

Kaveh Akbarzadeh-Sherbaf

Assistant Professor of Computer Engineering, akbarzadeh@imamreza.ac.ir

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### Personal Information

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**Date of Birth:** September 15, 1980

**Nationality:** Iranian

**Gender:** Male

**Marital Status:** Married

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### Education

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#### University of Tehran

PhD in Computer Engineering

2015-2020

GPA: 19.37/20 (Ranked 1<sup>st</sup>)

**Thesis Title:** Design and Implementation of a Hardware Accelerator for Spiking Neural Networks

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#### Semnan University

M.Sc. in Electrical Engineering (Electronic),

2003-2005

GPA: 19.25/20 (Ranked 1<sup>st</sup>)

**Thesis Title:** FPGA Implementation of Symmetric Block Ciphers: AES, DES, 3DES

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#### Ferdowsi University

B.Sc. in Electrical Engineering (Electronic),

1999-2003

GPA: 16.72/20 (Ranked 4<sup>t</sup>)

**Thesis Title:** Real-time Implementation of Active Noise Cancellation Using TMS320C31 DSK

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### Vocational Experience

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#### Imam Reza International University

Lecturer

2006-present

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#### Teaching Experiences:

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- Parallel Programming.
  - Neuromorphic Engineering
  - Very Large Scale Integrated Circuit Design (VLSI).
  - Digital Logic Design.
  - Engineering Mathematics.
  - Digital Image processing.
  - Introduction to Digital Electronics.
  - Linear Electric Circuits.
  - Analogue Electronic Circuits.
  - Microelectronic Devices.
  - Hardware Description Language (System Verilog, VHDL).
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#### Awards and Honors:

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- Ranked 2nd in National PhD Entrance Exam, 2015.
- Distinguished Company in the Elm-ta-amal National Festival, 2012.
- Ranked 3rd in Ferdowsi Festival for the Best Translated Book, 2011.
- Ranked 2nd in the Sheikh-Bahai National Technopreneurship Festival, 2009.
- Distinguished Lecturer (Imam Reza University), 2007.

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## Publication

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### Journals:

- Nastaran Jannesar, **Kaveh Akbarzadeh-Sherbaf**, Saeed Safari, and Abdol-Hossein Vahabie. *SSTE: Syllable-specific temporal encoding to force-Learn audio sequences with an associative memory approach*. *Neural Networks*, 177:106368, 2024.
- Danesh Soltani, Bayan Azizi, Sepehr Sima, Kiarash Tavakoli, Negin Sadat Hosseini Mohammadi, Abdol-Hossein Vahabie, **Kaveh Akbarzadeh-Sherbaf**, and Ali Vasheghani-Farahani. *A systematic review of the effects of transcutaneous auricular vagus nerve stimulation on baroreflex sensitivity and heart rate variability in healthy subjects*. *Clinical Autonomic Research*, 33(2):165-189, April 2023.
- **Kaveh Akbarzadeh-Sherbaf**, Saeed Safari, and Abdol-Hossein Vahabie. *A digital hardware implementation of spiking neural networks with binary force training*. *Neurocomputing*, 412:129-142, 2020.
- **Kaveh Akbarzadeh-Sherbaf**, Behrooz Abdoli, Saeed Safari, and Abdol-Hossein Vahabie. *A scalable fpga architecture for randomly connected networks of hodgkin-huxley neurons*. *Frontiers in Neuroscience*, 9:141, 2018.
- Fateme Sarani, Hamidreza Mirzaei, and **Kaveh Akbarzadeh-Sherbaf**. *Prediction of amino acids contents in corn and wheat using artificial neural network and multiple linear regression*. *Animal Sciences Journal*, 103:195, 2013.

### Translated Books:

- Dogan Ibrahim. *Microcontroller Based Applied Digital Control*, Imam Reza University Press, 2011.