



Soheila Nazari

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وب سایت:

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پروفايل علم سنجی:

*Electrical Engineering – Electronics and
/ Telecommunications*

Education

- B.Sc: , Electrical Engineering – Electronics, 1387→1391
- M.Sc: Amirkabir University of Technology, Electrical Engineering- Electronics (Digital), 1391→1393
- Ph.D: Amirkabir University of Technology, Electrical Engineering- Electronics (Digital), 1394→1397

Research Interests

- Digital electronics - artificial intelligence - neuromorphic systems - hardware implementation of neural networks

Professional Experiences

- , 1401→1402

Journal Papers

- Efficient digital design of the nonlinear behavior of Hindmarsh-Rose neuron model in large-scale neural population
Soheila Nazari, Shabnam Jamshidi
Scientific Reports, Vol.14, 2024
- Digital design of a spatial-pow-STDP learning block with high accuracy utilizing pow CORDIC for large-scale image classifier spatiotemporal SNN
Mohammad Kazem Bahrami, Soheila Nazari
Scientific Reports, Vol.10, pp. 1-23, 2024
- A Novel Un-supervised Burst Time Dependent Plasticity learning approach for Biologically Pattern Recognition Networks
Masoud Amiri, Amir Homayoun Jafari, Bahador Makkiabadi, Soheila Nazari, Marc M. Van Hulle
INFORMATION SCIENCES, Vol.622, pp. 1-15, 2023
- A novel learning approach in deep spiking neural networks with multi-objective optimization algorithms for automatic digit speech recognition
Melika Hamian, Karim Faez, Soheila Nazari, Malihe Sabeti
JOURNAL OF SUPERCOMPUTING, Vol.-, pp. 1-26, 2023
- DEU-Net: Dual-Encoder U-Net for Automated Skin Lesion Segmentation

Ali Karimi, Karim Faez, Soheila Nazari
IEEE Access, Vol.11, pp. 134804-134821, 2023

■ **Designing Very Fast and Accurate Convolutional Neural Networks With Application in ICD and Smart Electrocardiograph Devices**

Alireza Keyanfar, GHaderi Reza, Soheila Nazari, Behzad Hajimoradi, Leila Kamalzadeh
IEEE Access, Vol.11, pp. 5502-5516, 2023

■ **A new full closed-loop brain-machine interface approach based on neural activity: A study based on modeling and experimental studies**

Masoud Amiri, Soheila Nazari, Amir Hodayoun Jafari, Bahador Makkiabadi
Heliyon, Vol.9, pp. 1-19, 2023

■ **Recognizing intertwined patterns using a network of spiking pattern recognition platforms**

Masoud Amiri, Amir Hodayoun Jafari, Bahador Makkiabadi, Soheila Nazari
Scientific Reports, Vol.12, 2022

■ **Spiking image processing unit based on neural analog of Boolean logic operations**

Soheila Nazari, Alireza Keyanfar, Marc M. Van Hulle
Cognitive Neurodynamics, Vol.-, pp. 1-12, 2022

■ **A New Brain-Machine Interface Algorithm Based on Neural Firing: A Study Based on Modeling**

masoud amiri, bahador makkiabadi, amirhodayoun jafari, Soheila Nazari
Journal of Neurodevelopmental Cognition, Vol.5, pp. 38-54, 2022

■ **A Novel Unsupervised Spatial-Temporal Learning Mechanism in a Bio-inspired Spiking Neural Network**

Masoud Amiri, Amir Hodayoun Jafari, Bahador Makkiabadi, Soheila Nazari
Cognitive Computation, Vol.15, pp. 694-709, 2022

■ **Neuromorphic circuit based on the un-supervised learning of biologically inspired spiking neural network for pattern recognition**

Soheila Nazari, Alireza Keyanfar, Marc M. Van Hulle
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, Vol.116, 2022