dr. Nabiollah Shiri, Islamic Azad University of Shiraz (2022-2023).
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### WORK EXPERIENCE

- Researcher in Bio-IC Lab, under supervision of Dr. Nabiollah Shiri, Islamic Azad University of Shiraz (2021-Current).
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### LANGUAGES

- **Persian (native), English (fluent).**
  - English Diploma (2018).
  - IELTS (Taken in September 2022): Overall: 6.5, Speaking: 7, Writing: 7, Listening: 6, Reading: 6.
  - Cambridge, C1 Advanced (September 2023)/Cambridge, C2 Advanced (November 2023).
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### REFERENCES

- Dr. Nabiollah Shiri (Assistant Professor), Department of Electrical Engineering, Shiraz Branch, Islamic Azad University, Shiraz, Iran. Email: [na.shiri@iau.ac.ir](mailto:na.shiri@iau.ac.ir)
- Dr. Farshad Pesaran (Assistant Professor), Department of Electrical Engineering, Shiraz Branch, Islamic Azad University, Shiraz, Iran. Email: [farshad.pesaran@iau.ac.ir](mailto:farshad.pesaran@iau.ac.ir)
- Dr. Amirhossein Gheisari (Assistant Professor), Department of Electrical Engineering, Shiraz Branch, Islamic Azad University, Shiraz, Iran. Email: [amir.gheisari@iau.ac.ir](mailto:amir.gheisari@iau.ac.ir)