



Zahra Shahriari
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Tel: (+98) 9125208670
Birth: 15 August 1995

Zahra Shahriari

M. Sc. Biomedical Engineer

Education

2017 - 2019, Master

M.Sc. Biomedical Engineering at Amirkabir University of Technology

CGPA: 19.2 / 20

Thesis: An interactive beta cells network model providing a treatment method for diabetes

Supervisor: Dr. Sajad Jafari

2013 - 2017, Bachelor

B.Sc. Bioelectrical Engineering at University of Tehran

CGPA: 16.75 / 20

Thesis: Design and manufacture of vein finder system for displaying blood vessels inside the tissue

Supervisor: Prof. Seyed Kamaledin Setarehdan

Experience

2020 - 2021

Software Developer and Database Analyst, Novin Hi-tech Solutions Company

Chairman of the Board: Dr. Farzad Yazdi

2020

Teacher Assistant, Computational Modeling of Biological Systems, University of Tehran

Supervisor: Dr. Fariba Bahrami

2019

3 month internship at Department of Mathematics and Statistics, University of Western Australia (UWA)

Supervisor: Prof. Michael Small

2019

Participating in SDG (Sydney Dynamics Group) workshop

2018 - 2019

Teacher Assistant, Principles of Rehabilitation and Equipment, University of Tehran

Supervisor: Dr. Fariba Bahrami

2018 - 2019

Teacher Assistant, Linear Control Systems, University of Tehran

Supervisor: Dr. Fariba Bahrami

2019

Teacher Assistant, Biological Signals Lab, University of Tehran

Supervisor: Prof. Gholamali Hosseinzadeh

2016

Internship in Medical Equipment Department, Taleghani Hospital

Supervisor: Prof. Seyed Kamaledin Setarehdan

Research Interests

- Complex Systems
- Nonlinear Dynamics
- Chaos
- Collective Behavior
- Synchronization
- Neuronal Network
- Data Analysis
- Signal Processing

Relevant Courses

- Chaos and Its Applications in Biomedical Engineering (20/20)
- Electrophysiology (19/20)
- Neural Networks (18.9/20)
- Neuro-Muscular Systems Control (20/20)
- System Biology (19.5/20)
- Bioelectromagnetics (19.75/20)
- Cognition and Brain Physiology (18.5/20)
- Linear Control Systems (19.4/20)
- An Introduction to Biomedical Engineering (20/20)
- Introduction to Medical Physics (17.6/20)

Skills & Languages

Languages Skills

- Persian (native)
- English (IELTS 7)

Computer Skills

- Matlab (advance)
- Python
- Julia
- SQL (advance)
- VB.NET
- C#
- Labview
- Latex
- Microsoft Office

Publication

The role of coupling factors on the emergence of synchronization and chimera patterns in network of non-locally coupled pancreatic beta-cells (Zahra Shahriari, Fatemeh Parastesh, Mahdi Jalili, Vesna Berec, Jun Ma, and Sajad Jafari)

Published by the Europhysics Letters, IOPscience
doi: 10.1209/0295-5075/125/60001

Permutation entropy of state transition networks to detect synchronization (Zahra Shahriari, Michael Small)

Published by the International Journal of Bifurcation and Chaos (IJBC)
doi: 10.1142/S0218127420501540

Chimeras

(Fatemeh Parastesh, Sajad Jafari, Hamed Azarnoush, Zahra Shahriari, Zhen Wang, Stefano Boccaletti, Matjaž Perc)

Published by the Physics Reports
doi: 10.1016/j.physrep.2020.10.003

Honors

2017

Finalist for the Best Undergraduate Project Award in School of Electrical and Computer Engineering

2013

Ranked 20 out of 2061 applicants in the university entrance exam

References

Dr. Sajad Jafari

Affiliation:

Assistant Prof. of Department of Biomedical Engineering, Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran

Email:

sajadjafari83@gmail.com

sajadjafari@aut.ac.ir

Google Scholar Profile:

<https://scholar.google.com/citations?user=tiCsmt8AAAAJ&hl=en>

Home Page:

https://www.researchgate.net/profile/Sajad_Jafari3

Prof. Seyed Kamaledin Setarehdan

Affiliation:

Prof. of School of Electrical and Computer Engineering, College of Engineering, University of Tehran, Tehran, Iran

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ksetareh@ut.ac.ir

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<https://scholar.google.com/citations?user=QYJx0JMAAAAJ&hl=en>

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Dr. Fariba Bahrami

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Associate Prof. of School of Electrical and Computer Engineering, College of Engineering, University of Tehran, Tehran, Iran

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