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afrooz haghbin

Educational Information

Grade	Graduated At	Major	University
BSc	2002	Communications Systems	Sharif University of Technology
MSc	2004	Communications Systems	University of Tehran
Doctoral	2009	Communications Systems	Tarbiat Modares University

Employment Information

Service Location	Position Name	Employment Type	Cooperation Type	Base
Science and Research Branch in Islamic Azad University	- Academic Staff in Electrical and computer Engineering faculty - Communications Group	Certain convertional	Full Time	

Executive Activities

2010- Now: Science and Research Branch in Islamic Azad University, Tehran-Iran

- Academic Staff in Electrical and computer Engineering faculty
- Communications Group

2002- 2009: Pardis Novel Processing Technology, Tehran-Iran

- R&D Engineer
- Technical System Designer
- Technical Consultant

Executive Awards

Honors

The first position in Tarbiat Modares University's PhD Entrance Exam

Patent

Precoding for MIMO MC-CDMA Systems using EM Algorithm, Iranian Intellectual Property Center

Professional Education Subjects

Under Graduate Courses

- Differential Equations
- Electrical Circuits I
- Electrical Circuits I Lab.
- Communications Circuits Lab.
- Digital Communications

Graduate Courses

- Stochastic Processes
- Advanced Theory of Communications
- Wireless Communications Systems
- Detection Theory
- Estimation Theory
- Information Theory
- Channel Coding
- Matrix Calculation
- Research Methodology

Executions And Scientific Activities

Industrial Projects

- Simulation of the DVBS Transceiver Baseband Sections
- Study of E1 Standard for Use in Digital Radio Links
- Simulation of Channel Coding Blocks of DVBT Transmitter
- Study of Different Techniques for Coded Modulation
- Design and Simulation of the Channel Coding Sections of the Physical Layer of a TropoScatter Digital Radio Link
- Study of LMDS and MMDS Standards
- Study of Circuit Emulation Standards for ATMbased PMP Radios
- Design and Simulation of QAM Radio Link Baseband Sections

Academic Projects

- Simulation of the Data Link Layer of Data Networks
- Design and Implementation of a Universal Programmer Using FPGA Chips
  Funding Agency: Research division of Iran Ministry of Industrial Affairs
- Design and Simulation of an Equalizer for MMDS Systems

- Study of Intelligent Channel Allocation Algorithms for Cellular Communications Systems
- A Security Policy for Mobile Wireless Networks
- Low Complexity Blind Adaptive MIMO Channel Shortening

Papers in Conferences

1. A. Haghbin, M. Shiva and S. H. Jamali ,LDPC-Based Space-Time Codes on Multi-Carrier CDMA Systems in Fading Channels ,International Symposium on Telecommunications (IST 2005) ,pp. 573-578 ,Shiraz ,10-12 Sept., 2005.

2. B. Bornoosh, A. Nabavi, M. E. Nick, A. haghbin ,A New Architecture for Reducing Phase Noise of Digital Carrier Recovery Algorithms in High-Order QAM Demodulators ,IEEE International Conf. on Sig. Proc. and Comm., ICSPC2007 ,pp. 668-671 ,Nov. 2007.

3. A. Haghbin, P. Azmi ,Precoding in downlink MC-CDMA systems using EM algorithm ,16th. Iranian Conf. on Electrical Eng. ICEE2008 ,pp. 605-611 ,Tehran ,13-15 May 2008.

4. S. M. Rezvani, S. H. Safavi, R. Sadegh Zadeh, A. Haghbin, R. Davarpanah،Relay Power Minimization Approach based on General-Rank Beamforming for Multi-Antenna Relaying Schemes،۵th International Conference on New Technologies, Mobility and Security (NTMS)،شماره صفحات ۱-۵،May ۲۰۱۲.

5. H. Hosseinzadeh, F. Razzazi, A. Haghbin،An adaptable architecture for blind modulations classification in variable SNR environments،۶th IEEE International Conference Intelligent Systems (IS)،شماره صفحات ۱۶۴-۱۶۹،Sept. ۲۰۱۲.

6. H. Hosseinzadeh, F. Razzazi, A. Haghbin،Tracking performance of online large margin semi-supervised classifiers in automatic modulation classification،Sixth International Symposium on Telecommunications (IST۲۰۱۲)،شماره صفحات ۳۸۷-۳۹۲،Nov. ۲۰۱۲.

7. M. Moshirynia, F. Razzazi, A. Haghbin،speech dereverberation method using adaptive sparse dictionary learning،REVERB Challenge Workshop ۲۰۱۴،شماره صفحات ۱-۷،May ۲۰۱۴.

8. H. Jahanpanah, Afrooz Haghbin،SLM-based dynamic clipping and amplification PAPR reduction schemes for interleaved OFDMA uplink systems،۲۲th. Iranian Conf. on Electrical Eng. ICEE۲۰۱۴،شماره صفحات ۱۴۶۷-۱۵۰۱،Tehran،May ۲۰۱۴.

Papers in Journals

1. A. Haghbin, M. Shiva and S. H. Jamali,Performance analysis of the combination of LDPC and space-time codes on multi-carrier CDMA systems over fading channels,IEE Comm,Vol. 153,No. 4,pp. 525-532,Aug. 2006.

2. A. Haghbin, P. Azmi,Precoding in downlink multi-carrier code division multiple access systems using expectation maximisation algorithm,IET Comm,Vol. 2,No. 10,pp. 1279-1288,Nov. 2008.

3. M. R. Ahadiat, P. Azmi, A. Haghbin,Impulsive noise estimation and suppression in OFDM systems over in-home power line channels,International Journal of Communication Systems,pp. 1099-1131,July 2014,John Wiley and Sons.

4. A. Tajvidy, A. Haghbin, M. A. Pourmina, R. A. Sadeghzadeh,A New Multiple-Input−Multiple-Output Uniform Theory of Diffraction Based Channel Model for Multiple Building Diffraction in Urban Environments,Electromagnetics,Vol. 34,No. 7,pp. 553-567,Oct. 2014,Taylor & Francis.

5. A. Tajvidy, M. Pourmina, M. Naser ,& Moghadasi, A. Haghbin,An Improved UTD Based Model for the Multiple Building Diffraction of Plane Waves in Urban Environments by Using Higher Order Diffraction Coefficients,Wireless Personal Communications,pp. 1-10,April 2013,Springer.

6. SSS. Ghaemmaghami, A. Haghbin, M. Mirmohseni,Cryptanalysis and improvement of two new RFID protocols based on R-RAPSE,Journal of Communications and Information Networks,Vol. 2,No. 3,pp. 107-122,Sept. 2017.

7. M. H. Abbaszadeh, B. H. Khalaj, A. Haghbin,Optimum low complexity filter bank for generalized

orthogonal frequency division multiplexing,EURASIP Journal on Wireless Communications and Networking,Jan. 2018.

8. M. H. Abbaszadeh, B. H. Khalaj, A. Haghbin,Error performance analysis for generalized orthogonal frequency division multiplexing,Computers and Electrical Engineering,No. 61,pp. 139-150,July 2017.

9. S Sajjadi Ghaemmaghami, A Haghbin, M Mirmohseni,Traceability improvements of a new RFID protocol based on EPC C1 G2,The ISC International Journal of Information Security,Vol. 8,No. 2,pp. 105-114,July 2016.

10. MR. Ahadiat, P. Azmi, A. Haghbin,BER Performance Analysis of MIMO-OFDM Communication Systems Using Iterative Technique Over Indoor Power Line Channels in an Impulsive Noise Environment,Information Systems & Telecommunication,Vol. 4,No. 1,pp. 3-41,2016.

11. H. Jahanpanah, A. Haghbin,Low Complexity SLM-Based PTS PAPR Reduction Scheme for OFDMA Uplink Systems,International Journal of Computer Science Issues (IJCSI),Vol. 12,No. 5,pp. 72-77,2015.

12. H. Hosseinzadeh, F. Razzazi, A. Haghbin,A Self Training Approach to Automatic Modulation Classification Based on Semi-supervised Online Passive Aggressive Algorithm,Wireless Personal Communications, springer,pp. 1-17,2015.

13. M. Izanlou, M. A. Pourmina, A. Haghbin,Route optimization and roaming capability based MIPv6 protocol in internet network,International Journal of Computer Science Issues (IJCSI),Vol. 12,No. 4,pp. 28-32,2014.