

## Curriculum vitae

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**Zahra Baharlouei**

**Assistant Professor**

**Isfahan University of Medical Sciences (MUI),**

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## Education

**2009-2014** PhD in Electrical Engineering–Communications, Isfahan University of Technology (Ranked first).

Advisor: Dr. Massoud Hashemi,

Dissertation: Fair Automatic Demand Side Management in Smart Grid

**2004-2006** MSc in Electrical Engineering – Communications, Isfahan University of Technology.

Advisor: Dr. Massoud Hashemi,

Dissertation: A Low cost VoIP Architecture for PSTN Network

**1999-2003** BSc in Electrical Engineering – Electronics, University of Yazd, (Ranked first).

Dissertation: Implementation of an IRDA Communication Board.

Advisor: Dr Mohammadreza Taban.

## POSITIONS AND EMPLOYMENT

**2021-Present** Assistant Professor, Medical Image and Signal Processing Research Center (MISP), Isfahan University of Medical sciences.

**2014-2021** Assistant Professor, Ragheb Isfahani university, Isfahan, Iran.

**2014-2021** Head of Bioelectric, Computer and Electrical Engineering groups, Ragheb Isfahani University, Isfahan, Iran.

**2017-2018** Post-Doctoral Researcher, Isfahan University of Technology.

**2011-2012** Visiting Researcher, Texas Tech University, Texas, USA.

**2007-2009** Researcher in Information Technology and Communication Center, Isfahan University of Technology.

## **Publications**

### **Journal Papers:**

M. Javidan, M. Yazdchi, **Z. Baharlouei**, A. Mahnam, "Feature and channel selection for designing a regression-based continuous-variable emotion recognition system with two EEG channels", *Biomedical Signal Processing and Control*, VOL 70, 2021.

**Z. Baharlouei**, H. Narimani, and M. Hashemi, "On the Convergence Properties of Autonomous Demand Side Management Algorithms", *IEEE Transactions on Smart Grid*, 2017.

**Z. Baharlouei**, M. Hashemi, "Efficiency-Fairness Trade-off in Autonomous Demand Side Management in Smart Grid", *IEEE Transaction on Smart Grid*, VOL. 5, NO.2, JUNE 2014.

**Z. Baharlouei**, M. Hashemi, H. Narimani, H. Mohsenian-Rad, "Achieving Optimality and Fairness in Autonomous Demand Response: Benchmarks and Billing Mechanisms", *IEEE Transaction on Smart Grid*, VOL. 4, NO. 2, JUNE 2013.

### **Conference Papers:**

F. Haftbaradaran, **Z. Baharlouei**, M. Hashemi, "Strategy- Proofness in Demand Side Management Algorithms", in Proc. of SCIoT, Mashhad, Iran, 2017.

**Z. Baharlouei**, H. Narimani, " Smart Load Management using Direct Load Control for Industrial - Companies ", in Proc. of Technology, Energy and Data on Electrical and Computer Engineering, Kermanshah, Iran, June 2016.

**Z. Baharlouei** and M. Hashemi,"Demand Side Management Challenges in Smart Grid: a Review", in Proc. of SGC, Tehran, Iran, 2013.

**Z. Baharlouei**, H. Narimani, H. Mohsenian-Rad, "Tackling coexistence and fairness challenges in autonomous demand side management," in Proc. of IEEE GLOBECOM, Anaheim, CA, Dec. 2012.

H. Akhavan-Hejazi, **Z. Baharlouei**, and H. Mohsenian-Rad, "Challenges and Opportunities in Large-Scale Deployment of Automated Energy Consumption Scheduling Systems in Smart Grids", in Proc. of the IEEE Conference on Smart Grid Communications (SmartGridComm), Tainan City, Taiwan, 2012.

**Z. Baharlouei** and M. Hashemi, "A low cost VoIP architecture for private networks," in Proc. of IEEE Int. Conference on Future networks (ICFN), Thailand, 2009.

**Z. Baharlouei** and M. Hashemi, "a solution to solving NAT Problem in SIP Signaling without sending RTP Traffic to VoIP Server", ICEE2008, Tehran,Iran.

### **PROFFESIONAL SERVICES:**

- Reviewer in: Journal of Medical Signals & Sensors, IEEE Transactions on Smart Grid  
IEEE Transactions on Power systems, IET Smart Grid, IEEE SmartGridComm Conference,  
Iranian Student Conference on Electrical Engineering.
- Head of Sessions in Iranian Student Conference on Electrical Engineering

### **Honors and Awards:**

- The first rank among PhD students in Communication Engineering, Isfahan University of Technology, Iran, 2014.
- The first rank among BSc students in Electrical Engineering, University of Yazd, Iran, 2003.
- Visiting fellowship from Texas Tech University, Texas, USA, 2011.
- Visiting fellowship from Ministry of Science, Research and Technology (MSRT), Iran, 2011.
- Post-Doctoral fellowships from, INSF, Iran, 2017.

### **Teaching:**

- *In Isfahan University (Biomedical Engineering Group):* Electrical Circuits 1, Standards and Electrical Safety in Hospitals.
- *In Isfahan University of technology (Computer Group):* IT Fundamentals, Computer Networks.
- *In Ragheb Isfahani University:* Stochastic Process, Advanced Computer Networks, Advanced Theory of Communications, Electrical Circuits 1, Standards and Electrical Safety in Hospitals, Electromagnetics, Control Systems.