

Mohsen Shafieirad



Assistant Professor

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EDUCATION

- Jan 2014 **Amirkabir University of Technology**, Tehran, Iran
Ph.D. in **Control Engineering**
Thesis:
Centralized & Distributed Identification of Two-Dimensional Systems
- Jan 2008 **Amirkabir University of Technology**, Tehran, Iran
M.S. in **Control Engineering**
Thesis:
A New Method for Congestion Control & Solving the Stability Problem in Ad-hoc Wireless Networks
- Sep 2005 **Isfahan University of Technology**, Isfahan, Iran
B.S. in **Control Engineering**
Project Title:
DC Motor Speed Control Based on PC-Based Control System using LabVIEW Software and Axiom Data Acquisition Cards (Equipping the Digital Control Lab.)
- Sep 2000 **Imam Bagher High School**, Isfahan, Iran
High School Diploma in **Mathematics**
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PRESENT ACADEMIC POSITION

- Jan 2014- Present **Kashan University, Kashan, Iran**
Assistant Professor
Control Group, Department of Electrical & Computer Engineering
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RESEARCH INTERESTS

- System Identification & Modelling
- Multidimensional (M-D) Systems & M-D Time Series
- Distributed Control & Distributed Identification
- Instrumentation & Automation
- Control of Ad-hoc & Sensor Networks
- Digital Signal Processing

EDUCATIONAL & RESEARCH ACTIVITIES

- Teaching More than 20 Different Courses at B.S., M.S. and Ph.D. Levels
- Author of More than 15 Papers in International & National Journals & Conferences
- Supervisor & Co-Supervisor of 11 Theses at M.S. Level and 1 Thesis at Ph.D. Level
- Supervisor of more than 120 Projects at B.S. Level (control, communication, etc)
- Equipping and Setting up the Instrumentation Lab in Electrical & Computer Eng. Dep., Kashan University.
- Tutoring Several Electrical Eng. Courses & Mathematics (for High School, B.S. & M.S. Students)

TEACHING EXPERIENCE

Jan 2006 Teacher Assistant	Amirkabir University of Technology, Tehran, Iran Department of Electrical & Computer Engineering
Sep 2007- Jan 2011 Teacher Assistant	International Branch of Amirkabir University of Technology, Tehran, Iran Electrical Engineering group
Jan 2009 Instructor	Imam Khomeini International University, Qazvin, Iran Department of Computer Engineering
Jan 2014- present Instructor	Feiz Kashani Institute of Higher Education, Kashan, Iran Department of Electrical & Computer Engineering
Sep 2011 Instructor	Sadra-al-Motoallehin Institute of Higher Education, Tehran, Iran Department of Electrical & Computer Engineering
Sep 2009 Instructor	Payam Golpayegan Institute of Higher Education, Golpayegan, Iran Electrical Engineering Group
Sep 2006 & Jan 2007 Instructor	Natanz Azad University, Natanz, Iran Electrical Engineering Group
Jan 2008- Jan 2013 Instructor	Allameh Rafiee Institute of Higher Education, Qazvin, Iran Electrical Engineering Group

TAUGHT COURSES

- System Identification
- Distributed Control Systems
- Multivariable Control Systems
- Digital Control Systems
- Digital Signal Processing
- Modern Control Systems
- Linear Control Systems
- Instrumentation (Sensors & Actuators)
- Signals & Systems
- Linear Algebra
- Electrical Measurement
- Logic Circuits
- Electrical Circuits 1
- Electrical Circuits 2
- Applied Math 1 & 2
- Engineering Mathematics
- Computer Networks
- Electrical Machine 1
- Pulse Techniques
- Communication Technology
- Analog & Digital Communication
- QBASIC Programming

JOURNAL PUBLICATION

1. **M. Shafieirad**, M. Shafiee and M. Abedi, Recursive Identification of Continuous Two-Dimensional Systems in the Presence of Additive Colored Noise, *IETE Journal of Research*, vol. 60, no. 1, pp. 74-84, 2014.
2. **M. Shafieirad**, M. Shafiee and M. Abedi, Estimation of Space and Time Shifts in Continuous 2-D Systems Using Instrumental Variable, *Electrical and Computer Engineering, Canadian Journal of*, vol. 37. No. 1, pp. 42-47, 2014.
3. M. Farrokhi, **M. Shafieirad** and M. Emamimeybodi, Localized Cross-Layer Algorithm to Minimize Transmission Delay in Wireless Ad-hoc Networks, *Journal of American Science*, vol. 9, no. 4, pp. 218-222, 2013.
4. **M. Shafieirad**, M. Shafiee, A. Mobinidehkordi and H. Shafieirad, Distributed Cross-layer Routing and Congestion Control Algorithm in Mobile Ad-hoc Networks, *Journal of American Science*, vol. 9, no.2, pp. 156-165, 2013.
5. **M. Shafieirad**, M. Shafiee and M. Abedi, Identification of Linear Partial Difference Equations with Constant Coefficients, *Journal of Basic and Applied Scientific Research*, vol. 3, no. 1, pp. 655-660, 2013.
6. M. Akhtari, M. Hamdi Bin Abd Shukor, R. Rahbari Ghahnaviye, M. Amiri Roudan and **M. Shafieirad**, "Fabrication of TiB₂-TiC composites using different amount of carbon in the initial Ti-B-C powder mixture An Axiomatic Approach to Design for Sustainable End-of-life: A Review of Literature", *Applied Mechanics and Materials Journal*, vol. 315, pp. 720-723, 2013, doi:10.4028/www.scientific.net/AMM.315.720.
7. M. Sadeghi, M. Shafiee and **M. Shafieirad**, "A New Approach to Improve Defect Detection of Steel Sheets Using Gabor Wavelet", *International Journal of Information and Electronics Engineering*, vol. 3(5), pp. 541-543, 2013, DOI: 10.7763/IJIEE.2013.V3.374.
8. **M. Shafieirad**, M.shafiee, "Cross-layer Design for Congestion Control Routing and Scheduling in Ad-hoc Wireless Networks with Considering the Electrical Power of nodes", *Iranian Journal of Information and Communication Technology*, vol. 1,no. 1, pp. 71-83, 2008.

CONFERENCE PROCEEDING

1. S. Kashefi and **M. Shafieirad**, "Formation of C4I Network Components Using Distributed Position-Based Formation Control Design", *9th National Conference of Command Control Communication Computer Intelligence*, Tehran, Iran, 2016.
2. M. H. Nasirirad, I. Zamani, **M. Shafieirad** and S. A. Hosseini, "New Road Tunnels Intelligent Control Design to Increase Safety and Reduce Financial Costs and Death Toll with the Case Study of Tunnels in Road 006-85-01-04", *1st National Road ITS Congress*, Tehran, Iran, 2015.
3. M. Sadeghi, M. Shafiee, F. Memarzadeh Zavareh and **M. Shafieirad**, "Utilization of Gabor Wavelet in Image Processing of Steel Surfaces for Detection of Observable Defects", *MASFOR 2012*, Istanbul, Turkey, 2012.
4. M. Akhtari, M. Hamdi Bin Abd Shukor, R. Rahbari Ghahnaviye, M. Amiri Roudan and **M. Shafieirad**, "Fabrication of TiB₂-TiC composites using different amount of carbon in the initial Ti-B-C powder mixture An Axiomatic Approach to Design for Sustainable End-of-life: A Review of Literature.", *ICME2012*, KL, Malaysia, 2012.

5. M. Sadeghi, M. Shafiee and **M. Shafieirad**, “A New Approach to Improve Defect Detection of Steel Sheets Using Gabor Wavelet”, *IEEE 3rd International Conference On Signal Processing Systems (ICSPPS)*, Yantai, China, Aug 2011.
6. **M. shafieirad**, M. Karimi Hosseinabadi and M. Shafiee, “Graphical stability Analysis for two-Dimensional systems”, *ICEE2010*, Isfahan, Iran, 2010. (in Persian)
7. **M. Shafieirad** and M. Shafiee, “A Mobility-aware Cross-layer Congestion Control, Routing and Scheduling Design in Ad-hoc Wireless Networks”, *11th International Conference on Optimization of Electrical and Electronic Equipment*, pp. 191–200, Romania, 2008.

PUBLICATION IN PROGRESS

1. **M. Shafieirad**, A. R. Soleymani, Identification of Two-Dimensional Nonlinear Time Series, Submitted, 2017.
2. **M. Shafieirad**, N. Aghajantabaar, Recursive Parameter Estimation of Two-Dimensional Nonlinear Systems, In Preparation, 2017.
3. **M. Shafieirad**, Z. Hayati, Iterative Parameter Estimation of Two-Dimensional Multivariable Systems, In Preparation, 2017.

HONORS & AWARDS

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| 2016 | Award of Excellence for Teaching in Electrical & Computer Eng. Dep., Kashan University. |
| 2008 | Ranked 1 st in Ph.D. Entrance Exam (Control Eng.), Amirkabir University of Technology. |
| 2005 | Outstanding Undergraduate Student Award in Electrical & Computer Eng. Dep., Isfahan Uni. of Tech. |
| 2001 | 1 st Rank of Pre-University Level in Isfahan Province. |

ADMINISTRATIVE ACTIVITIES & MEMBERSHIPS

- Chair of the Control Group from 2016, Electrical & Computer Eng. Dep., Kashan University
- Chair of the Control, Communication & ICT Groups (for 3 years) in Allameh Rafiee Inst. Of Higher Edu.
- Member, Institute of Electronic and Electrical Engineering (IEEE)
- Member, Iranian Society of Instrument & Control Engineers
- Member, Iranian Association of Information and Communication Technology

LANGUAGES

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| English | Fluent |
| Persian | Native |