Personal information:

Meysam Zareiee

Associate Professor

Damghan University, Damghan, Iran

DOB: 7 April 1983

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Education:

- Ph.D. Electronic Engineering, Department of Electrical and Computer Engineering, University of Semnan, Semnan, Iran, September 2009-February 2014.

  Thesis title: Synthesis and optimization of controller in discrete event systems modeled by Petri Net.

  Supervisors: Prof. Ali Asghar Orouji and Prof. Abbas Dideban

- Visiting researcher, Politecnico di Milano, Milan, Italy, June 2012-January 2013.

  Supervisor: Prof. Luigi Piroddi

- M.Sc. Electronic Engineering, Department of Electrical and Computer Engineering, University of Semnan, Semnan, Iran, 2007-2009.

  Thesis title: Simplifying of final controller in Discrete Event Systems using Petri net.

  Supervisor: Prof. Abbas Dideban

- B.Sc. Electrical Engineering, Department of Electrical Engineering, Tarbiat Moalem University of Azerbaijan, Tabriz, Iran, 2003-2007.

  Project: Simulation of line physical parameters impact on power system channel characteristics for transferring information using Broad Band Power Line Carrier.

  Supervisor: Prof. Shahram Hosseinzadeh

Professional Experiences:

2019-Present: Associate Professor, Damghan University, Damghan, Iran.

2015-2019: Assistant Professor, Damghan University, Damghan, Iran.

2017-2019: Head of electrical and electronic engineering group, Damghan University, Damghan, Iran.

Journal Articles:

- **M, Zareiee**, "A new architecture of the dual gate transistor for the analog and digital applications" AEU-International Journal of Electronics and Communications, 100, 114-118, 2019.

- **M, Zareiee**, "A new structure for lateral double diffused MOSFET to control the breakdown voltage and the on-resistance" Silicon, 11 (6), 3011-3019, 2019.

- **M, Zareiee**, "A novel dual trench gate power device by effective drift region structure" Superlattices and microstructures, 125, 8-15, 2019.

- M, Mehrad, **M, Zareiee**, A.A, Orouji, "Controlled Kink Effect in a Novel High-Voltage LDMOS Transistor by Creating Local Minimum in Energy Band Diagram" IEEE Transactions on Electron Devices, 64 (10), pp. 4213-4218, 2017

- **M, Zareiee**, M, Mehrad, "A Reliable Nano Device with Appropriate Performance in High Temperatures" ECS Journal of Solid State Science and Technology, 6 (4), pp. M50-M54, 2017.

- **M, Zareiee**, "High Performance Nano Device with Reduced Short Channel Effects in High Temperature Applications" ECS Journal of Solid State Science and Technology, 6 (7), pp. M75-M78, 2017.

- **M, Zareiee**, A.A, Orouji, "Superior electrical characteristics of novel nanoscale MOSFET with embedded tunnel diode" Superlattices and Microstructures, 101, pp. 57-67, 2017.

- **M, Zareiee**, "Modifying Buried Layers in Nano-MOSFET for Achieving Reliable Electrical Characteristics" ECS Journal of Solid State Science and Technology, 5 (10), pp. M113-M117, 2016.

- M, Mehrad, **M, Zareiee**, "Improved Device Performance in Nano Scale Transistor: An Extended Drain SOI MOSFET" ECS Journal of Solid State Science and Technology, 5 (7), pp. M74-M77, 2016.

- **M, Zareiee**, A.A, Orouji, M, Mehrad, "A novel high breakdown voltage LDMOS by protruded silicon dioxide at the drift region" Journal of computational Electronics 15 (2), pp. 611-618, (2016).

- **M, Zareiee**., "A novel high performance nano-scale MOSFET by inserting Si3N4 layer in the channel" Superlattices and Microstructures 88, pp. 254-261, (2015).

- A, Dideban., **M, Zareiee**., and A. A. Orouji, "A Simple Petri Net Controller by Solving Some Integer Linear Programming Problems", *Journal of control engineering and applied informatics*, 16(4), pp. 3-11, (2014).

- **M, Zareiee**., A, Dideban., A.A, Orouji., and H, soltanizadeh, "Solving the problem of forbidden states in Discrete Event Systems: A novel systematic method for reducing the number of control places", *Asian Journal of Control*, (In press).

- **M, Zareiee**., A, Dideban., and A.A, Orouji, "Safety analysis of discrete event systems using a simplified Petri net controller," *ISA Transactions*, 53(1), pp. 44-49, 2014.

- A, Dideban., **M, Zareiee**., and H, Alla, "Controller synthesis with highly simplified linear constraints in PN model," *Asian Journal of control*, 15(1), pp. 80-94, 2013.
- P, Nazemzadeh., A, Dideban., and **M, Zareiee**, "Fault modeling in discrete event systems using Petri Nets," *ACM Transactions on Embedded Computing Systems*, 12(1), 2013.

- **M, Zareiee**., A, Dideban., A.A, Orouji., and H.R, Soleymanpour, "Simplification of a Petri Net controller in industrial systems by using an optimization algorithm," *International journal of industrial engineering and production research*, 24(1), 59-70, 2013.

- **M, Zareiee**., A, Dideban., and A.A. Orouji, "Time management approach on a Discrete Event manufacturing System modeled by Petri Net," *International journal of industrial engineering and production research*, 22(2), pp. 115-121, 2011.

Conference Papers:

- **M, Zareiee**, H, Salami, "Inserting PN junction in a power device for achieving improved figure of merit" Ultimate Integration on Silicon (EUROSOI-ULIS), 2017 Joint International EUROSOI Workshop and International Conference on, Granada, Spain, 2018.

- **M, Zareiee**, M, Abtin, "A reliable high performance nano SOI MOSFET by considering quadruple silicon zones" Ultimate Integration on Silicon (EUROSOI-ULIS), 2017 Joint International EUROSOI Workshop and International Conference on, Athens, Greece, 2017.

- **M, Zareiee,** "A New Structure for Controlling Lattice Temperature in Double Gate MOSFET on SOI Technology" *1th National Conference on Development of Civil engineering, Architecture, Electricity, and Mechanical in Iran*, Gorgan, Iran, December, 2014.

- **M, Zareiee., A, Dideban., and A. A, Orouji,** "Designing an optimized controller in industrial systems using some Integer Linear Programming Problems," *9th International Industrial Engineering Conference*, Tehran, Iran, January 20-21, 2013.

- **M, Zareiee**., A, Dideban., A. A, Orouji., and H, Alla, " A Simple Petri Net Controller in Discrete Event Systems," *14th IFAC symposium on Information Control Problems in Manufacturing*, Bucharest, Romania, May 23-25, 2012.

- **M, Zareiee**., and A, Dideban, "Reducing the number of constraints in non safe Petri net," *World Academy of Science, Engineering and Technology*, Dubai, UME, January 2011.

- **M, Zareiee**., A, Dideban., and P. Nazemzadeh, "From forbidden states to linear constraints," *World Academy of Science, Engineering and Technology*, Dubai, UME, January 2011.

- P, Nazemzadeh., A, Dideban., and **M. Zareiee**, "Fail-safe modeling of discrete event systems using Petri nets," *World Academy of Science, Engineering and Technology*, Dubai, UME, January 2011.

- **M, Zareiee**., and A, Dideban, "A new idea for having a simplified controller in Discrete Event Systems," *International Conference on industrial automation*, Sharif University, Tehran, Iran, October 2009.

- A, Dideban., **M, Zareiee**., and H, Alla, "Controller synthesis with very simplified linear constraints in PN model," *2nd IFAC workshop on dependable control of discrete systems*, Bari, Italy, Jun 10-12, 2009.

Sholarships:

✓ 2011-2014: PhD scholarship from Iranian ministry of science, research and technology

Fields of interest:

✓ Semiconductor devices

✓MOSFET transistors

✓Nanotechnology

✓ Discrete Event Systems

✓ Supervisory Control Theory on Discrete Event Systems

✓ Petri net, theory and application

✓ Flexible Manufacturing Systems

Graduate Course:

- Semiconductor devices
- Advance semiconductor devices
- Theory and technology of semiconductor devices fabrication
- Discrete event systems
- Petri net, theory and application
- Fuzzy controller
- Modern control
- Programmable logic controller
- Neural network
- Signal processing
- VLSI

Teaching Experiences:

- Teaching "Basic circuit theory" in School of Engineering, University of Damghan, Damghan, Iran, September 2014- January 2014.

- Teaching "Engineering Mathematics" in School of Engineering, University of Damghan, Damghan, Iran, September 2014- January 2014.
- Teaching "Theory and technology of semiconductor devices fabrication" in Department of Electrical and Computer Engineering, Islamic Azad University of Damghan, Damghan, Iran, February, 2014- June 2014.
- Teaching "Basic circuit theory" in Department of Electrical and Computer Engineering, University of Semnan, Semnan, Iran, September 2009- June 2011.
- Teaching "Basic circuit theory" in Faculty of Engineering, Azad University, Sari branch, Sari, Iran, Autumn 2011.
- Teaching "Electronic I" in Faculty of Engineering, Azad University, Sari branch, Sari, Iran, Autumn 2011.
- Teaching "Industrial Electronic" in Faculty of Engineering, Azad University, Sari branch, Sari, Iran, Autumn 2011.

Computer Skills:

General and Electrical Softwares, Operating Systems: MS Office (Word, Excel, Power point), Windows 98/2000/XP. MATLAB and Simulink, Silvaco (ATLAS), Orcad, PSpice, GLPK, GLPKMEX.

Language Proficiency:

Persian: Mother tongue

English: Advanced

Italian: Elementary

French: Elementary

Hobbies:

Listening to music, Playing Football, Hiking, Reading Novels, Computer and Internet.

References:

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