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Speech Processing I

Place: Room A

Chairs: Farshad Almasgnaj, Amirkabir University of Technology
Ahmad Akbari, Iran University of Science and Technology

A3A.2 Performance Analysis of Linear Feature Transformations in Speech Recognition Systems***%
Seyyed Iman Shirinbayan, *Biomedical Engineering Department, Amirkabir University of Technology (Tehran Polytechnic)*
Farshad Almasganj, Yasser Shekofteh

Radar and Sonar I

Place: Room B

Chairs: Mohammad H. Bastani, Sharif University of Technology
Hossein Khoshbin, Ferdowsi University of Mashhad

A3B.2 Improving Performance of Adaptive Radar Detectors in Nonhomogeneous Environment ***

N. Aghaabdellahian, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
M.Modarres-Hashemi

A3B.3 A Computationally Efficient Direction-of-Arrival Estimation Algorithm, Robust Against Coherent Sources and Small Sample Size *&**

Mostafa Rahmani, *Department of Electrical Engineering Sharif University of Technology, Tehran, Iran*
Mohammad H. Bastani
Sara Shahraeeni, *Department of Electrical Engineering K.N.Toosi University of Technology, Tehran, Iran*

Communication Networks

Place: Room C

Chairs: Hossein Saeedi, Isfahan University of Technology
Saied Hosseini-Khayat, Ferdowsi University of Mashhad

A3C.1 On the Impact of Retrials on Traffic Burstiness
Khosrow Sohraby, Kiseon Kim

A3C.2 A new sensor scheduling method for distributed sensor network
Behrooz Safarinejadian, *Faculty of Electrical and Electronics Engineering, Shiraz University of Technology, Shiraz, Iran*
Abdolah Rahimi, Mohiyeddin Mozaffari

A3C.3 Novel Broadcast Schemes based on Network Codes for Ad Hoc Networks with Noisy Wireless Links
Reza Ebrahimi-Ghiri, *Amirkabir University of Technology*
Alireza Keshavarz-Haddad, *Shiraz University*

A3C.4 Weighted Decision Fusion vs. Counting Rule over Wireless Sensor Networks: A Realistic Comparison
S. Hamed Javadi, *Department of Electrical Engineering Ferdowsi University of Mashhad, Mashhad, Iran*
Ali Peiravi

A3C.5 Fast Index Coding Algorithms for Multi-rate Wireless Communications
Zeinab Sadat Javanmard, *School of Electrical and Computer Engineering of Shiraz University*
Azizolah Jamshidi, Alireza Keshavarz hadad

Machine Vision I

Place: Room D

Chairs: Alireza Seyedin, Ferdowsi University of Mashhad
Amir Hossein Taherinia, Ferdowsi University of Mashhad

A3D.4 **Introducing a New Multimodal Database from Twins' Biometric Traits''()**

Hamid Behravan, *School of Computing University of Eastern Finland*

Karim Faez, *Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*

A3D.5 **Hybrid Method for Hand Gesture Recognition Based on Combination of Haar-Like and HOG Features'') %**

Sudabeh Ghafouri, *University College of Nabi Akram (UCNA), Tabriz, Iran*

Hadi Seyedarabi, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*

Microgrid and Distribution Networks I

Place: Room G

Chairs: Mohammad R. Mozayeni, Razavi Khorasan Power Distribution Co.
Habib Rajabi-Mashhadi, Ferdowsi University of Mashhad

A3G.1 A Dynamic GA-Based Approach for Optimal Short-Term Operation of a Micro-Grid"))

MasoudBashari, *SNL, School of ECE, University of Tehran*
Mahmoud Salamat, MohamadTavakkolinia, AshkanRahimi-Kian

A3G.2 Load Shedding in Microgrids*\$**

NedaHajimohamadi, *University of Kurdistan*
Hassan Bevrani

Semiconductor Devices

Place: Room H

Chairs: Mojtaba Joodaki, Ferdowsi University of Mashhad

A3H.1 Fabrication and Characterization of Polyaniline Based Schottky Diode***

Asgar Hajibadali, *Faculty of Electrical and Computer engineering
Hakim Sabzevari University Sabzevar, Iran*
Majid Baghaei Nejhad

A3H.3 Homo- and Hetero-epitaxial Growth of InSb and AlxIn1-xSb Layers by Molecular Beam Epitaxy**

Mahdi Mohammadkhani, *Department of Electrical Engineering,
Iran University of Science and Technology (IUST), Tehran, Iran*
Sattar Mirzakuchaki
Seyyed Ahmad Mohades Kassai, *Electrical Engineering
Department, California State University, Long Beach, California,
USA*

Optimal Control I

Place: Room J

Chairs: Mojtaba Rohani, Gonabad University
Mohammad B. Naghibi-Sistani, Ferdowsi University of Mashhad

- Invited talk** **Advances In Epidemic Models**
Asier Ibeas, Departament de Telecomunicació i Enginyeria de Sistemes, Escola d'Enginyeria. Universitat Autònoma de Barcelona, Barcelona, Spain
- A3J.1** **A New Control Allocation Methodology Based on the Pseudo Inverse along the Null Space**
Davoud Bozorgnia, K.N.Toosi University of technology, Tehran, Iran
Ali Khaki Sedigh
- A3J.3** **Directional Enlargement of Attraction Domain via HOPE Method**
Navid Khajepour, Young Researchers Club and elites, Mashhad Branch, Islamic Azad University, Mashhad, Iran
Reihane Kardehi Moghaddam, Department of Electrical engineering, Islamic Azad University, Mashhad, Iran

Robotics and Automation I

Place: Room K

Chairs: Hamid Taghirad, K. N. Toosi University of Technology
Kamal Hosseini-Sani, Ferdowsi University of Mashhad

A3K.3 An Efficient Fuzzy Method for Path Planning a Robot in Complex Environments^{*}, ***

Pooya Mobadersany, *Department of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*
Sohrab Khanmohammadi, Sehrane Ghaemi

A3K.4 Designing a Fuzzy Logic Controller for a Quadruiped Robot Using Human Expertise Extraction^{*} - &**

Ramtin Mohammadi Zand, *Artificial Creatures Lab, Electrical Engineering school, Sharif University of Technology, Tehran, Iran*
Saeed Bagheri Shouraki

A3K.5 Fuzzy Logic & Fuzzy Sliding Mode Tracking Control of Non-holonomic Unicycle Wheeled Mobile Robots^{*} - ,**

Afagh Mohagheghi, *School of Electrical Engineering, Shiraz University, Shiraz, Iran*
Faridoon Shabaninia
Maryam Salmirfard, *School of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*

**Poster Session (Electronic Engineering and
Control Engineering)**

Place: Room P

-
- A3P.02 Implementation of an AMR Magnetic Sensor by Means of a Microcontroller to Achieve More Accurate Response**
H. Bolandi, *Iran University of Science & Technology*
N. Riahi, M. Esmailzadeh, M. Abedi and B. Ghorbani
- A3P.05 Delay-Dependent Filtering for Stochastic Nonlinear Genetic Regulatory Networks with Time-Varying Delays and Extrinsic Noises**
N. S. Hosseini, *School of Electrical and Computer Engineering, Tarbiat Modares University*
S. Ozgoli
- A3P.07 Kernel Least Mean Square Algorithm in Control of Nonlinear Systems**
Zinat Mazloomi, *Faculty of Electrical and Robotic Engineering, Shahrood University of Technology, Shahrood*
Heydar Tusian Shandiz
Hossein Faramarzpour, *Department of Mechanical Engineering, Faculty of Engineering, Tarbiat Modares University, Tehran*
- A3P.16 Impact of Carbon Material on RF MEMS Switch**
Yasser Mafinejad, *School of Engineering, Deakin University, Geelong, VIC 3216, Australia*
Abbas Z. Kouzani
Majid Zarghami, *MEMS and RF MEMS Research Group, School of Electrical and Computer Engineering, Sadjad Institute of Higher Education, Mashhad, Iran*
Khalil Mafinezhad
- A3P.17 Effects of single-walled carbon nanotube defects and alignment angles on percolation conductivity in carbon nanotubes thin film**
M. Berahman, *School of Electrical and Computer Eng., Shiraz University, Shiraz, Iran*
M. Taheri, M. H. Sheikhi, A. Zarifkar
- A3P.18 A Numerical Study of a New Four-layer-substrate Closing Device**
Tara afra, *Electrical Engineering Department Islamic Azad University South Tehran Branch*
Seyed Nasrolah Anousheh, *Central Tehran branch Tehran, Iran.*
Ahmad Taghinia
Morteza Fathipour, *Device Modeling and Simulation Lab Tehran university Tehran, Iran*

**Poster Session (Electronic Engineering and
Control Engineering)**

Place: Room P

-
- A3P.19 A Novel 2-Pole MEMS Tunable Bandpass Filter for
Satellite Communication Applications** (Sabbagh et al.)
Sadegh Sabbagh, *Integrated Circuit Laboratory, Ferdowsi
University of Mashhad, Mashhad, Iran*
Amir Akbarzadeh, Ashkan Mofidi.
Khalil Mafinezhad, *Electrical Engineering Department, Ferdowsi
University of Mashhad, Mashhad, Iran*
- A3P.21 Compare Noise Characteristic of DC-HEMT and HEMT** (Sadeghi et al.)
Sonia sadeghi, *Department of Electrical Engineering, Islamic
Azad University, South Tehran Branch, Tehran, Iran*
Mehdi vadi-zadeh, *Department of Electrical Engineering, Islamic
Azad University, Abhar Branch, Abhar, Iran*
Rahim faez, *Sharif University of technology*

**Poter Session (Computer Engineering and
Biomedical Engineering)**

Place: Room Q

-
- A3Q.05 A Novel Adaptive Agent-Based Algorithm to Find Mixed Nash Equilibrium in Static Games**
Fateme Daburi Farimani, *Faculty Of Engineering, Ferdowsi University Of Mashhad, Mashhad, Iran.*
Navid Yektay, Habib Rajabi Mashhadi
- A3Q.07 Exploring the Design Space for Area-Efficient Embedded VLIW Packet Processing Engine**
M. HassanNajafi, *School of Electrical and Computer Engineering, Faculty of Engineering, University of Tehran, Tehran, Iran*
Mostafa E. Salehi
- A3Q.08 Energy-Aware ILP Formulation for Application Mapping on NoC Based MPSoCs**
Elyas Khajekarimi, *Multimedia Processing Laboratory, School of Electrical and Computer Engineering, College of Engineering, University of Tehran*
Mahmoud Reza Hashemi
- A3Q.10 Finding Association Rules in Linked Data, a Centralization Approach**
Reza Ramezani, *Electrical & Computer Engineering Isfahan University of Technology, Iran*
Mohammad Saraee, *School of Computing, Science and Engineering University of Salford, Manchester, UK*
Mohammad Ali Nematbakhsh, *Department of Computer Engineering University of Isfahan, Iran*
- A3Q.11 Genetic-based Feature Selection for Spam Detection**
SeyyedHosseinSeyyediArani, *Islamic Azad University, Qazvin Branch, Qazvin, Iran*
SaeedMozaffari, *Electrical and Computer Engineering Department, Semnan University*
- A3Q.12 A New Hyperspectral Image Classification Approach Using Fractal Dimension of Spectral Response Curve**
S. Abolfazl Hosseini, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Hassan Ghassemian
- A3Q.15 Ensemble-based Classifiers for Cancer Classification Using Human Tumor Microarray Data**
Argin Margoosian, *Dept. of Electrical and Computer Engineering, Yazd University, Yazd, Iran*
Jamshid Abouei

**Poter Session (Computer Engineering and
Biomedical Engineering)**

Place: Room Q

**A3Q.18 Linear Features, Principal Component Analysis, and
Support Vector Machine for Epileptic Seizure Prediction
Progress'''%, '**

Peyvand Ghaderyan, *Computational Neuroscience Laboratory,
Department of Biomedical Engineering, Faculty of Electrical
Engineering, Sahand University of Technology, Tabriz, Iran*
Ataollah Abbasi, Mohammad Hossein Sedaaghi

**A3Q.19 Classification Of Normal and Abnormal Lung Sounds
Using Neural Network and Support Vector Machines'''%, ,**

Samira Abbasi, *Computational Neuroscience Laboratory,
Department of Biomedical Engineering, Faculty of Electrical
Engineering, Sahand University of Technology, Tabriz, Iran*
Roya Derakhshanfar, Ataollah Abbasi, Yashar Sarbaz

Poster Session (Communications)

Place	Room R
<hr/>	
A3R.01	<p>A New Method for Increasing the Lifetime of Network and Reducing Energy Consumption in Wireless Sensor Network % &</p> <p>Jaber Beitollahzadeh, <i>Department of Electrical Engineering Iran University of Science and Technology, Narmak, Tehran, Iran</i> Abdollah Amirkhani Shahraki, Karim Mohammadi</p>
A3R.13	<p>Improving Efficiency in Resource Allocation Of OFDMA Femtocell Networks % +</p> <p>Keyvan Aghababaiyan, <i>Sharif University of Technology, Tehran</i> Mohammad Reza Pakravan</p>

Poster Session (Power Engineering)

Place: Room S

-
- A3S.06 The Effect of Various Types of DG Interconnection Transformer on Ferroresonance**
M. Esmaeili, *Shahed University, Tehran, Iran*
M. Rostami
G.B. Gharehpetian, *Amirkabir University of Technology, Tehran, Iran*
- A3S.14 Optimal design of Inverter Based Distributed Generation in Grid-Connected Mode of Operation Using Genetic**
R. Toorani, *Faculty of Eng., Tafresh University, Tafresh, Iran*
A. Radmehr, S. A. Hosseini
- A3S.15 Optimal Sectionalizing Switches and DG Placement Considering Critical System Condition**
Maisam Nematollahi, *Department of Electrical Najafabad Branch, Islamic Azad*
Mahdi Tadayon, *Behrad Consulting Engineers*

Image Processing and Recognition I

Place: Room A

Chairs: Mohammad. H. Ghasemian, Tarbiat-Modarres University
Morteza Khademi, Ferdowsi University of Mashhad

- A4A.1 Online Signature Verification :
A Persian-Language Specific Approach**
M. E. Yahyatabar, *Electrical and computer Department Babol University of Technology*
Y. Baleghi, M. R. Karami
- A4A.2 Bag of Visual Words Approach for Image Retrieval
Using Color Information**
Naimeh Sadat Mansoori, *Department of Electrical and Computer Engineering Isfahan University of Technology, Isfahan, Iran*
Mansour Nejati, Parvin Razzaghi, Shadrokh Samavi
- A4A.3 Iron Ore Green Pellet Diameter Measurement by Using
of Image Processing Techniques**
Mahdi Heydari, *Digital Signal processing Research Lab, Department of Electrical and Computer Engineering, Isfahan University of Technology*
Rassoul Amirfattahi, Behzad Nazari
Alireza Bastani, *Department of Mechanical Engineering, Isfahan University of Technology*
- A4A.4 Adaptive Expansion of Training Samples for Improving
Hyperspectral Image Classification Performance**
Maryam Imani, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Hassan Ghasseman
- A4A.6 Using GLCM and Gabor Filters for Classification of PAN
Images**
Fardin Mirzapour, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Hassan Ghasseman

Coding

Place: Room B

Chairs: Hengameh Keshavarz, University of Sistan & Baluchestan
Ghosheh Abed Hodtani, Ferdowsi University of Mashhad

- A4B.3 A New Hybrid Decoding Algorithm for LDPC Codes Based on the Improved Variable Multi Weighted Bit-Flipping and BP Algorithms*****& ,
Ehsan Olyaei Torshizi, *Young Researchers Club and Elites, Mashhad Branch, Islamic Azad University, Mashhad, Iran*
Hossein Sharifi, Meysam Seyrafi, *Dept. of Electrical & Computer Engineering, Shahid Beheshti University, Tehran, Iran*
- A4B.5 Attack Signature Matching using Graphics Processors in High-Performance Intrusion Detection Systems*****& (
Payam Mahdinia, *Isfahan University of Technology*
Mehdi Berenjkooab
Hedayat Vatankhah, *Payampardaz Engineering Co*

Wireless Communications I

Place: Room C

Chairs: Masoumeh Nasiri, Sharif University of Technology
Paeiz Azmi, Tarbiat Modares University

- A4C.3 Double-Layered Coordinated Resource Allocation In Multi-Cell MIMO-OFDMA Systems**
Ahmad Kasaeyan, *Department of Electrical and Computer Engineering K.N. Toosi University of technology, Tehran, Iran*
Kamal Mohamed-pour
Seyed Mehdi Hosseini Andargoli, *Department of Electrical and Computer Engineering, Babol Noshirvani University of technology, Babol, Iran*
- A4C.4 A Cyclic Correlation-Based Cooperative Spectrum Sensing Method for OFDM Signals**
Hamed Sadeghi, *Department of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Paeiz Azmi
- A4C.5 The Performance Evaluation of Fountain Codes with Feedback in Cooperative Systems**
Maryam Fazeli, *Electrical and Computer Engineering School, Shiraz University*
Azizollah Jamshidi

Machine Vision II

Place: Room D

Chairs: Hamid Reza Pourreza, Ferdowsi University of Mashhad
Amir Taherinia, Ferdowsi University of Mashhad

A4D.1 Image Noise Reduction by Low Complexity Hardware Median Filter*&***

Hossein Zamani HosseinAbadi, *Department of Electrical and Computer Engineering Isfahan University of Technology Isfahan, Iran*
Shadrokh Samavi, Nader Karimi

A4D.3 3D Face Reconstruction Using Modified Shadow Moiré*& %**

Ali Jamali Avilaq, *Electrical Department, AmirKabir University of Technology*
Amir Hossein Rezaie

A4D.4 Document Image Dewarping using Kinect Depth Sensor*& ***

Amir Reza Ghods, *Electrical and Computer Engineering Department, Semnan University, Semnan, Iran*
Saeed Mozaffari, Farhad Ahmadpanahi

A4D.5 Robust Pedestrian Detection Using Low Level and High Level Features*& &**

Fariba Takarli, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*
Ali Aghagolzadeh, *Faculty of Electrical and Computer Engineering, Babol University of Technology*
Hadi Seyedarabi, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*

Biomedical Signal Processing I

Place: Room E

Chairs: Hossein Esteky, Univ. of Shaheed Beheshti Medical Sciences
Sahar Moghimi, Ferdowsi University of Mashhad

A4E.1 Differentiation between Migraine without Aura and Chronic Tension-type Headache Based on HOS Analysis of sEMG Signals

Fariba Biyouki, *Dept. of Biomedical Engineering, Mashhad Branch, Islamic Azad University, Iran*
Saeed Rahati, Katri Laimi, Reza Boostani, Ali Shoeibi

A4E.3 A single channel-single trial P300 detection algorithm

Neda Haghighatpanah, *Digital signal processing research lab, department of Elec. & Comp. Eng. Isfahan University of technology Isfahan, Iran*
Rassoul Amirfattahi
Vahid Abootalebi, *Elec. & Comp. Eng. Department, Yazd University, Yazd, Iran*
Behzad Nazari, *Digital signal processing research lab, department of Elec. & Comp. Eng. Isfahan University of technology Isfahan, Iran*

Power Systems Study I

Place: Room F

Chairs: Pedjman Pourmohamadiyan, Ferdowsi University of Mashhad
Ali Peiravi, Ferdowsi University of Mashhad

**A4F.1 Generation and Transmission Expansion Planning With
Considering Natural Gas Network**

Fatemeh Barati, *Iran University of Science and Technology*

Abolfazl Nateghi, *TarbiatModarres University*

Hossein Seifi

Mohammad SadeghSepasian, *Power and Water University of
Technology*

**A4F.5 PMU-Based Linear and Nonlinear Black-Box Modelling
of Power Systems**

B. Zaker, *Electrical Engineering Department, Amirkabir
University of Technology*

G. B. Gharehpetian, *Iran Grid Secure Operation Research
Institute, Amirkabir University of Technology, Tehran, Iran*

M. Mirsalim, *Electrical Engineering Department, Amirkabir
University of Technology*

N. Moaddabi

Power Electronics and Drives I

Room: Room G

Chairs: Javad Shokrollahi, Amirkabir University of Technology
Hossein Abootorabi Zarchi, Ferdowsi University of Mashhad

A4G.2 Design and Construction of a New SRM Sensorless Driver''' &&

M.Rafiee, *Young Researchers Club, West Tehran Branch, Islamic Azad University, Tehran, IRAN*

E.Afjei, *Department of Electrical Eng., Faculty of Electrical & Computer Eng., Shahid Beheshti University G.C., Tehran, IRAN*
A.Siadatai

A4G.5 Torque Ripple Minimization of Switched Reluctance Motor Using Modified Torque Sharing Function''' &+

MiladDowlathshahi, *Electrical and Computer Engineering Department, Isfahan University of Technology(IUT), Isfahan, Iran*
SeyedMorteza SaghaeianNejad

Jin-Who Ahn, *Department of Mechatronics Engineering, Kyungshung University, Busan, Korea*

Photocells and Sensors

Room: Room H

Chair: Ebrahim Hosseini, Ferdowsi University of Mashhad

A4H.2 Design of High Performance CdS/CdTe Solar Cells by Optimization of Step Doping and Thickness of the CdTe Absorption Layer

Saeed Khosroabadi, *Department of Electrical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran*
Seyyed-Hossein Keshmiri

A4H.3 CMOS Magnetic Sensor with MAGFET

Nasrin Rezaei, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
Rasoul Dehghani, Armin Jalili, Ali Mosahebfard

A4H.4 Specific Fast Response CH₄ Gas Sensor Based on Metal Oxide, Tungsten Carbide /SnO₂ Core-Shell Modified Interdigitated Electrode (&

S. Nikmanesh, *School of Electrical and Computer engineering, Shiraz University, Iran*
M. H. Sheikhi, A. Zarifkar
M. M. Doroodmand, *Department of Chemistry, College of Sciences, Shiraz University, Iran*
A. Zahabi, *Department of Electrical engineering, Islamic Azad University, Bushehr Branch, Iran*

Robust Control I

Room: Room J

Chairs: Rajab Asgharian, Ferdowsi University of Mashhad
Nasser Pariz, Ferdowsi University of Mashhad

Invited Talk **System of Systems** B#5

Rajab Asgharian, Ferdowsi University of Mashhad

A4J.1 **A New Approach for Designing Robust Adaptive Fuzzy Sliding Mode Controller** (-

S. Barghandan, *Department of Electrical Engineering, Science and Research Branch, Islamic Azad University, Tehran, Iran*
M.A. Badamchizade, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*

A4J.2 **Sliding Mode Control of Switch Reluctance Motor without Chattering**))

Ali Karami-Mollaei, *Department of Electrical and Robotic Engineering, Shahrood University of Technology Shahrood, Iran*

A4J.4 **Robust fault detection via unknown input observer based on cubature Kalman filter** * \$

Jafar Zarei, *Faculty of Electrical and Electronics Engineering, Shiraz University of Technology*
Ehsan Shokri

A4J.5 **An optimal sliding mode control based on immune-wavelet algorithm for underwater robotic manipulator** * *

Hossein Nejatbakhsh Esfahani, *The Center of Excellence for Mechatronics, School of Engineering Emerging Technologies, University of Tabriz, Tabriz, Iran*
Vahid Azinmirad, Ali Eslami, Saeid Asadi

Fields and Waves (Antennas)

Room: Room K

Chairs: Rashid Mirzavand, Amirkabir University of Technology
Mohammad Hassan Neshati, Ferdowsi University of Mashhad

- A4K.1 A Novel Miniaturized Multilayer E-shaped Patch Antenna Using Giuseppe Peano Fractal Geometry on its Edges for WLAN Dual-Band Applications**^{***} +&
Homayoon Oraizi, *Department of Electrical Engineering, Iran University of Science and Technology, Tehran, Iran*
Mojtaba Bahramgiri, Shahram Hedayati
- A4K.2 Effect of Parasitic Elements on Spherical Probe-Fed Antennas**^{***} +*
Javad Soleiman Meiguni, *Faculty of Electrical and Computer Engineering, K. N. Toosi University of Technology*
Manoochehr Kamyab, Ahmad Hosseinbeig
- A4K.3 Gain Enhancement of Waveguide Slot Antennas Using Quasi-TEM Mode in Rectangular Waveguide**^{***}, \$
Sajjad Mohammadian, *Tarbiat Modares University*
Keyvan Forooraghi, Zahra Atlasbaf

Image Processing and Recognition II

Room: Room A

Chairs: Rasoul Amirfattahi, Isfahan University of Technology
Farokh Torkaman Azar, Shaid Beheshti University

Invited Talk Mohammad Hassan Ghasemian, Tarbiat Modares University

B1A.2 Remote Sensing Image Fusion Using Improved ATW-PCA Transform , (Morteza Ghahremani, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University Tehran, Iran*
Hassan Ghassemian

B1A.3 A Noise-Robust SVD-MLBased Classification Method for Multi-Spectral Remote Sensing Images - \$ (Amin Zehtabian, *Department of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Hassan Ghassemian

B1A.4 Outdoor Fire Detection Based on Color and Motion Characteristics - * (Maedeh Jamali, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
Shadrokh Samavi, Mansour Nejati, Behzad Mirmahboub

Signal Processing I

Room: Room B

Chairs: Hamadreza Amindavar, Amirkabir University of Technology
Saeid Mashhadi, Sharif University of Technology

B1B.5 **An Energy-Efficient SD-based LZW Algorithm in Dynamic Wireless Sensor Networks** (\$%
Hamidreza Asgarizadeh, *Department of Electrical and Computer Engineering, Yazd University, Yazd, Iran*
Jamshid Abouei

Information and Communication Security I

Room: Room C

Chairs: Mahmoud Salmasizadeh, Sharif University of Technology
Abbas Ghaemi, Ferdowsi University of Mashhad

- B1C.1** **An Efficient Quantum Secret Sharing using Secure Direct Communication**
Mahsa Khorrampanah, *Electrical Engineering Department, Imam Reza International University, Mashhad, Iran*
Monireh Houshmand
- B1C.2** **An Attack on a Dynamic Multi-Secret Sharing Scheme And Enhancing Its Security**
M.H. Tadayon, *Cyber Space Research Institute*
H. Khanmohammadi, *Mathematical Science Dep., Tarbiat Modares University*
S. Arabi
- B1C.5** **Security Framework for Designing SIP Scanner**
Mitra Alidoosti, *School of Computer Engineering, Iran University of Science and Technology, Tehran, Iran*
Hassan Asgharian, Ahmad Akbari

Radar and Sonar II

Room: Room E

Chairs: Mahmoud Modarres Hashemi, Isfahan University of Technology
Hossein Khoshbin, Ferdowsi University of Mashhad

- B1E.3** **Direct Data Domain (D3) Approach for Space-Time Adaptive Processing in Colocated MIMO Radar***** &&
Moein Ahmadi, *K.N. Toosi University of Technology*
Kamal Mohamedpour, Fatemeh Keshvari
- B1E.4** **A New Approach for Sea Target Detection in Satellite Based Passive Radar***** &*
Marziye Golabi, *Electronics and communications department, Shiraz University Shiraz, Iran*
Abbas Sheikhi, Mehrzad Biguesh
- B1E.5** **Implementation of Sequential Algorithm in Batch Processing for Clutter and Direct Signal Cancellation in Passive Bistatic Radars***** (' %
Farzad Ansari, *Department of Electrical and Computer Engineering Yazd University*
Mohammad Reza Taban

Power Electronics and Drives

Room: Room F

Chairs: Hossein Abootorabi Zarchi, Ferdowsi University of Mashhad
Mohammad Monfared, Ferdowsi University of Mashhad

B1F.2 Application of Trans Z-source Inverter in Photovoltaic Systems

Mehran Moslehi Bajestan
Mahdi Shahparasti, Davood Arab Khaburi

B1F.4 Selective Harmonic Mitigation PWM Control Strategy for Three-Phase Four-Leg Voltage Source Inverters

Amene Zabihian, *Dept. Of Computer and Electrical Engineering, Tarbiat Modares University*
Ali Yazdian Varjani
Hoda Ghoreishy, *Babol Noshirvani University of Technology*

Electrical Machines and Transformers I

Room: Room G

Chairs: Abolfazl Vahedi, Iran University of Science and Technology
Jafar Ebadi, Ferdowsi University of Mashhad

B1G.1 **Axial Flux Permanent Magnet Motor Modeling using Magnetic Equivalent Circuit** (,
Karim Abbaszadeh, *Electrical and Computer Engineering Dep.*
K.N. Toosi University of Technology, Tehran, Iran
Seyede Sara Maroufian

B1G.6 **Reduction of Vibration and Acoustic Noise in the Switched Reluctance Motor by Using New Improved Stator yoke shape** () (
Kamran Masoudi, *University of Tabriz, Iran*
Mohammad Reza Feyzi, Amir Masoudi

Modeling of Semiconductor Devices

Room: Room H

Chairs: Mojtaba Joodaki, Ferdowsi University of Mashhad
Ebrahim Hosseini, Ferdowsi University of Mashhad

- B1H.4** **Effect of Stone-Wales Defects on Electronic Properties of Armchair Graphene Nanoribbons**^{***()},
Mohsen Samadi, *Department of Electrical Engineering, Sharif University of Technology, Tehran, Iran*
Rahim Faez
- B1H.5** **Spin Effect on Band Structure of Zigzag and Armchair Graphene Nanoribbons with Stone-Wales defect**^{***()} * &
R. Faez, *Sharif University of Technology*
S. Barami
- B1H.6** **Analysis and Optimization of Tunnel FET with Band Gap Engineering**^{***()} **
M. R. Salehi, *Shiraz university of technology*
E. Abiri, *B. Dorostkar*
S. E. Hosseini, *Ferdowsi university of Mashhad*

Robotic and Automation II

Room: Room J

Chairs: Heydar Toosian Shandiz, Shahrood University
Hamed Molla Ahmadian, Khorasan Institute of Higher Education

B1J.2 Adaptive Task-Space Control of Rigid-Link Robots with Uncertain Kinematics and Dynamics and without Acceleration Measurements'''(+\$

Mahboubeh Ahmadipour, *Department of Power and Control Engineering, Shiraz University*
Alireza Khayatian, Maryam Dehghani

B1J.4 Design of Mechanical Structure and Tracking Control System for 5 DOF Surgical Robot'''(+)

S.M.Sajadi, *School of Engineering-Emerging Technologies, University of Tabriz, Tabriz, Iran*
S.H.Mahdioun, A.A.Ghavifekr

B1J.6 LTV-MPC Based Path Planning of an Autonomous Vehicle Via Convex Optimization'''(, %

Mohsen Ahmadi Mousavi, *Faculty of New Sciences and Technologies, University of Tehran*
Zainabolkoda Heshmati
Behzad Moshiri, *Faculty of Electrical and Computer Engineering, University of Tehran*

Nonlinear Systems and Chaos I

Room: Room K

Chairs: Mohammad Reza Jahed, Iran University of Science and Technology
Mohammad B. Naghibi Sistani, Ferdowsi University of Mashhad

B1K.1 Robust Impulsive Synchronization of Lorenz Chaotic Dynamical System with Capability of Unknown Bounded Disturbance Rejection

Monireh Mirnezami, *Faculty of Graduate Studies, Department of Electrical Engineering, South of Tehran Branch, Islamic Azad University, Tehran, Iran*

Hamid Khaloozadeh, *Industrial Control Center of Excellence, K.N.Toosi University of Technology, Tehran, Iran*

B1K.3 Synchronization of Chaotic Systems with Unknown Time Delay by Sliding Mode Observer Approach and Unknown Delay Identification

ShirinBeheshti, *Islamic Azad University, South Tehran Branch, Iran*

Hamid Khaloozadeh, *Industrial Control Center of Excellence, K.N. Toosi University of Technology, Tehran, Iran*

B1K.4 Synchronization of uncertain chaotic systems based on optimal and variable structure control

Armin Iromloozadeh, *Department of Control Engineering, Islamic Azad University, Meymeh Branch Isfahan, Iran*

M. Ataei, *Department of Electrical Engineering, Faculty of Engineering, University of Isfahan, Isfahan, Iran*

F. Khalili, *Department of Electrical Engineering, Naghshe jahan University, Baharestan, Iran*

B1K.5 Identification and Adaptive Position Control of Two Mass Systems with Unknown Backlash

Mirhamed Mola, *School of Electrical and Computer Engineering, Shiraz University*

Alireza Khayatani, Maryam Dehghani

B1K.6 Robust Observer-based Controller Design for T-S Systems with Nonlinear Consequent Parts

Hoda Moodi, *Department of Electrical Engineering, Iran University of Science and Technology, Tehran, Iran*

Mohammad Farrokhi

**Poster Session (Electronic Engineering and
Control Engineering)**

Place: Room P

-
- B1P.01 Adaptive Control of Wheeled Inverted Pendulum Mobile Robot using Fuzzy Disturbance Observer**
Amirkhosro Vosughi, *Electrical Engineering Department, Iran University of Science & Technology*
Alireza Mohammad Shahri
- B1P.03 Adaptive Stochastic Sliding Mode Ship Autopilot for Way-Point Tracking**
M. Asadi, *School of Electrical & Computer engineering, Shahrood University of Technology Shahrood, Iran*
H. Gholizade Narm
- B1P.04 Design of Reliable Adaptive Controller for Uncertain Linear Systems with H₂ Performance**
Anahita Ghasemi, *Departement of Electrical Engineering, Mashhad branch, Islamic Azad University, Mashhad, Iran*
Saeed Toosizadeh, Rajab Asgharianghanyazdi
Ali Abootalebi, *Departement of Electrical Engineering, Naghshejahan Institute of Higher Education, Isfahan*
Mohamad Mesbah, *Departement of Electrical Engineering, Behbahan branch, Islamic Azad University, Behbahan, Iran*
- B1P.06 Optimum Synthesis of Sensory Layout in Active Suspension based on Linear Observer**
Ali Reza Ramezany, *Electrical Department University of Science and Technology Tehran, Iran*
M., Ehsan Fathi
S. M. Mehdi Ansarey M, *Vehicle Dynamics & Homologation ITRAC Co (SAPCO Test Centre) Tehran, Iran*
- B1P.10 Network-Based Robust H₂ Stabilization of Uncertain Systems**
Arash Farnam, *Electrical Engineering Department Sahand, University of Technology Tabriz, Iran*
Reza Mahboobi Esfanjani

**Poster Session (Computer Engineering and
Biomedical Engineering)**

Place: Room Q

-
- B1Q.04 Three Camera-Based Human Tracking Using weighted Color and Cellular LBP histograms in a Particle Filter Framework** (+
S. Rahimi, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*
A. Aghagolzadeh, H. Seyedarabi
- B1Q.08 New Approach for Human Detection in Images Using Histograms of Oriented Gradients**)' '
Narges Ghaedi Bardeh, *Isfahan University of Technology*
Maziar Palhang
- B1Q.10 Point Cloud Registration Using Maximally Stable Shape Index Regions**) +
MohammadMahdi Manafzade, *Ferdowsi University of Mashhad, Mashhad, Iran*
Ahad Harati
- B1Q.12 YAPPTCHA: Yet Another Picture Promoted CAPTCHA with Spam Stopping, Image Labeling and SIFT Accomplishment**) *'
M. Babaei, *Tehran University*
M.B. Ghaznavi Ghouschi, *Shahed University*
A. Noori, *Qazvin Islamic Azad University*
- B1Q.14 ECG Power line Interference Removal Using Combination of FFT and Adaptive Non-linear Noise Estimator**) + %
Fatemeh Shirbani, *School of Electrical and computer Eng., College of Engineering, University of Tehran, Tehran, Iran*
Seyed Kamaledin Setarehdan, *Control and Intelligent Processing Center of Excellence, School of Electrical and Computer Eng., College of Engineering, University of Tehran, Tehran, Iran.*

Poster Session (Communications)

Room: **Room R**

**B1R.05 A New Colour Image Watermarking Scheme Using
Cellular Automata Transform and Schur Decomposition^{***}) +***
Nazila Panahi, *Urmia University, Urmia, Iran*
Mehdi Amirani, Sohrab Behnia, Peyman Ayubi

Poster Session (Power Engineering)

Room: Room S

-
- B1S.04** **Design, Analysis and Controlling of a Novel 4 by 4 Multilayer SRA** , %
A.Siadatan, Department of Electrical Engineering, West Tehran Branch, Islamic Azad University, Tehran, IRAN
M.Rafiee, Young Researchers Club, West Tehran Branch, Islamic Azad University, Tehran, IRAN
E.Afjei, Department of Electrical Eng., Faculty of Electrical & Computer Eng., Shahid Beheshti University G.C., Tehran, IRAN
- B1S.05** **A Novel Brushless Synchro: Operation Principle and Experimental Resultg** , *
Davood Pazouki, Iran University of Science and Technology, Tehran, Iran
Mahdi Ghafarzadeh, Rezvan Abedini, Aliakbar Damaki Aliabad, Ali Kamali
- B1S.06** **Sensitive Analysis between Different Types of One Layer Switched Reluctance Motor** - &
R. Moeini, Department of Electrical Engineering, West Tehran Branch, Islamic Azad University, Tehran, IRAN
E.Afjei, A.Siadatan
- B1S.08** **PM Demagnetization Detection in Axial Flux Permanent Magnet Motor using ARX Model** - , ~~AAA~~
KarimAbbaszadeh, Electrical and Computer Engineering Dept.K.N. Toosi University of Technology,Tehran, Iran
Seyede Sara Maroufian
- B1S.16** **Design of the Forced Water Cooling System for a Claw Pole Transverse Flux Permanent Magnet Synchronous Motor** * \$'
Ahmad Darabi, Faculty of Electrical and Robotic Engineering, Shahrood University of Technology, Shahrood, Iran
Ali Sarreshtehdari, Faculty of Mechanical Engineering Shahrood University of Technology, Shahrood, Iran
Hamed Tahanian, Faculty of Electrical and Robotic Engineering, Shahrood University of Technology, Shahrood, Iran
- B1S.17** **Exact Determination of a Winding Disk Radial Deformation Location Considering Tank Effect Using an Analytical Method** * \$,
H. RahbariMagham, Electrical Engineering Department, Amirkabir University of Technology, Tehran, Iran
M.A. Hejazi, H. Karami Porzani, M.S. Naderi, G.B. Gharehpetian

Image Processing and Recognition III

Room: Room A

Chairs: Hassan Aghaeinia, Amirkabir University of Technology
Alireza Seyedin, Ferdowsi University of Mashhad

B2A.3 A New Robust Semi-Blind Digital Image Watermarking Approach Based on LWT-SVD and Fractal images*%**

Kayvan Ghaderi, *Department of Computer Engineering, University of Kurdistan*
Fardin. Akhlaghian, Parham Moradi

B2A.4 Robust Image Watermarking In 3-D Space Using Wavelet Coefficients*%**

Mohammad Hamghalam, *Department of Electrical Engineering, Iran University of Science and Technology (IUST)*
Sattar Mirzakouchaki, Mohammad Ali Akhaee

B2A.6 A Novel Approach of Secure Image Based Steganography by Using Eigenvalue and Eigenvector Principles*&**

Seyed Abbas Hosseini-pour, *Shahid Bahonar University of Kerman*
Mohadeseh Soleimanpour, Hussein Nezam-abadi

Wireless Communications II

Room: Room B

Chairs: Mohammad Javad Omid, Isfahan University of Technology
Babak Khalaj, Sharif University of Technology

Invited Talk Masoumeh Nasiri, Sharif University of Technology

B2B.1 A Random Matrix Approach to Wide Band Spectrum Sensing: Unknown Noise Variance Case* &**
Sajjad Imani, *ECE. Dept., University of Tehran, Tehran, Iran*
Amin Banitalebi-Dehkordi, *ECE. Dept., University of British Columbia, Vancouver, BC, Canada*
Mehdi Cheraghi, *ECE. Dept., Shahed University, Tehran, Iran*

B2B.2 Joint Power and Subcarrier Allocation in OFDMA-Based Cooperative Cognitive Networks** (**
Yoonas Hashemi, *Department of Electrical and Computer Engineering University of Tehran, Tehran, Iran*
Ali Olfat

B2B.3 Likelihood-Ratio-Based Cooperative Spectrum Sensing for Autocorrelation-Assisted Detection of OFDM Signals in Cognitive Radio** (\$**
Hamid Arezumand, *Department of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Paeiz Azmi, Hamed Sadeghi

Field and Waves II (Microwaves)

Room **Room C**

Chairs Abdolali Abdipour, Amirkabir University of Technology
Mehrdad Shokooh-Saremi, Ferdowsi University of Mashhad

Invited Talk **Terahertz Technology**
Mahmoud Shahabadi, University of Tehran

B2C.1 **Fully Distributed Analysis of an Improved Single Pole Single Throw Traveling Wave Switches**
Hamed Khoshniyat, *Electrical Engineering Department, Amirkabir University of Technology, Tehran, Iran*
Gholamreza Moradi, Abdolali Abdipour
Kambiz Afrooz, *Electrical Engineering Department, Shahid Bahonar University of Kerman, Iran*

B2C.2 **A Novel Composite Left-Right Handed Structure for Rectangular Waveguide with Its Multi Bandstop and Bandpass Applications**
S. Saravi, *School of Photonics, Friedrich-Schiller-Universität Jena, Germany*
S. A. Hassani Gnagaraj, *Department of Electrical Engineering, Iran University of Science and Technology, Tehran*
M. Tayarani

B2C.3 **Design of a Novel Dual Mode Filter Based on HMSIW Structure Using Mode Shifting Technique**
Morteza Rezaee, *Electrical Engineering Department Ferdowsi University, Mashhad, Iran*
Amir Reza Attari

Artificial Intelligence II

Room: Room D

Chairs: Mahmood Amintoosi, Hakim Sabzevari University
Mohammad-R. Akbarzadeh-T., Ferdowsi University of Mashhad

B2D.2 N-gram Adaptation Using Dirichlet Class Language Model Based on Part-of-Speech for Speech Recognition**),**

Ali Hatami, *Computer Engineering Department, Iran University of Science and Technology, Tehran, Iran*

Ahmad Akbari, *Computer Engineering Department, Iran University of Science and Technology, Tehran, Iran*

Babak Nasersharif, *Electrical and Computer Engineering Department, K. N. Toosi University of Technology, Tehran, Iran*

B2D.4 Motion Planning of a Spherical Robot Using eXtended Classifier Systems*****

M. J. Esfandyari, *School of Mechanical Engineering, University of Tehran, Tehran, Iran*

M. Roozegar, *Center for Mechatronics and Automation, School of Mechanical Engineering, University of Tehran Tehran, Iran*

M. Shariat Panahi, *School of Mechanical Engineering, University of Tehran, Tehran, Iran*

M. Mahjoob, *Center for Mechatronics and Automation, School of Mechanical Engineering, University of Tehran Tehran, Iran*

Biomedical Signal Processing II

Room: Room E

Chairs: Ali Motie Nasrabadi, Shahed University
Mohammad Ali Khalilzadeh, Islamic Azad University of Mashhad

B2E.3 Automated Spectral Analysis for Pediatric Cardiac Auscultation* -**

Azra Rasouli Kenari, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Dr. M. Hassan Ghassemian

B2E.5 How Health Related to Quality of Sleep and Breathing: How to Associate Sleep Disorder Breathing and Extracted Respiratory Signal* +{**

Sepideh Tork, *Department of Biomedical Engineering, University of Isfahan, Isfahan, IR. Iran*
MohammadReza Yazdchi, Arezoo Karimizadeh

B2E.6 Hierarchical Region Based ML EEG Source Reconstruction: A Subspace Projection Approach*, \$**

Foroogh Fathnia, *Electrical Engineering Department, Ferdowsi University of Mashhad*
Hossein Zamiri-Jafarian

Distributed Generation II

Room: Room F

Chairs: Mohammad Taghi Bathaee, K. N. Toosi University of Technology
Alireza Fereidunian, K. N. Toosi University of Technology

B2F.3 Nonlinear Control of a Satellite Power System Based on the Sliding Mode Control, (

Mohammad Rasool Mojallizadeh, *Department of Electrical Engineering Islamic Azad University, Najafabad Branch Najafabad, Isfahan, Iran*

Bahram Karimi, *Department of Electrical Engineering Malek-Ashtar University of Technology Shahinshahr, Isfahan, Iran*

B2F.4 Wind Turbine Power Tracking Using Multiple Model Predictive Control - \$

Salehe Afsharian, *Department of Electrical Engineering, Ferdowsi University of Mashhad Ali Karimpour*

B2F.5 Optimization-based Home Energy Management in the Presence of Solar Energy and Storage - *

Sattar Mohammadi, *Electrical Engineering Department, Sharif University of Technology*
Mahmoud Momtazpour, Esmail Sanaei

B2F.6 Optimal Placement of Switching Devices in Distribution Networks Using Multi-objective Genetic Algorithm NSGAI + \$ &

Mohammad Reza Mazidi, *Tehran University*
Mohsen Aghazadeh, *Iran University of Science and Technology*
Yousef Ahmadi Teshnizi, *Islamic Azad University of Shahrekord*
Erfan Mohagheghi, *University of Greenwich*

Power System Study II

Room **Room G**

Chairs: Maryam Dehghani, Shiraz University
Habib Rajabi-Mashhadi, Ferdowsi University of Mashhad

B2G.1 **A Way to Evaluate Segmentation: An Examination of AC
Line Elimination in a Parallel AC/DC Transmission
System** +\$,
Reza Gholizadeh Roshanagh, *Department of Electrical
Engineering Azarbaijan Shahid Madani University, Tabriz, Iran*
Sajad Najafi Ravadanegh

Analog Techniques

Room: Room H

Chairs: Mehdi Fakhraie, University of Tehran
 Mohammad Maymandi-Nejad, Ferdowsi University of Mashhad

- B2H.1 A Current-Mode Membership Function Generator With Continuous Slop Tunability and Low Power Consumption**
 Naser Beyraghi, *Microelectronic Research Laboratory, University of Urmia Urmia, Iran*
 Abdollah Khoei, Khayrollah Hadidi
- B2H.2 A Modified Structure for High-Speed and Low-Overshoot Comparator-Based Switched-Capacitor Integrator**
 Ali Roozbehani, *VLSI Lab, Shahid Beheshti University, G.C., Tehran, Iran*
 Omid Hashemipour
- B2H.3 Optimization of Inference Engine in CMOS Analog Fuzzy Logic Controllers**
 Mahmoud Mahdipour Pirbazari, *Microelectronics Research Laboratory, Urmia University, Urmia, Iran*
 Abdollah Khoei, Khayrollah Hadidi
- B2H.4 Wide-Range Programmable Duty Cycle Corrector (DCC)**
 Hadiseh Babazadeh, *Microelectronic Research Laboratory Urmia University*
 Arash Esmaili, Khayrollah Hadidi, Abdollah Khoei
- B2H.5 Hardware Implementation of Interval Type-2 Fuzzy Logic Controller**
 Alireza Mesri, *Microelectronics Research Laboratory, Urmia University, Urmia, Iran*
 Abdollah Khoei, Khayrollah Hadidi
- B2H.6 A Modified Adaptive Exponential Integrate and Fire neuron Model for Circuit Implementation of Spiking Neural Networks**
 Shaghayegh Gomar, *Faculty of Engineering, Razi University, Kermanshah, Iran*
 Arash Ahmadi, Elahe Eskandari
- B2H.7 A Novel CMOS Image Sensor for High Speed Parallel Integral Image Computation**
 Yusof Doost Hoseini, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
 Sayed Masoud Sayedi, Saeid Sadri

Soft Computing and Intelligent Control I

Room: Room J

Chairs: Behzad Moshiri, University of Tehran
Ali Vahidian, Ferdowsi University of Mashhad

Invited Talk Behzad Moshiri, University of Tehran

B2J.1 Type-2 Fuzzy Neural Network Controller for a class of Nonlinear Systems %
Hossein Moradi Farahani, *Department of Electrical and Computer Engineering Isfahan University of Technology (IUT)*
Javad Askari, MaryamZekri, Marzieh Kamali

B2J.2 Designing Interval Type-2 Fuzzy Controllers by Sarsa Learning +
Nooshin Nasri Mohajeri, *Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad Bagher Naghibi Sistani

MEMS I

Room: Room K

Chairs: Khalil Mafinejad, Ferdowsi University of Mashhad
Hossein Keshmiri, Ferdowsi University of Mashhad

B2K.4 Design and Simulation of High Isolation RF MEMS Shunt Capacitor Switch for C-K Band*+***

Yasser Mafinejad, *School of Engineering , Deakin University, Geelong, Australia*

Abbas Z. Kouzani

Majid Zarghami, *MEMS and RF MEMS Research Group, School of Electrical and Computer Engineering, Sadjad Institute of Higher Education, Mashhad, Iran*

B2K.5 A Novel Design of MEMS Gyroscope with Control Capability*+*,**

Zeinab Yousefi, *Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran*

Zahra Deyhim

Esmail Najafi Aghdam, *Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran*

Habib Badri Ghavifekr

Wireless Communications III

Room: Room A

Chairs: Vahid Tabataba Vakili, Iran University of Science and Technology
Ghosheh Abed Hodtani, Ferdowsi University of Mashhad

B3A.2 An Enhanced MMSE based Pre-processing Scheme for Time Reversal MIMO-UWB Systems in an Imperfect CS

Sajjad Alizadeh, *Electrical and Electronic Engineering University Complex (EEEUC) Malek Ashtar University of Technology (MUT) Tehran, Iran*
Hossein Khaleghi Bizaki

B3A.3 Compressed Receiver for Ultra-Wideband Communication

Abbas Akbarpour-Kasgari, *School of Electrical and Computer Engineering, University of Tehran, Tehran, Iran*
Said Nader Esfahani

B3A.5 Joint Multiuser And Inter-symbol Interference Suppression In CDMA Systems Using Particle Swarm Optimization Algorithms

Atefeh Haji Jamali Arani, *TarbiatModares University, Tehran, Iran*
Paeiz Azmi

Photonics and Optoelectronics I

Room: Room B

Chairs: Mahmoud Shahabadi, University of Tehran
Mehrdad Shokooh Saremi, Ferdowsi University of Mashhad

B3B.1 **Performance considerations of a photonic crystal based on graphene multilayer system*****+, '
Zahra Arefinia, Research Institute for Applied Physics and Astronomy, Tabriz University
Asghar Asgari, Research Institute for Applied Physics and Astronomy, Tabriz University, School of Electrical, Electronic and Computer Engineering, The University of Western Australia, Crawley, Australia

Field and Waves II (Antennas)

Room: Room C

Chairs: Mahmoud Kamarei, University of Tehran
Homayoon Oraizi, Iran University of Science and Technology

B3C.2 A Compact Directional Super-wideband Antenn
Hossein Mehrpour Bernety, *Babol Noshirvani University of Technology*
Bijan Zakeri, Reza Gholami

B3C.3 SIW Cavity-Backed Slot Antennas with Improved Gain
Hamideh Dashti, *Electrical Department, Ferdowsi University of Mashhad, Mashhad, Iran*
Mahmoud Shahabadi, *School of ECE, College of Eng. University of Tehran, Tehran, Iran*
Mohammad H. Neshati, *Electrical Department Ferdowsi University of Mashhad, Mashhad, Iran*

B3C.4 Compact, Dualband T-Junction Zeroth-Order Resonant Antenna With Extended Bandwidth
Navid Amani, *Faculty of Electrical and Computer Engineering K. N. Toosi University of Technology*
Manouchehr Kamyab, Amir Jafargholi

Algorithms and Data Processing

Room: Room D

Chairs: Saied Abrishami, Ferdowsi University of Mashhad
Hadi Sadoughi Yazdi, Ferdowsi University of Mashhad

B3D.1 Applying Read-Only Optimization in Commit Processing of Pure Main Memory Database Systems

Sadegh Firoozandeh, *Pooya Co.Inc, Tehran, Iran*

B3D.5 Sentiment Classification in Persian: Introducing a Mutual Information-based Method for Feature Selection

Ayoub Bagheri, *Intelligent Database, Data Mining and Bioinformatics Lab, Electrical and Computer Engineering Department, Isfahan University of Technology, Isfahan, Iran*
Mohamad Saraei, *School of Computing, Science and Engineering, University of Salford, Manchester, UK*
Franciska de Jong, *University of Twente, Human Media Interaction, The Netherlands.*

Speech Processing II

Room: Room E

Chairs: Hamid Reza Abutalebi, Yazd University
Abbas Ebrahimi-Moghaddam, Ferdowsi University of Mashhad

- B3E.2** **Localization of Multiple Simultaneous Speakers by Combining the Information from Different Subbands**, \$,
Ali Dehghan Firoozabadi, *Speech Processing Research Lab (SPRL), Electrical and Computer Eng. Dept., Yazd University, Yazd, Iran*
Hamid Reza Abutalebi
- B3E.3** **Robust Voice Activity Detection Using Feature Combination**, %
Sahar Khaksar Haghani, *Speech Processing Research Laboratory, Electrical Engineering Department, Amirkabir University of Technology, Tehran, Iran*
Seyed Mohammad Ahadi
- B3E.4** **Realtime Stereo Localization of a Moving Speaker Using Filtered Spectrogram Correlation Map algorithm**, %
Azadeh Vakili Qahani, *Department of Electrical Engineering, K.N. Toosi University of Technology*
Amir Mousavinia

Microgrid and Distribution Networks II

Room: Room F

Chairs: Mahmud Fotuhi Firuzabad, Sharif University of Technology
Mohammad Hossein Javidi, Ferdowsi University of Mashhad

Invited Talk Gevorg B. Gharehpetian, Amirkabir University of Technology

**B3F.1 Optimal Directional Relay Placement in Microgrids
Considering Coordination Constraintg'', &)**

Bahare Salehi, *Department of Electrical and Computer
Engineering Isfahan University of Technology*

Mahdi Tadayon, *Distribution NetworkDepartmentBehrad
Consulting Engineers*

Hamid Reza Karshenas, *Department of Electrical and
ComputerEngineering Isfahan University of Technology*

Restructured Power Systems I

Room: Room G

Chairs: Masoud Rashidinejad, Shahid Bahonar University of Kerman
Majid Oloomi, Ferdowsi University of Mashhad

B3G.2 **Generating Unit Maintenance Scheduling in Power Market Based on Fairness and Competition**, ' %
Hessam Golmohamadi, *Department of Electrical Engineering The University of Birjand*
Maryam Ramezani

B3G.3 **IGDT Based Risk-constrained Strategic Bidding of GenCos Considering Bilateral Contracts**, ' +
Mostafa Kazemi, *Department of Electrical Engineering Sharif University of Technology*
Behnam Mohammadi-Ivatloo, *Faculty of Electrical and Computer Engineering University of Tabriz*
Mehdi Ehsan, *Department of Electrical Engineering, Sharif University of Technology*

MEMS II

Room: Room H

Chairs: Khalil Mafinejad, Ferdowsi University of Mashhad
Hossein Keshmiri, Ferdowsi University of Mashhad

- B3H.1** **A New Method for Eliminating Cross Axis Sensitivity in Two Axis Capacitive Micromachined Accelerometers**, (' Hadi Tavakoli, *Microelectronics Research Laboratory, Urmia University*
Ebrahim Abbaspour Sani
- B3H.2** **Study of a High Sensitivity Transverse Comb-Drive As Small Force Sensor**, (, S. A. Ahmadi, *Electrical and Computer Engineering, University of Sistan and Baluchestan Zahedan, Iran*
T. Fanaei S., S. M. Barakati

System Identification

Room: Room J

Chairs: Maryam Dehghani, Shiraz University
Alireza Khayatian, Shiraz University

- B3J.2 Nonlinear System Identification Based on a Novel Adaptive Fuzzy Wavelet Neural Network**,)'
Maryam Salimifard, *School of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*
Ali Akbar Safavi, *Department of Power and Control, School of Electrical and Computer Engineering, Shiraz University, Shiraz, Iran*
- B3J.3 Detection of Natural Gas Pipeline Defects using Magnetic Flux Leakage Measurements**,),
Mojtaba Rostami Kandroodi, *Control and Intelligent Processing Center of Excellence, School of ECE, College of Engineering, University of Tehran, Iran*
Babak Nadjar Araabi, Majid Nili Ahmadabadi, Farshad Shirani
Maisam Mansoob Bassiri, *Segal Pardazesh Engineering Co., Tehran, Iran*
- B3J.4 Simultaneous Fault Detection and Control for Switched Linear Systems: An LMI Approach**, *(
Shahram Hajshirmohamadi, *Isfahan University of Technology*
Javad Askari
Saeed Hoseinnia, *Islamic Azad University, Najafabad Branch*

VLSI

Room: Room K

Chairs: Mehdi Fakhraie, University of Tehran
Reza Lotfi, Ferdowsi University of Mashhad

B3K.1 Synthesis of Parallel Hierarchical Finite State Machines^{*}, +\$**

Valery Sklyarov, *Department of Electronics, Telecommunications
and Informatics/IEETA, University of Aveiro, Portugal*
Iouliia Skliarova

**B3K.3 A Waveform Soft Model Extraction Method to Track
Wire Behavior in Nano Scale Technologies^{***}, +,**

Atefesadat Seyedolhosseini, *Advanced VLSI Lab., School of ECE,
College of Eng., University of Tehran, Tehran, Iran*
Nasser Masoumi

**Poster Session (Electronic Engineering and
Control Engineering)**

Room: Room P

-
- B3P.01 A Model-Based Fuzzy Controller Using the Parallel Distributed Compensation Method for Quadrotor Attitude Stabilization** , , &
Soroush Sheikhpour, *Artificial Creature Lab, Electrical Engineering School, Sharif University of Technology, Tehran Iran*
Saeed Bagheri Shouraki
- B3P.03 An Adaptive Linear Neural Network for Identification of Oscillatory Damped Signals** , , ,
Z. Nouri-Sedeh, *Dept. of Electrical and Computer Engineering Isfahan University of Technology, Isfahan, Iran*
M. Mojiri, M. Zekri
- B3P.05 Optimization of Model Predictive Controller Parameters Based on Imperialist Competitive Algorithm** , - '
M.Abedi, *Department of Electrical Engineering Mashhad Branch, Islamic Azad University Mashhad, Iran*
M.Yaghoobi
- B3P.07 Constraint Control Allocation Using Differential Evolution for Over-actuated Geostationary Communications Satellite** , - ,
Amirreza Kosari, *University of Tehran*
Samane Kaviri, Behzad Moshiri, Mahdi Fakoor
- B3P.09 Modeling the Effect of Process Variations on the Delay and Power of the Digital Circuit Using Fast Simulators** - '\$'
Amirali Amirsoleimani, *Electrical Engineering Department, Razi University*
H. Soleimani, A. Ahmadi
M. Bavandpour, *Faculty of Electrical Engineering, Sharif University of Technology, Tehran, Iran*
M. Zwolinski, *School of Electronic and Computer Science, University of Southampton, Southampton, UK*
- B3P.10 A New Design Technique for Low Power Subthreshold Logic Circuits with Enhanced Robustness Against Process Variations** - '\$-'
Sareh Majidi, *Ferdowsi university of Mashhad, Iran*
Mohammad Maymandi-nejad
- B3P.14 Reliability Analysis of Logic Circuits Using Binary Probabilistic Transfer Matrix** - '%'
Hamed Zandevakili, *Department of Electrical Engineering, Shahid Bahonar University, Kerman, Iran*
Ali Mahani, Mohsen Saneei

**Poster Session (Electronic Engineering and
Control Engineering)**

Room: Room P

-
- B3P.15** **Design of high-Throughput QC-LDPC Decoder for
WiMAX**
Tahere Heidari, *Tarbiat Modares University*
Abumoslem Jannesari, *Tarbiat Modares University*
- B3P.17** **A New Frequency Comparator for Using in Fast Charge
Pump PLLs**
Vahideh Sadat Sadeghi, *Babol University of Technology, Babol*
Hossein Miar Naimi

**Poster Session (Computer Engineering and
Biomedical Engineering)**

Room: Room Q

-
- B3Q.01 Deployment of gLite Middleware: An E-Science Grid Infrastructure***- &***
Mohammad Hasanzadeh, *Computer Engineering and Information Technology Department Amirkabir University of Technology (Tehran Polytechnic) Tehran, Iran*
Mohammad Reza Meybodi
- B3Q.03 Overload control in Asterisk Proxy: implementation and Evaluation***- ' &**
Ahmadreza Montazerolghaem, *Department of Computer Engineering Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad Hossien Yaghmaee moghaddam
- B3Q.04 Improving Performance of SIP Signaling During Overload Using Capabilities of Connection-Oriented Transport Protocol***- ' ,**
Maryam Baghdadi, *School of Computer Engineering, Iran University of Science and Technology, Tehran, Iran*
Seyed Vahid Azhari
- B3Q.06 An Energy-Efficient Clustering Algorithm for Large Scale Wireless Sensor Networks***- ((**
Maryam Soleimani, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Iran*
Amirali Sharifian, Ali Fanian
- B3Q.07 Replication based on Objects Iteration Frequency and Load Using a Genetic Algorithm under a Content Distribution Network***-) \$**
Hamid Jabraili, *Computer Department, Islamic Azad University, Shabestar Branch, Shabestar, Iran*
Saleh Yousefi, Behzad Boukani
Meysam Bayani Rad, *Computer Department, Urmia University, Urmia, Iran*
- B3Q.08 Robust and Energy Efficient Clock Synchronization Scheme for Wireless Sensor Networks***-) ***
Maryam Sadat Rasouli Danesh, *Faculty of Electrical and Computer Engineering K. N. Toosi university of technology Tehran, Iran*
Abdorasoul Ghasemi
- B3Q.10 Active Queue Management for Self-Similar Network Traffic***- * %**
Farnaz Amin, *Electrical Engineering and computer science Department, Yazd University, Iran*
Kiarash Mizanain, Ghasem Mirjalily

**Poster Session (Computer Engineering and
Biomedical Engineering)**

Room: Room Q

-
- B3Q.11 Power-aware QoS Routing for Wireless
Multimedia Sensor Networks***** **
Babak Namazi, *Department of Electrical Engineering,
Amirkabir university of technology, Tehran, Iran*
Karim Faez
- B3Q.14 Vector-Valued Image Segmentation using Region based
active contour*****B#5
Zahra Shahvaran, *Shiraz University of Technology, Shiraz, Iran*
Kamran Kazemi, Mohammad Sadegh Helfroush, Narjes
Golshaeyan
- B3Q.16 Symmetric brain atlas template for newborns brain
asymmetry studies***** +%
Negar Noorizadeh, *Shiraz University of Technology, Shiraz, Iran*
Kamran Kazemi, *Department Shiraz University of Technology,
Shiraz, Iran*
Reinhard Grebe, *UFR of Medicine, University of Picardie Jules
Verne, France*
Mohammad Sadegh Helfroush, *Shiraz University of Technology,
Shiraz, Iran*
Mahdi Mahmoudzadeh, *EFSN Pediatrique, CHU Amiens, France*
Narjes Golshaeyan, *University of Applied Science and
Technology, Helal Ahmar Shiraz, Iran*
Fabrice Wallois, *EFSN Pediatrique, CHU Amiens, France*

Poster Session (Communications)

Room: Room R

- B3R.02 Face Recognition Using Global and Local Gabor Features**
Sara Nazari, *Faculty of Electrical and Computer Engineering
Islamic Azad University, Qazvin Branch, Qazvin, Iran*
Mohammad-Shahram Moin
- B3R.06 An Efficient Algorithm for Lip Detection in Color Face Images**
Behrooz Zali-Vargahan, *Department of Electrical Engineering,
Urmia University, Urmia, Iran*
Hashem Kalbkhani, Mahrokh G. Shayesteh
- B3R.07 Robust Head Pose Estimation Using Contourlet Transform**
Mohammad Tofighi, *Department of Electrical Engineering,
Urmia University, Urmia, Iran*
Hashem Kalbkhani, Mahrokh G. Shayesteh, Mehdi Ghasemzadeh
- B3R.08 Enhanced Strategy to Sample Newborn Targets within Nonthresholded Measurements**
Meysam R. Danaee, *Department of Electrical Engineering, Sharif
University of Technology, Tehran, Iran*
Fereidoon Behnia
- B3R.10 Sector Beamforming with Uniform Circular Array Antennas Using Phase Mode Transformation**
Mohsen Askari, *School of Electrical and Computer Engineering
Shiraz University, Iran*
Mahmood Karimi
- B3R.11 Auxiliary Unscented Particle Cardinalized Probability Hypothesis Density**
Meysam R. Danaee, *Department of Electrical Engineering, Sharif
University of Technology, Tehran, Iran*
Fereidoon Behnia
- B3R.12 3D Models' Retrieval System Design Based on Poisson's Histogram of 2D Selective Views**
Mohammad Ramezani, *Computer Vision Res. Lab, Electrical
Engineering Faculty, Sahand University of Technology, Tabriz*
Hossein Ebrahimnezhad

Poster Session (Power Engineering)

Rooms: Room S

- B3S.02 Induction Motor Stator Fault Detection via Fuzzy Logic**
Hamid Fekri Azgomi, *Iran University of Science and Technology (IUST)*
Javad Poshtan
- B3S.03 Comparison of Saturated Parameters of Three-Layer Interior Permanent Magnet Synchronous Machine Obtained from Lumped Parameter Model and Finite Element Method**
H. Mirahki, *Isfahan University of Technology*
M. Moallem
- B3S.04 Review of Induction Motor Testing and Monitoring Methods for Inter-turn Stator Winding Faults**
M. Eftekhari, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
M. Moallem, S. Sadri, A. Shojaei
- B3S.05 A Mathematical Dynamic Model for Static and Dynamic Behaviours of MEMS-based AC Voltage Reference Source**
Ali Mehrnezhad, *EED, Amirkabir University of Technology*
Amir A. Suratgar, Saeed Khatami, Sima Sobhiyeh
- B3S.13 Three Dimensional Finite Element Modeling of a Current Transformer and Analyzing its Operation under Normal Condition**
H. Givi, *Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*
J. S. Moghani, M. A. Vakilian Zand, M. A. Noroozi
- B3S.21 Probabilistic Modelling of Electric Vehicles' Parking Lots Charging Demand**
M. H. Amini, *Department of Electrical and Computer Engineering, Tarbiat Modares University*
M. Parsa Moghaddam
- B3S.22 A Comprehensive Load Reduction Demand Response Program for Spinning Reserve Provision**
E. Heydarian-Forushani, *Dept. of Electrical and Computer Engineering, Tarbiat Modares University (TMU), Tehran, Iran*
M. Parsa Moghaddam, M. K. Sheikh-El-Eslami

Signal Processing II

Room: Room A

Chairs: Mohammad H. Kahaei, Iran University of Science and Technology
Mohammad Molavi, Ferdowsi University of Mashhad

- B4A.1 Adaptive Distributed Incremental Networks Based on the Selective Partial Update Affine Projection Algorithm*****\$(*
Ali-Reza Danaee, *Faculty of Electrical and Computer Engineering, Shahid Rajaei Teacher Training University, Tehran, Iran*
Mohammad Shams Esfand Abadi
- B4A.2 A New Variable Step-Size Normalized Subband Adaptive Filter Algorithm Employing Dynamic Selection of Subband Filter*****\$) \$
Mohammad Shams Esfand Abadi, *Faculty of Electrical and Computer Engineering, Shahid Rajaei Teacher Training University, Tehran, Iran*
Mohammad Saeed Shafiee
- B4A.3 Computation Saving in a SRP-PHAT Sound Source Locator Variant*****\$))
M. Seifipour, *Elec. Eng. Department, Shahed University*
S. Seyedtabaiee
- B4A.5 Kernel Recursive Least Squares-Type Neuron for Nonlinear Equalization*****\$* \$
Mohammed Naseri Tehrani, *Ferdowsi university*
Majid Shakhshi, Hossein khoshbin

Optical Communication I

Room: Room B

Chairs: Nosratollah Geranpayeh, K. N. Toosi University of Technology
Mohammad Reza Pakravan, Sharif University of Technology

B4B.1 Design and Simulation of a ROADM-based DWDM Network*\$****

Vahid Abedifar, *Cyber Space Research Institute*
Sadeqh Abbasi Shahkooh, Ali Emami, Ali Poureslami,
S. A. Ayoughi

B4B.2 An Optimized Virtual Network Mapping Using PSO in Cloud Computing*\$+\$**

Vahid Abedifar, *ECE Department, Shahid Beheshti University, Tehran, Iran*
Mohammad Eshghi
Seyedali Mirjalili, *School of Information and Communication Technology, Griffith University, Brisbane, Australia*
S. Mohammad Mirjalili, *ECE Department, Shahid Beheshti University, Tehran, Iran*

B4B.3 Performance of Back-propagation and Self Organizing Map Neural Equalizers for Asymmetrically Clipped Optical OFDM*\$+***

Farideh Javidi, *Engineering Department, Ferdowsi university of Mashhad, Mashhad, Iran*
Hossein Khoshbin

B4B.4 Adaptive Level Control to improve QoS in OCDMA Local Area Networks*\$, &**

Mohammad Hadi, *Electrical Engineering Department, Sharif University of Technology*
Mohammad Reza Pakravan

Fields and Waves IV (Dielectric Antennas)

Room: Room C

Chairs: Jalil Rashed-Mohassel, University of Tehran
Amir Reza Attari, Ferdowsi University of Mashhad

- B4C.1 Numerical Investigation of a Broadband Dielectric Resonator Antenna Backed by SIW Cavity** +
Hamideh Dashti, *Electrical Department, Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad H. Neshati
- B4C.2 A Low Sidelobe and Wideband Series-Fed Dielectric Resonator Antenna Array** - %
M. Ranjbar Nikkhah, *Center of Excellence on Applied Electromagnetic, School of ECE, University of Tehran, Tehran, Iran*
J. Rashed-Mohassel
A. A. Kishk, *Department of Electrical Engineering, University of Concordia, Montreal, Canada*
- B4C.3 Mutual Coupling Reduction in Microstrip Patch Antenna Arrays by using Planar EBG Structure in X Band** - (%
Seyed Mohammad Emamimeybodi, *Department of Electrical Engineering, Amirkabir University of Technology*
Homayoon Oraizi, *Department of Electrical Engineering, Iran University of Science and Technology*
- B4C.4 Design of a compact dual feed Dielectric Resonator Antenna with Aperture Coupling** - -
S. shad, M.N. Azarmanesh
- B4C.5 Design Investigation of a Dual Band, Dual Polarized Probe-fed DR Antenna feeding by SIW Cavity** %\$'
Alireza Moosaei, *Electrical Department, Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad H. Neshati, Morteza Rezaee

Computer Networks I

Room: Room D

Chairs: Mohammad Hossein Yaghmaee, Ferdowsi University of Mashhad
Amin Hosseini Seno, Ferdowsi University of Mashhad

B4D.3 A Congestion-Game Based Scheme for Handoff Management in Cognitive Radio Networks
Hosein Aghajani, *Faculty of Electrical and Computer Engineering*
K. N. Toosi University of Technology Tehran, Iran
Abdorasoul Ghasemi

Biomedical Image Processing I

Room: Room E

Chairs: Hassan Ghasemian, Tarbiat Modares University
Mohammad Sadegh Helfroush, Shiraz University

Invited Talk Hamid Abrishami Moghaddam, K. N. Toosi University of Technology

B4E.4 Segmentation of Carotid Arteries in Computed Tomography Angiography Images Using Fast Marching and Graph Cut Methods
H.R. Hemmati, *Department of Radiation Medicine Engineering, Shahid Beheshti University, Tehran, Iran*
A.R. Kamali-asl, A.R. Talebpour, M. Alizadeh, S. Shirani

Electrical Machines and Transformers II

Room: Room F

Chairs: Davood Arab Khaburi, Iran University of Science and Technology
Jafar Ebadi, Ferdowsi University of Mashhad

Invited Talk Hossein Mohseni, University of Tehran

B4F.2 Experimental Evaluation on the dielectric breakdown voltage of fresh and used Transformer Oil mixed with Titanium dioxide nanoparticles in the Gilan Electrical distribution company
A Fallah-Shojaie, *Department of chemistry, University of Guilan*
A Tavakoli, *Department of electrical engineering, Lahijan Branch, Islamic Azad University*
M Ghomashpasand, *University of Guilan*
S Hoseinzadeh, *Gilan Electrical distribution company*

Demand Management

Room: Room G

Chairs: Mostafa Rajabi, Khorasan Regional Electric Company
Majid Oloomi, Ferdowsi University of Mashhad

- B4G.1 Welfare Maximization under Real-time Pricing in Smart Grid Using PSO Algorithm**
Gh. Asadi, *Dept. of Electrical and Electronic Engineering Shiraz University of Technology*
M. Gitizadeh, A. Roosta
- B4G.2 Optimal Planning of Energy Resources in a small energy system under the Smart Home Concept**
Mohammad Hassan Amirioun, *Center of Excellence for Power System Automation and Operation, Department of Electrical Engineering, Iran University of Science and Technology*
Ahad Kazemi

Logic and SRAM

Room: Room H

Chairs: Mohammad Sharifkhani, Sharif University of Technology
Ali Peiravi, Ferdowsi University of Mashhad

- B4H.2** **A Low-Power Area-Efficient Dynamic Circuit Using Conditionally Charging Pattern with Embedded Latching Capability**
Mahshid Nasserian, *Electrical Engineering, Department Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammd Maymandi-Nejad
- B4H.5** **A 32kb 90nm 10T-cell Sub-threshold SRAM with Improved Read and Write SNM**
Sina Hassanzadeh, *Department of Electrical Engineering, Sharif University of Technology, Tehran, Iran*
Milad Zamani, Khosrow Hajsadeghi
- B4H.6** **A New Sub-Threshold 7T SRAM Cell Design with Capability of Bit-Interleaving in 90 nm CMOS**
Ghasem Pasandi, *Silicon Intelligence & VLSI Signal Processing Lab, University of Tehran, Tehran, Iran*
Seyed Mehdi Fakhraie

Robotics and Automation III

Room: Room J

Chairs: Massoud Shafiee, Amirkabir University of Technology
Javad Askari, Isfahan University of Technology

Invited Talk Massoud Shafiee, Amirkabir University of Technology

B4J.1 Modelling and Analysis of Quadraped Walking Robot Using Singular System Theory
Maryam Sadati, *Amirkabir University of Technology, Tehran, Iran*
Mohammad Hosseinzadeh, Masoud Shafiee

B4J.2 Interval-Analysis-Based Determination of the ingularity-free Workspace of Gough-Stewart Parallel Robots
M. Hadi Farzaneh Kaloorazi
Mehdi Tale Masouleh
St'ephane Caro

B4J.3 Static Modeling of Continuum Robots by Circular Elements
Mohammad Dehghani, *Center of Excellence in Robotics and Control*
S. Ali A. Moosavian

Radio Frequency Circuits I

Room: Room K

Chairs: Ali Fotowat-Ahmady, Sharif University of Technology
Rasoul Dehghani, Isfahan University of Technology

B4K.2 A Ring-Type ILFD with Locking-Range of 91% for Divide-by-4 and 40% for Divide-by-8 with Quadrature Outputs

Najmeh Hajamini, *Integrated Circuits Design Laboratory, Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*
Mohammad Yavari

B4K.3 A Low Jitter 110MHz 16-Phase Delay Locked Loop Based on a Simple and Sensitive Phase Detector

Sarang Kazeminia, *Microelectronics Research Laboratory, Urmia University, Urmia, Iran*
Khayrollah Hadidi, Abdollah Khoei

B4K.6 A Precise $\Delta\Sigma$ -based Digitally Controlled Oscillator (DCO) for All-Digital PLL

Samira Jafarzade, *Tarbiat Modares University*
Abumoslem Jannesari

Image Processing and Recognition IV

Room: Room A

Chairs: Saeid Saryazdi, Shahid Bahonar University of Kerman
Shadrokh Samavi, Isfahan University of Technology

C1A.2 Accelerating Image Resizing by Multiple Seam Removal and Path Update

Ali Ajorian, *Department of Electrical and Computer Engineering
Isfahan University of Technology Isfahan, Iran*
Shadrokh Samavi, Majid Mohrekesh

C1A.6 A Novel Video Error Concealment Technique Using Modified Boundary Matching Algorithm With Correlation Function

Ali Radmehr, *Faculty of electrical and computer engineering
K.N.Toosi university of technology, Teahran, Iran*
Abdorasoul Ghasemi

Wireless Communications IV

Room: Room B

Chairs: Abbas Mohammadi, Amirkabir University of Technology
Hossein Zamiri, Ferdowsi University of Mashhad

- C1B.1 Optimal Beamforming in Wireless Multiuser MIMO-relay Networks** -
Mohammad-Hossein Golbon-Haghighi, *Pasargad Higher Education Institute, Shiraz, Iran*
Mojtaba Shirazi, Behrad Mahboobi, Mehrdad Ardebilipour
- C1B.2 Beamforming Algorithms for Multiuser MIMO Uplink Systems: Parallel and Serial Approaches** (-
S.M.J. Asgari Tabatabaee, *Electrical Engineering Department, Ferdowsi University of Mashhad*
H. Zamiri-Jafarian
- C1B.3 Particle Swarm Optimization for Energy Efficient Antenna Selection in MIMO Broadcasting Channel** -
Mahnaz Sinaie, *Communication system Lab, TarbiatModares University (TMU), Tehran, Iran*
Masumeh Sadat Tohidi, Paeiz Azmi
- C1B.4 An Adaptive Cooperative Strategy for Underlay MIMO Cognitive Radio Networks** -
Mehdi Ghamari Adian, *Electrical Engineering Department Amirkabir University of Technology, Tehran, Iran*
Hassan Aghaeinia
- C1B.6 Circuit Power Considered Energy Efficiency In Decode-and-Forward Relaying** -
Mohammad Hossein Chinaei, *ECE Departement, Isfahan University of Technology, Iran*
Mohammad Javad Omid, Jafar Kazemi

Radar and Sonar III

Room: Room C

Chairs: Mohammad Farzan Sabahi, University of Isfahan
Hossein Khoshbin, Ferdowsi University of Mashhad

**C1C.1 Underwater Acoustic Sensor Network Localization
Using Four Directional Beams**

Rahman Zandi, *University of Tehran, Tehran, Iran*

Mahmoud Kamarei, *University of Tehran, Tehran, Iran*

Hadi Amiri, *Engineering Research Institute, Tehran, Iran*

**C1C.2 Underwater Acoustic Sensor Network Localization
Using Received Signals Power**

Rahman Zandi, *University of Tehran, Tehran, Iran*

Mahmoud Kamarei, *University of Tehran, Tehran, Iran*

Hadi Amiri, *Engineering Research Institute, Tehran, Iran*

Computer Architecture

Room: Room D

Chairs: Hamid Noori, Ferdowsi University of Mashhad
Yasser Sedaghat, Ferdowsi University of Mashhad

C1D.2 An Efficient Implementation of Hamiltonian Path Based Multicast Routing for 3D Interconnection Networks*&&***

Sanaz Rahimi Moosavi, *Department of Information Technology, University of Turku, Turku, Finland*
Amir-Mohammad Rahmani, *Department of Information Technology, University of Turku, Turku, Finland and, Turku Centre for Computer Science (TUCS), Turku, Finland*
Pasi Liljeberg, *Department of Information Technology, University of Turku, Turku, Finland*
Juha Plosila, *Department of Information Technology, University of Turku, Turku, Finland*
Hannu Tenhunen, *Department of Information Technology, University of Turku, Turku, Finland*

C1D.3 A Conceptual Custom Super-Computer Design for Real-Time Simulation of Human Brain*& &**

Nasim Farahini, *Information and Communication Technology Royal Institute of Technology Stockholm, Sweden*
Ahmed Hemani

C1D.5 Hierarchical Defect Tolerance Technique for NRAM Repairing with Range Matching CAM*&' ,**

Hossein Pourmeidani, *Computer Engineering Department Azad University of Arak Isfahan, Iran*
Mehdi Habibi, *Electrical Engineering Department Isfahan University Isfahan, Iran*

Biomedical Image Processing II

Room: Room E

Chairs: H. Abrishami Moghaddam, K. N. Toosi University of Technology
Mahdi Saadatmand, Ferdowsi University of Mashhad

- C1E.4 High Resolution Tagging Pattern in the Polar Coordinate System; A Reconstruction Based Approach** (Ali Aghaeifar, *Iran University of Science and Technology (IUST), Tehran, Iran* & Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran
Nafiseh Babaei, *Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran*
Abbas N. Moghaddam, *David Geffen School of Medicine at UCLA, Los Angeles, California, USA*
Ahmad Ayatollahi, *Iran University of Science and Technology*
- C1E.5 Investigation of the Effects of Transducer Parameters on Adaptive MV Beamformers In Medical Ultrasound Applications** (Seyed Amin Izadi Avanji, *Ultrasonic Lab, Department of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Ali Mahlooji Far, Babak Mohammadzadeh Asl
- C1E.6 Ultrasound Image Segmentation by Using a FIR Neural Network** (Nima Torbati, *Department of Electrical Engineering Iran University of Science and Technology, Tehran, Iran*
Ahmad Ayatollahi, Ali Kermani

Power Quality and FACTS I

Room: Room F

Chairs: Ali Saeidi, Mashhad Electric Energy Distribution Co.
Reza Ghazi, Ferdowsi University of Mashhad

C1F.1 **8 YhWjcb`UbX`7`Ugg]ZVUjcb`cZ<][\`a dYXUbWV': U`hg`]b
Dck Yf`8]glf]Vi hcb`BYtk cf_g`l`g]b[`5 FH`BYi fU`BYtk cf_g`...%&)
KOP knqqlgmt.'O 0Uctnrm"cpf "UO 0Uj cj tvcuj
Hgtf qy uk`Wpkygtuks{ "qh'O cuj j cf. 'Ko cp`Pknqqlgmt B uwo QeQe
Lqpf KUj cr qwt`Wpkygtuks{.'UctnrmB kwnQeQe
Egpygt`qh`Gzegmgpeg`lqt`Rqy gt`Uwgo`Cwqo cvkqp`cpf`Qr gt cvkqp**

C1F.2 **A Three-Phase Four-leg DVR Using Three Dimensional
Space Vector Modulation`...%&* %**

Aziz Tashackori, *Faculty of Electrical and Computer
Engineering, University of Tabriz, Tabriz, Iran*
Seyed Hossein Hosseini, Mehran Sabahi, Tohid Nouri

C1F.4 **Multi-Objective Optimization Based Approaches for
Hybrid Power Filter Design`...%&***

Hamid Reza Imani, *Department of Electrical, Electronic &
Systems Engineering, University Kebangsaan Malaysia, Selangor,
Malaysia*
Azah Mohamed, Hussain Shreef, Hussain Shreef

Restructured Power System II

Room: Room G

Chairs: M. S. Ghazizadeh, Power and Water University of Technology
Mohammad Hossein Javidi, Ferdowsi University of Mashhad

C1G.3 Studding Two Indices of Voltage Stability in Reliability Constrained Unit Commitment in a Day-ahead Market

M. Khalifeh, *Department of Electrical Engineering, Faculty of Engineering, Shahid Chamran University, Ahvaz, Iran*
S. S. Mortazavi, M. Joorabian, V. Davatgaran

C1G.5 Optimal Demand Response Program for Active market power reduction

Hasan Jalili, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Mohsen Parsa Moghadam

C1G.6 Asset and Risk Management for a Wind Farm in a Competitive Electricity Market

H. Izadpanah, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
G. R. Yousefi, S. Makhdoumi Kaviri

Data Converters

Room: Room H

Chairs: Mohammad Yavari, Amirkabir University of Technology
Mohammad Taherzadeh, Ferdowsi University of Mashhad

- C1H.1 A Reduced-Sample-Rate 2-2-0 MASH-Delta-Sigma-Pipeline ADC Architecture** ,
Reza Mohammadi, *Faculty of ECE, K. N. Toosi University of Technology, Tehran, Iran*
Hossein Shamsi
- C1H.2 New SNDR Enhancement Techniques In Pipelined ADC &**
Mohsen Hassanpour Ghadi, *Sharif University of Technology*
Seyede Mahya Safavi, Mohammad Sharifkhani
- C1H.3 A New Power Efficient Wireless Non-Uniform Adaptive-Sampling ECG Recording System +**
Maryam Zaare, *Integrated Systems Lab., Department of Electrical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad Maymandi-Nejad
- C1H.5 Detailed Study of the Time Estimation in Level-Crossing Analog-to-Digital Converters \$&**
Nassim Ravanshad, *Electrical Engineering Department, Ferdowsi University of Mashhad, Mashhad, Iran*
Hamidreza Rezaee-Dehsorkh, Reza Lotfi
- C1H.6 Design of a Low-power Compressive Sampling Circuit for Gaussian Sensing Matrices \$,**
Parvin Bahmanyar, *Digital System Design Laboratory, Electrical Engineering Department, Ferdowsi University of Mashhad, Mashhad, Iran*
Saied Hosseini-Khayat

Nonlinear Systems and Chaos II

Room: Room J

Chairs: Mohammad Saleh Tavazoei, Sharif University of Technology
Maryam Dehghani, Shiraz University

Invited Talk Mohammad Saleh Tavazoei, Sharif University of Technology

C1J.3 Backstepping Time-scale Separation Redesign for Stabilization of a Class of Nonlinear Systems with Matched and Unmatched Uncertainties

Shabnam Pourdehi, *School of Electrical and Computer Engineering, Shiraz University, Shiraz, Iran*
Alireza Khayatiyan

C1J.4 A New State Estimation Method for Unit Time-Delay Systems Based on Kalman Filter

Behrouz Safarinejadian, *Department of Electrical Engineering, Shiraz University of Technology*
Mohiyeddin Mozaffari

**Poster Session (Electronic Engineering and
Control Engineering)**

Room: Room P

-
- C1P.02 Designing Inverse Dynamic Controller with Integral Action for Motion Planning of Surgical Robot in the Presence of Bounded Disturbances** % &
A. Aminzadeh Ghavifekr, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*
M.A. Badamchizadeh, G. Alizadeh
A. Arjmandi, *Faculty of Electrical and Computer Engineering, K.N. Toosi University, Tehran, Iran*
- C1P.06 Delayed Teleoperation System In Presence of Moving Virtual Fixture** % ' \$
Faezeh Kazemi, *Amirkabir university of Technology, Tehran, Iran*
Seyed Mehdi Rezaei, Saeed Shiry Ghidary
Mohammad Zareinejad, Mohammad Reza Dehghan
- C1P.09 Modified PD based bilateral nonlinear teleoperation with Flexible link Robots** % ' *
Mohadeseh Yaryan, *Amirkabir University of Technology: dept. Mechanical Engineering Tehran, Iran*
Mahyar Naraghi, Seyed Mehdi Rezaei, Mohammad Zareinejad, Hamed Ghafarirad
- C1P.11 Laser Diode Modulation Under Large Signal Conditions** % (&
Arman Ahmadian, *Department of Electrical Engineering Sharif University of Technology Tehran, Iran*
- C1P.14 Design of tunneling field-effect transistor (TFET) with $\text{Al}_x\text{Ga}_{1-x}\text{As}/\text{In}_x\text{Ga}_{1-x}\text{As}$ hetero-junction** % (+
M. R. Salehi, *Shiraz university of technology*
E. Abiri, B. Dorostkar
S. E. Hosseini, *Ferdowsi university of Mashhad*
- C1P.16 On the Intelligent Components Geometry Design of a Current Reuse Folded Cascode Concurrent Dual-band CMOS LNA** %) \$
A. Fathianpour, *Engineering Faculty, Shahed University*
S. Seyedtabaai
- C1P.18 An Ultra-Wideband Common Gate LNA With gm-Boosted And Noise Cancelling Techniques** %) *
Amin Jamalkhah, *Department of Electrical Engineering, Shahid Bahonar University of Kerman, Iran*
Ahmad Hakimi
- C1P.19 Design of Low Cost Class-E Power Amplifier for HF Band Applications** % * %
Javad Yavand Hasani, *Iran University of Science and Technology (IUST), Tehran*

**Poster Session (Electronic Engineering and
Control Engineering)**

Room: Room P

-
- C1P.21 A 2.4-GHz Subthreshold Down-conversion Mixer with Improved Noise Figure**
Maryam Safari, *Electrical Engineering Department, University of Zanjan, Zanjan, Iran*
Siroos Toofan, Leila Bagheriye
- C1P.22 A New Linearization Technique for CMOS Low Noise Amplifiers with Balun Circuitry**
Mahdi Barati, *Integrated Circuit Design Laboratory, Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran*
Babak MazhabJafari, Mohammad Yavari
- C1P.23 Threshold characteristics analysis of InP-based PhC VCSEL with buried tunnel junction**
Saeid Marjani, *Department of Electrical Engineering Ferdowsi University of Mashhad, Iran*
Seyed Ebrahim Hosseini
Rahim Faez, *Department of Electrical Engineering Sharif University of Technology Tehran, Iran*

**Poster Session (Computer Engineering and
Biomedical Engineering)**

Room: Room Q

-
- C1Q.02 Joint Scheduling and Routing Tree Construction in IEEE 802.16 Wireless Mesh Networks**
Meysam Bayani Rad, *Department Computer Engineering Urmia University, Urmia, Iran*
Saleh yousefi, Jamshid Bagherzadeh
- C1Q.05 Fault-tolerant MIN Shuffle-Exchange NoC**
Ali Mazaheri, *Islamic Azad University Central Tehran Branch*
Reza Sabbaghi-Nadooshan
- C1Q.07 A multi-thread based approach for IP Address Lookup**
Hootan Zhian, *Amirkabir University of Technology*
Ali Jokar, Navid Farrokhi, Masoud Sabaei
- C1Q.08 A New GA Based Method for Improving Hybrid Clustering**
N. Razizadeh, *University of Tabriz, Tabriz, Iran*
M. A. Badamchizadeh
M. S.G. Ghasempour, *Amirkabir University of Technology, Tehran, Iran*
- C1Q.09 Artificial Neural Networks Generation Using Grammatical Evolution**
Khabat Soltanian, *University of Kurdistan, Sanandaj, Iran*
Fardin Akhlaghian Tab, Fardin Ahmadi Zar
Ioannis Tsoulos, *Department of Computer Science, University of Ioannina, Ioannina, Greece*
- C1Q.13 Visualization of Palm Veins in NIR Images, Application in Clinical Injection and Identification**
Maral Fakoor, *University of Tehran Tehran, Iran*
Seyed Kamaloddin Setarehdan, Reihaneh Sadat Daneshmand

Poster Session (Communications)

Room: Room R

-
- C1R.01 A Hybrid Genetic Algorithm-Neural Network for Modeling of Periodic Nonlinearity in Three-Longitudinal-Mode Laser Heterodyne Interferometer**
Saeed Olyaei, *Faculty of Electrical and Computer Engineering, Shahid Rajaee Teacher Training University, Tehran, Iran*
Reza Ebrahimpour, Somayeh Esfandeh
- C1R.03 Plasmonic Behavior of Metallic and Core-shell Nanostructures**
Fatemeh Taghian, *Nano-Optoelectronic Research Lab, Department of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Mansoor Yousefi Rad, Vahid Ahmadi
- C1R.04 A Novel Multi-Channel Photonic Crystal Waveguide Biosensor**
Saeed Olyaei, *Faculty of Electrical and Computer Engineering, Shahid Rajaee Teacher Training University (SRTTU), Tehran, Iran*
Samira Najafgholizadeh
- C1R.07 Planar Metallic Lens Based on an Array of Slits Modified by Perpendicular Cuts**
Hadiseh Nasari, *Department of Electrical and Computer Engineering, K. N. Toosi University of Technology, Tehran, Iran*
Mohammad Sadegh Abrishamian
- C1R.09 Plasmonic Waveguide Directional Coupler Based on Two Dimensional Two-Hole Coupler**
Alireza Dolatabadi, *Optical Communication Lab., Faculty of Electrical and Computer Engineering, K. N. Toosi University of Technology, Tehran, Iran*
Nosrat Granpayeh
- C1R.10 Design and Optimization of a Double-Clad Yb-Doped Fiber Master Oscillator - Power Amplifier**
Sajjad Mohammadian, *Physics Department, Amirkabir University of Technology, Tehran, Iran*
Parviz Parvin, Maryam Ilchi-Ghazaani
Reza Poozesh, *Fiber group, Iranian National Center for Laser Science and Technology, Tehran, Iran*
Kamran Hejaz
- C1R.11 Metallic Nanostructures for Enhancement of Absorption in Thin-film Solar Cells**
Fahimeh Armin, *Communications and Computer Research Center Ferdowsi University of Mashhad, Mashhad, Iran*
Mir Mojtaba Mirsalehi

Poster Session (Power Engineering)

Room: Room S

-
- C1S.02 Construction of a Low Cost Asymmetric Bridge Converter for Switched Reluctance Motor Driv** ,
E.Afjei, *Department of Electrical Eng., Faculty of Electrical & Computer Eng., Shahid Beheshti University G.C., Tehran, Iran*
A.Siadataan
M.Rafiee, *Shahid Beheshti University G.C., Tehran, Iran*
- C1S.09 Torque Ripple Reduction of SRM Drives Below the Base Speed Using Commutation Angles Control** ('
A. Shahabi, *Isfahan University of Technology*
A. Rashidi, S.M. Saghaian-Nejad
- C1S.11 5`AcXY!6 UgYX': i nnn7 cbIfc`Yf`l g]b[`h Y`DUfU`Y`8]gf]Vi hYX 7 ca dYbgU]cb`A Yh cX`Zf`Ei Uxfclcf`5 H]li XY`GfUW]`nU]cb` (-**
Uqtqwuj "Uj gknj r qwt."Ucggf "Dci j gtlUj qwtcnk
Ct`HkclcnEt gcwt g'Ncd.'GigevtkecnGpi kpggtlpi "Uej qqn"Uj ct kHlWpkxgt ulof
qhVgej pqrqi {."Vgj tcp."Kcp
- C1S.12 Power Factor Improvement Using Current Source Rectifier with Battery Charging Capability in Regenerative Mode of Switched Reluctance Motor Drives**))
A. Rashidi, *Dept. of Electrical and Computer Eng., Isfahan University of Technology, Isfahan, Iran*
M. M. Namazi, A. Bayat, S.M. Saghaiannejad
- C1S.16 The Effect of Time-Based Demand Response Program on LDC and Reliability of Power System** * \$
Mahdi Samadi, *Department of Electrical Engineering, Ferdowsi University of Mashhad, Iran*
Mohammad Hossein Javidi
Mohammad Sadegh Ghazizadeh, *Department of Electrical Engineering, Power and Water University of Technology, Iran*
- C1S.21 Generalized Formulation for Optimal Placement of PMUs Considering Single Unit or Single Branch Outage** * *
Nima Amin, *Faculty of Elec. & Robotic Engineering, Shahrood University of Technology*
Mahdi Banejad
- C1S.22 A Proposed Approach for Modeling of Power System Uncertainties to Design Robust PSS** + %
M.B Abolhasani Jabali
Department of Electrical Engineering, Shahed University, Iran
Grid Management Company(IGMC), Tehran, Iran
M.H Kazemi, Saeid Joudaki
Department of Electrical Engineering, Shahed University
Tehran, Iran

Poster Session (Power Engineering)

Room: **Room S**

**C1S.23 Coordinated Design of MPSS and TCSC-based Damping
Controller Using PSO to Enhance Multi-machine Power
System Stability**

Javad Morsali, *Electrical and Computer Engineering Faculty,
Tabriz University, Tabriz, Iran*

Rasool Kazemzadeh, *Dept. of Electrical Engineering, Sahand
University of Technology, Tabriz, Iran*

Mohammad Reza Azizian

Signal Processing III

Room: Room A

Chairs: Kamal Mohamedpour, K. N. Toosi University of Technology
Ali Akbar Tadaion, Yazd University

- C2A.1 Comparison of Nonquiet Spectrum Sensing in Filter Bank Multicarrier and OFDM Based Cognitive Radio Systems**
Afrooz Jalali, *Department of Electrical and Computer Engineering Isfahan University of Technology Isfahan, Iran*
Mohammad Javad Omid
Hamid Saeedi-Sourck, *Department of Electrical and Computer Engineering Yazd University Yazd, Iran*
- C2A.3 Improving Instantaneous Capacity and Outage Probability in DF-Relaying**
Majid Raeis, *Department of Electrical and Computer Engineering Isfahan University of Technology Isfahan, Iran*
Mohammad Javad Omid, Jafar Kazemi
- C2A.4 Effects of Channel Estimation on the Optimal Number of Active Users in Multi-User Channels with Rayleigh Fading**
Ali Eslami, *University of Sistan & Baluchestan Department of Communications Engineering Zahedan, Islamic Republic of Iran*
Hengameh Keshavarz

Field and Waves V (Electromagnetics)

Room: Room B

Chairs: Mahmoud Kamarei, University of Tehran
Mir-Mojraba Mir-Salehi, Ferdowsi University of Mashhad

C2B.3 Analytical Treatment of Electromagnetic Scattering by a Lossy Multilayer Strip

A. Fazel, *Faculty of Electrical and Computer Engineering, K. N. Toosi University of Technology, Tehran, Iran*
T. Pakizeh, M. S. Abrishamian

C2B.4 The Effect of Polarization in Shape Reconstruction of Two-Dimensional Penetrable and Non-penetrable Objects Using Linear Sampling Method

Mehdi Salar Kaleji, *Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
Mohammad Zoofaghari, Reza Safian

C2B.5 Reconstruction of Hidden Wire Objects Using Complex Time Green's Functions and Particle Swarm Optimization

Masoud Roodaki-Lavasani-Fard, *School of Electrical and Computer Engineering, College of Engineering, University of Tehran, Iran*
Reza Faraji-Dana

C2B.6 Modified Physical Optics Approximation for RCS Calculation of Dielectric Coated PEC with Axial Symmetry

Hossein Mohammadzadeh, *Department of Electrical and Computer Engineering Isfahan University of Technology (IUT) Isfahan, Iran*
Abolghasem Zeidaabadi Nezhad, Zaker Hossein Firouzeh

Information and Communication Security II

Room: Room C

Chairs: Mahdi Berenjkoo, Isfahan University of Technology
Ghosheh Abed Hodtani, Ferdowsi University of Mashhad

- C2C.1 Security Assessment of Scalar Costa Scheme Against Known Message Attack in DCT-Domain Image Watermarking**
Reza Samadi, *Electrical Engineering Dept. Ferdowsi University of Mashhad Mashhad, Iran*
Seyed Alireza Seyedin
- C2C.2 Hybrid Image Watermarking Using Local Complexity Variations**
Shekoofeh Azizi, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Iran*
Majid Mohrekesh, Shadrokh Samavi
- C2C.3 A New High Capacity and EMD-based Image Steganography Scheme in Spatial Domain**
Hamzeh Hajizadeh, *Department of Electrical Engineering, Iran University of Science and Technology Narmak, Tehran, Iran*
Ahmad Ayatollahi, Sattar Mirzakuchaki
- C2C.6 Recognition of Channel Encoder Parameters From Intercepted Bitstream**
Yasser Karimian, *Coding and Cryptography Lab. Faculty of Electrical and Computer Engineering K. N. Toosi University of Technology, Tehran, Iran*
Mahmoud Ahmadian Attari

Computer Networks II

Room: Room D

Chairs: Mohammad Hossein Yaghmaee, Ferdowsi University of Mashhad
Amin Hosseini Seno, Ferdowsi University of Mashhad

- C2D.1** **A Cooperative intrusion detection algorithm based on trusted voting for mobile ad hoc network** +
Seyyede Fatemeh Malek, *Department of Computer Engineering*
Siyavash Khorsandi
- C2D.2** **An AQM-support Congestion Control for SCTP multi-homing (QCC-SCTP)** +
Afsane Zahmatkesh, *Dept. of Computer Engineering*
Ferdowsi University, Mashhad, Iran
Mohammad Hossein Yaghmaee, Amir Hossein Mohajerzadeh
- C2D.3** **Internet Traffic Classification using MOEA and Online Refinement in Voting on Ensemble Methods** +
Mohammad Sadegh Aliakbarian, *Department of Electrical and Computer Engineering Isfahan University of Technology Isfahan, Iran*
Ali Fanian
- C2D.4** **Modeling Vehicle Safety in Vehicular Networks Using Markov Chain Model Based on Cooperative Awareness** +
Seyed Mohammad Hosseini, *Department of Engineering, Faculty of Computer engineering Urmia University, Urmia, Iran*
Saleh Yousefi, Mohammad Javad Fazel Ashrafi

Biomedical Systems modeling

Room: Room E

Chairs: Fateme Helen Ghane, Ferdowsi University of Mashhad
Nadia Naghavi, Ferdowsi University of Mashhad

Invited Talk Fariba Bahrami, University of Mashhad

C2E.1 Sliding mode robust control of SEIR epidemic models

Asier Ibeas, *Escola d'Enginyeria Universitat Autònoma de Barcelona Bellaterra, Barcelona, Spain*

Manuel de la Sen and S. Alonso-Quesada, *Departamento de Electricidad y Electrónica Universidad del País Vasco P.O. Bilbao, Spain*

C2E.3 Optimal Electrode Placement in Transcranial Direct Current Stimulation via Genetic Algorithm

Raheleh Tavakoli, *Department of Biomedical Engineering, Science and Research Branch, Islamic Azad University Tehran, IRAN*

Hamed Sadjedi, *Technical and Engineering Faculty, Shahed University of Tehran, Iran*

S. Mohammad P. Firoozabadi, *Department of Medical Physics Tarbiyat Moares University of Tehran, IRAN*

C2E.4 Simulation of Coloured Human Eye Vision on the basis of Aberrations Effects

Taher Bodaghi, *Faculty of Electrical and Computer Engineering, Babol Noshirvani University of Technology*

Hussain Montazery Kordy, Mohammad Reza karami

C2E.5 Modelling Place Field Formation in Hippocampus Considering Recurrent Connections in CA3 and STDP

Shiva Ghaani Farashahi, *School of ECE, College of Engineering University of Tehran, Tehran, Iran*

Fariba Bahrami

Distributed Generation III

Room: Room G

Chairs: Mohammad Reza Aghaebrahimi, University of Birjand
Pedjman Pourmohamadiyan, Ferdowsi University of Mashhad

**C2G.1 Secure Multi-Objective Distributed Generation Planning
In Distribution Network**

A. Habibi, *Department of Electrical and Electronics Engineering,
Shiraz University of Technology, Shiraz, Iran*
M. Nayeripour, J. Aghaei

**C2G.3 Probabilistic Reliability Evaluation of Hybrid Wind-
Photovoltaic Power Systems**

MortezaAien, *Graduate University of Advanced Technology,
Kerman, Iran*
AhadBiglari, *Islamic Azad University, Science and Research
Branch, Kerman, Iran*
Masoud Rashidinejad, *ShahidBahonar University, Kerman, Iran*

**C2G.5 A Neural Network-Based Model for Wind Farm Output in
Probabilistic Studies of Power Systems**

S. Riahinia, *Sharif University of Technology, Tehran, Iran*
A. Abbaspour
M. Fotuhi-Firuzabad, *Sharif University of Technology, Tehran*
M. Moeini-Aghaie

Radio Frequency Circuits II

Room: Room H

Chairs: Ali Medi, Sharif University of Technology
Rasoul Dehghani, Isfahan University of Technology

Invited Talk Ali Medi, Sharif University of Technology

C2H.1 A Wideband CMOS Divide-by-3 Injection-Locked Frequency Divider

Rasoul Dehghani, *Electrical and Computer Engineering, Department Isfahan University of Technology Isfahan, Iran*

C2H.4 A New IR-UWB Pulse to mitigate coexistence issues of UWB and Narrowband systems

Sayed Vahid Mir-Moghtadaei, *Department of Electrical and Computer Engineering, Isfahan University of Technology*
Abolghasem Zeidaabadi Nezhad
Ali Fotowat-Ahmady, *Department of Electrical Engineering, Sharif University of Technology*

C2H.5 A Wide Band Envelope Modulator for Envelope Tracking RF Power Amplifiers

Atefeh Salimi, *Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, Iran*
Rasoul Dehghani
Abdolreza Nabavi, *Department of Electrical and Computer Engineering, Tarbiat Modarres University of Tehran, Tehran, Iran*

Optimal Control II

Room: Room J

Chairs: Hamid Khaloozadeh, K. N. Toosi University of Technology
Kamal Hosseini Sani, Ferdowsi University of Mashhad

C2J.3 Immersion and Invariance Based Fault Tolerant Adaptive Spacecraft Attitude Control

Danyal Bustan, *Ferdowsi University of Mashhad*
Seyyed Kamal Hosseini Sani, Naser Pariz

C2J.4 Incommensurate Order Fractional Optimal Control Application to Treatment of Psychiatric Disorders

S. S. Tabatabaei, *Department of Electrical Engineering, Amirkabir University of Technology Tehran, Iran*
M. J. Yazdanpanah, *Advanced Control Systems Lab. Control and Intelligent Processing Center of Excellence, School of Electrical and Computer, Tehran, Iran*
M. S. Tavazoei, *Electrical Engineering Department, Sharif University of Technology, Tehran, Iran*

Image Processing and Recognition V

Room: Room A

Chairs: Karim Faez, Amirkabir University of Technology
Shohreh Kasaei, Sharif University of Technology

C3A.1 Classification of Digital Communication Signals Based on Adaptive Neuro-fuzzy Inference System

Milad Azarbad, *Department of Electrical Engineering, University of Mazandaran, Iran*

Hamed Azami, *Department of Electrical Engineering, Iran University of Science and Technology*

Saeid Sanei, *Faculty of Engineering and Physical Sciences, University of Surrey, UK*

C3A.3 Near-lossless Compression for High Frame Rate Videos

Najmeh Nazari, *Department of Electrical and Computer Engineering Isfahan University of Technology, Isfahan, Iran*

Roozbeh Shams, Majid Mohrekesh, Shadrokh Samavi

C3A.4 Supervised Fully Constrained Linear Spectral Unmixing using Evolutionary Strategy

Hossein Fayyazi, *Malek-Ashtar University of Technology*

Hamid Dehghani, Mojtaba Hosseini

C3A.5 A low cost and reliable Polak-Ribiere Conjugate Gradient Deflation ICA algorithm for real signals

M. Ghasemi-Fard, *Electrical Department, Engineering Faculty, Shahid Chamran University of Ahvaz, Ahvaz, Iran*

K. Ansari-Asl

L. Albera, *Université de Rennes 1, LTSI, Rennes, France*

A. Kachenoura, L. Senhadji

Photonics and Optoelectronics II

Room: Room B

Chairs: Tavakkol Pakizeh, K. N. Toosi University of Technology
Mir-Mojtaba Mirsalehi, Ferdowsi University of Mashhad

C3B.2 Design and Analysis of Quantum Ring Photodetector Enhanced by Metallic Slits

Faramarz Alihosseini, *Dept. of Elect. and Comp. Eng., Tarbiat Modares University, Tehran, Iran*
Vahid Ahmadi
Ali Mir, *Lorestan University, Khoramabad, Iran*

C3B.4 Theoretical Investigation of Metal Schottky Barrier Detector on Si Microring Resonator

Aref Rasoulzadeh Zali, *Faculty of Electrical and Computer Engineering, Advanced Devices Simulation Lab, Tarbiat Modares University, Tehran, Iran*
Mohammad Kazem Moravvej-Farshi
Gholamreza Abaeiani, *Semiconductor laser department, laser and optics school, Tehran, Iran*

C3B.5 Theoretical Estimation of Optical Confinement Factor and its Effects on DC Characteristics of Long Wavelength Transistor

M.R. Farjadian, *Photonics Research Laboratory, Electrical Engineering Department, Amirkabir University of Technology, Tehran, Iran*
H. Kaatuzian, I. Taghavi

Fields and Waves VI (Microstrip Antennas)

Room: Room C

Chairs: Jalil Rashed-Mohassel, University of Tehran
Leila Yousefi, University of Tehran

C3C.2 Reconfigurable Single-Feed Antenna With Switchable Polarization*%*&**

Ailar Sedghara, *Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran*
Zahra Atlasbaf

C3C.3 Analysis and Design of a Low Sidelobe Level and Wide-band Aperture Coupled Microstrip Antenna Array Using FDTD*%****

P. Loghmannia, *Department of Electrical Engineering K. N. Toosi University of Technology, Tehran, Iran*
M. Kamyab
M. Ranjbar Nikkhah, *Center of Excellence on Applied Electromagnetic systems, School of ECE, University of Tehran Tehran, Iran*
J. Rashed-Mohassel
M. R. Nickpay, *Department of Electrical Engineering Islamic Azad University, Shahre_e_Rey Branch Tehran, Iran*

C3C.4 Mutual Coupling Between Two Microstrip Patch Antennas on Concave and Convex Cylindrical Surfaces*%+&**

Keyhan Hosseini, *Tarbiat Modares University*
Zahra Atlasbaf

C3C.5 Dual-Polarized Aperture-Coupled Wideband Microstrip Patch Antenna with High Isolation for C-Band*%+(**

A. Vaziri, *Faculty of Electrical and Computer Engineering K. N. Toosi University of Technology, Tehran, Iran*
M. Kaboli, S. A. Mirtaheri

Artificial Intelligence III

Room: Room D

Chairs: Ahad Harati, Ferdowsi University of Mashhad
Mohammad B. Naghibi-Sistani, Ferdowsi University of Mashhad

- C3D.1** **An Ultra-Fast, Optimized and Massively-Parallelized Curvelet Transform Algorithm on GP-GPUs**,
Mohammad Motamedi, *speed processing lab., Amirkabir University of Technology*
SimaSobhie, *AIMS lab., Amirkabir University of Technology.*
S. Ahmad Motamedi, *Professor, EED, Amirkabir University of Technology*
AmirHossein Rezaie, *Associate Professor, EED, Amirkabir University of Technology*
- C3D.2** **Evolutionary Based Matrix Factorization Method For Collaborative Filtering Systems**,
Dariush Zandi Navgaran, *Department of Electrical and Computer Engineering University of Kurdistan, Iran*
Parham Moradi, Fardin Akhlaghian.
- C3D.5** **Effect of Observer Agent on Ad Hoc Teamwork in the pursuit domain**,
Matin Kheirhahan, Mohammadreza Kangavari, Farimah Farahmandi

Power Electronics and Drive III

Room: Room G

Chairs: Abolfazl Vahedi, Iran University of Science and Technology
Mohammad Monfared, Ferdowsi University of Mashhad

C3G.2 Frequency Adaptive Repetitive Control of Grid Connected Inverter for Wind Turbine Applications (in Persian)

Ali Asbafkan, *Department of Electrical Engineering*

University of Isfahan

Behzad Mirzaeeian, Mehdi Niroomand

Hosein Abootorabi Zarchi, *Department of Electrical Engineering*

Ferdowsi University of Mashhad, Mashhad, Iran

C3G.3 Vienna Rectifier and B4 Inverter as PM WECS Grid Interface (in Persian)

Parviz Najafi, *Faculty of Electrical and Computer Engineering,*

Tarbiat Modares University, Tehran, Iran

Amirhossein Rajaei, Mustafa Mohamadian, Ali Yazdian Varjani

Opamps and Comparators

Room: Room H

Chairs: Majid Baghaei-Nejad, Hakim Sabzevari University
Hooman Nabovati, Sajjad Institute of Higher Education

- C3H.1 A Novel DC Gain Enhancement Technique for Amplifiers with cascoded structure***%&\$***
Faezeh Abdollahi, *Department of Electrical Engineering, Islamic Azad University, Arak Branch, Arak, Iran*
Farhad Razaghian, *Department of Electrical Engineering, Islamic Azad University, South Tehran Branch, Tehran, Iran*
- C3H.2 A Low-Noise Low-Power MOSFET only Electrocardiogram Amplifier***%&%\$**
Maryam Ghamati, *Department of Electrical Engineering Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad Maymandi-Nejad
- C3H.3 A New Rail-to-Rail Ultra Low Voltage High Speed Comparator***%&%&**
Masoume Akbari, *Department of Electrical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad Maymandi-Nejad
S. Abdollah Mirbozorgi, *Electrical and Computer Engineering Department, University of Laval, Laval, Canada*
- C3H.4 Bulk Driven Indirect Feedback Compensation Technique for Low Voltage Applications***%&%&**
Arash Esmaili, *Microelectronics Research Center, Urmia University, Urmia, Iran*
Hadiseh Babazadeh, Khayrollah Hadidi, Abdollah Khoei
- C3H.5 Modified Structures for Low Power Sub-threshold Level Translators***%&*&**
Seyed Rasool Hosseini, *Ferdowsi University of Mashhad*
Ehsan Rahiminejad, Reza Lotfi
- C3H.6 Analysis of Power in Dynamic Comparators***%&' \$**
Samaneh Babayan-Mashhadi, *Integrated Systems Lab, Department of Electrical Engineering, Ferdowsi University of Mashhad, Mashhad, I. R. Iran*
Mojtaba Daliri, Reza Lotfi

Adaptive Control

Room: Room J

Chairs: Ali Khaki-Seddigh, K. N. Toosi University of Technology
K. Mousavi Mashhadi, Iran University of Science and Technology

C3J.4 **Implementation and Performance Comparison of indirect Kalman Filtering Approaches for AUV Integrated Navigation System using Low Cost IMU""3956**
Mohammad Shabani Sheijani, *Isfahan University of Technology*
Asghar Gholami, Narjes Davari
Mehdi Emami, *Yazd University*

**Poster Session (Electronic Engineering
and Control Engineering)**

Room: Room P

-
- C3P.04 State Estimation in TPN and PPN Guidance Laws by Using Unscented and Extended Kalman Filters**
S.H. Moosapour, *Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran*
S. Moosapour, mostafa.asadollahi
- C3P.06 Adaptive Coverage Control in Non-Convex Environments with Unknown Obstacles**
M. Adibi, *Electrical Engineering Department Amirkabir University of Technology Tehran, Iran*
H. A. Talebi, K.Y. Nikraves
- C3P.08 Multi-sensor optimal information fusion Kalman filter with mobile agents in ring sensor networks**
Behrouz Safarinejadian, *Shiraz University of Technology*
Kazem Hasanpoor
- C3P.09 A New High-Resolution and High-Speed Open-Loop CMOS Sample and Hold Circuit**
Alireza Abolhasani, *Microelectronic Research Laboratory University of Urmia, Urmia, Iran 57159*
Khayrollah Hadidi, Mohammad Tohidi, Abdollah Khoei
- C3P.10 A K-Band Common-Source Gilbert-Cell Mixer with High Gain and High Linearity for UWB Applications**
Mohammad Beigzadeh, *Tarbiat Modares University*
Abdolreza Nabavi
- C3P.12 Design of A Current-Mode Fully Programmable Interval Type-2 Fuzzifier for General-Purpose Applications**
Alireza Mesri, *Microelectronics Research Laboratory Urmia University, Urmia, Iran*
Abdollah Khoei, Khayrollah Hadidi
- C3P.14 Dual-mode High Gain and High-Q Active RF Band Pass Filter**
Shoeib Rahmatollahi, *Tarbiat Modares University*
Bashir Fotouhi, Abumoslem Jannesari
- C3P.16 A Novel Technique for Wideband Bipolar Amplifiers**
Mehdi Ghasemzadeh, *Microelectronic Research Laboratory Urmia University, Urmia, Iran*
Amin Akbari, Morteza Mousazadeh, Khayrollah Hadidi, Abdollah Khoei

**Poster Session (Electronic Engineering
and Control Engineering)**

Room: Room P

-
- C3P.17 A 0.5V 200MHz Offset Trimmable Latch Comparator in Standard 0.18 μ m CMOS Process**
Meysam Mohammadi, *Sahand University of Technology, Tabriz, Iran*
Khosrov D. Sadeghipour, *University of Tabriz, Tabriz*
- C3P.18 A New Technique for Background Calibration of Pipelined ADCs**
Meysam Mohammadi, *Sahand University of Technology, Tabriz, Iran*
Amir Alipour, Esmail N. Aghdam
Khosrov D. Sadeghipour, *University of Tabriz, Tabriz, Iran*
- C3P.19 A 125MS/s Self-latch Low-Power Comparator in 0.35 μ m CMOS Process**
Ali Baradaran Rezaei, *Urmia Graduate Institute, Urmia, Iran*
Leila Hasseli, Tohid Moradi
- C3P.20 A Low Dropout Voltage Regulator with Enhanced Transconductance Error Amplifier and Small Output Voltage Variations**
Ebrahim Abiri, *Department of Electrical Engineering, Shiraz university of Technology, Shiraz, Iran*
Mohammad Reza Salehi, Sara Mohammadalinejadi
- C3P.22 Low Power Design of Successive Approximation Registers**
Rabeeh Majidi, *ECE Department, Worcester Polytechnic Institute, Worcester MA USA*
- C3P.24 Decentralized Particle Filtering Based Fault Diagnosis for Nonlinear Distributed and Interconnected Systems**
Nargess Sadeghzadeh Nokhodberiz, *Department of Electrical Engineering, Iran University of Science and Technology, Tehran, Iran*
Javad Poshtan

**Poster Session (Computer Engineering
and Biomedical Engineering)**

Room: Room Q

-
- C3Q.06** **Increasing the Initial Convergence of Distributed Diffusion LMS Algorithm by a New Variable Tap-Length Variable Step-Size Method**
Roghieh Mohammadloo, *Faculty of Electrical & Computer Engineering, University of Tabriz*
Ghanbar Azarnia, Mohammad Ali Tinati
- C3Q.08** **Forecasting Foreign Exchange Rates Using an IT2 FCM based IT2 Neuro-Fuzzy System**
Emad Fallahzadeh, *Dept. of Electrical and Computer Engineering Isfahan University of Technology Isfahan, Iran*
Mohammad Ali Montazeri
- C3Q.09** **An Ensemble Learning Approach for Data Stream Clustering**
Ramin Fathzadeh, *Mechatronics Research Laboratory Department of Computer Engineering, Qazvin Islamic Azad University Qazvin, Iran*
Vahid Mokhtari
- C3Q.12** **New Hybrid Hepatitis Diagnosis System Based on Genetic Algorithm and Adaptive Network Fuzzy Inference System**
Mahdieh Adeli, *Imam Khomeini International University*
Nooshin Bigdeli, Karim Afshar
- C3Q.14** **Comparison of visual and proprioceptive training on multisensory perception using a new designed setup**
Maryam Saidi, *Amirkabir University of Technology (Tehran Polytechnic), Iran*
Abdolaziz Azizi Lari, Farzad Towhidkhah.
- C3Q.15** **A New Approach to the Study of Heartbeat Dynamics Based on Mathematical Model**
Sohrab Behnia, *Department of Physics Urmia University of Technology (UUT) Urmia, Iran*
Javid Ziaei, Marjan Ghiassi
- C3Q.19** **Pressure Ulcer Risk Assessment by Monitoring Interface Pressure and Temperature**
Farve Daneshvar Fard, *Department of Electrical Engineering Biomedical Engineering Research Center, Ferdowsi University of Mashhad, Mashhad, Iran*
Sahar Moghimi, Reza Lotfi

**Poster Session (Computer Engineering
and Biomedical Engineering)**

Room: Room Q

C3Q.20 **Design of a Novel Wearable Human Computer Interface
based on Electrooculography** *
Sima Soltani, *Department of Biomedical Engineering,*
University of Isfahan, Isfahan, Iran
Amin Mahnam

Poster Session (Communications)

Room: Room R

-
- C3R.01 Steptrench plasmonic directional coupler**
Shahin Salarian, *School of Electrical Engineering, Iran University of science and Technology, Tehran, Iran*
Mohammad H. Vadjed Samiei
- C3R.07 Design and Fabrication of a Broadband Blade Monopole Antenna Operating in 30 MHz – 600 MHz Frequency Band**
Bijan Abbasi Arand, *Tarbiat Modares University*
Reza Shamsaee
Behzad Yektakhah, *School of Electrical and Computer Eng, University of Tehran*
- C3R.11 Developing an Accurate and Simple Dispersion Analysis of TE₁₀ mode of Substrate Integrated Waveguides**
Mohammad Alijani-Ghadikolae, *Electrical Department Ferdowsi University of Mashhad, Mashhad, Iran*
Mohammad H. Neshati
- C3R.12 Design of Compact UWB Band Pass Filter Using Radial Stub Loaded Resonator and Cross-Shaped Coupled Lines with Improved Out-of-Band Performance and Sharp Roll-Off**
B. Mohammadi, *Urmia University, Urmia, Iran*
J. Nourinia, C. Ghobadi
A. Valizade, *Young Researchers Club, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran*
- C3R.13 High Power Division Ratio Dividers for Millimeter-Wave Applications**
Laleh mirzavand, *Electrical Engineering Department, Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran*
Rashid Mirzavand, Abdolali Abdipour, Mohammad Mahdi Honari

Poster Session (Power Engineering)

Room: Room S

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- C3S.02** **Current Balancing, Reactive Power and Harmonic Compensation Using a Traction Power Conditioner on Electrified Railway System** % ++
Iman Maghsoud, *Iran University of Science and Technology Tehran*
Alireza Ghassem, Siamak Farshad, Seyed Saeed Fazl
- C3S.03** **A New Strategy for Harmonic Minimization Based on Triple Switching of Multilevel Converters** % ++
Yahya Naderi, *Faculty of Electrical, Computer Engineering, Tabriz University, Tabriz, Iran*
Seied Hossein Hosseini, Arash Mahari
Roya Naderi, *Islamic Azad University, Heris Branch, Electrical Department, Heris, Iran*
- C3S.08** **Different Strategies of Interruptible Load Contracts Implemented in Reliability Constrained Unit Commitment** % , '
V. Davatgaran, *Department of Electrical Engineering, Faculty of Engineering, Shahid Chamran University, Ahvaz, Iran*
S. S.Mortazavi, M. Saniei, M. Khalifeh
- C3S.09** **Designing Optimal Bidding Curve in Electricity Pay-as-Bid Markets** % , -
Javid Khorasani, *Khorasan Institute of Higher Education Mashhad, Iran*
Habib Rajabi Mashhadi, *Ferdowsi University of Mashhad Mashhad, Iran*
- C3S.16** **A Protection Scheme for Series Capacitor Compensated Transmission Lines that Uses DC Component of Line Current** % - '
Abbas Ali Razavi, *School of Electrical and Computer Engineering Shiraz University, Shiraz, Iran*
Haidar Samet
- C3S.17** **A Fast Online Load Shedding Method for Mitigating FIDVR Based On Novel Stability Index** % - -
Arash Mahari, *Faculty of Electrical and Computer Engineering University of Tabriz, Tabriz, Iran*
Heresh Seyed
- C3S.18** **A New Traveling Wave Fault Location Algorithm in Series Compensated Transmission Line** % \$)
Moien Abedini, *Department of Electrical engineering, university of Tehran, Tehran, Iran*
Abbas Hasani, Amir Hosein Hajbabaei, Vahid Khaligh

Poster Session (Power Engineering)

Room: Room S

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- C3S.19 A New Protection Scheme for Stator Faults in Synchronous Generators**
Pouya Mahdavi pour Vahdati, *Iran University of Science and Technology, Tehran, Iran*
Arash Arjmandi, *K.N.Toosi University, Tehran, Iran*
Heresh Seyedi, *University of Tabriz, Tabriz, Iran*
Soheil Moradi, *Shahid Madani University, Tabriz, Iran*
- C3S.20 High Frequency Components of Feeder Current as Diagnostic Tool to Study Contamination Conditions of Outdoor Insulators in Power Distribution Networks**
MohamadAli Amini, *Power Quality Research Group Yazd University Yazd, Iran*
AliReza Sedighi Anaraki
Mohamad Taghi Sadeghi, *Yazd University, Yazd, IRAN*

Optical Communications II

Room: Room B

Chairs: Sadegh Abbasi, Iran Telecommunication Research Center
Mohammad Molavi, Ferdowsi University of Mashhad

C4B.2 Effect of Pump Power on Gain and Saturation of Double-Clad Fiber Amplifiers
Maryam Ilchi-Ghazaani, *Physics Department, Amirkabir University of Technology, Tehran, Iran*
Parviz Parvin, Sajjad Mohammadian
Reza Poozesh, *Fiber group, Iranian National Center for Laser Science and Technology, Tehran, Iran*
Kamran Hejaz

C4B.3 Controlling the Coupling Ratio of the Plasmonic Directional Couplers by SPM and XPM Nonlinear Effects
N. Nozhat, *Faculty of Electrical Engineering, Shiraz University of Technology, Shiraz, Iran*
N. Granpayeh, *Faculty of Electrical and Computer Engineering, K. N. Toosi University of Technology, Tehran, Iran*

C4B.5 Hybrid Metal-Insulator Plasmonic Slab Directional Coupler
Mahmoud Talafi Noghani, *School of Electrical Engineering Iran University of Science and Technology, Tehran, Iran*
Mohammad H. Vadjed Samiei

Artificial Intelligence and Machine Learning

Room: Room D

Chairs: Reza Monsefi, Ferdowsi University of Mashhad
Mohammad B. Naghibi-Sistani, Ferdowsi University of Mashhad

- C4D.2 A hybrid Gravitational Search Algorithm–Genetic Algorithm for neural network training** +
SaeideSheikhpour, *Faculty of Electrical Engineering, University of Birjand*
MahdiehSabouri, Seyed-Hamid Zahiri
- C4D.6 Learning Low-dimensional Subspaces via Sequential Subspace Fitting** (&
Mostafa Sadeghi, *Electrical Engineering Department, Sharif University of Technology, Tehran, Iran*
Mohsen Joneidi, H. B. Golestani

Distributed Generation IV

Room: Room F

Chairs: Mahdi Banejad, Shahrood University
Pedjman Pourmohamadiyan, Ferdowsi University of Mashhad

- C4F.2** **Design and Control of Fully Parallel Embedded Z Source Inverters Based Flexible Photovoltaic Systems for Grid Power Quality Improvement under Distorted Condition** (+
Saeid Khani, *East Azarbayjan Electric Power Distribution Company, Tabriz, Iran*
Leila Mohammadian, *Shabestar branch, Islamic Azad University, Shabestar, Iran*
Seyed Hossein Hosseini, *Faculty of Electrical and Computer Engineering, University of Tabriz, Iran*
Saeid Ghasemzadeh
- C4F.3** **An Economic Study to Investigate the Impacts of Energy Policy Changes on Renewable Contribution in Power Systems** ()
Mohammad Hassan Amirioun, *Center of Excellence for Power System Automation and Operation, Department of Electrical Engineering, Iran University of Science and Technology, Tehran, Iran*
Hajir Pourbabak, Ahad Kazemi
- C4F.4** **Impacts of Strategic Behavior of Wind Power Plants on Electricity Markets: A Supply Function Equilibrium Approach** () * \$
Mohsen Banaei, *Ferdowsi University of Mashhad*
Majid Oloomi Buygi
- C4F.5** **How Wind Power Plants Can Affect Electricity Markets by gaming on their generation power** () * *
Mohsen Banaei, *Ferdowsi University of Mashhad*
Majid Oloomi Buygi

Power Quality and FACTS

Room: Room G

Chairs: Mohammad Reza Aghaebrahimi, University of Birjand
Reza Ghazi, Ferdowsi University of Mashhad

**C4G.2 Two-Area Frequency Control in Overloaded Conditions
by Using HVDC Transmission***% +&**

Zahra Khatami, *Amirkabir University of Technology, Electrical
Engineering Department*
Mehrdad Abedi, G. B. Gharehpetian

**C4G.3 Compensating of voltage flicker and disturbance using
Dynamic Voltage Restorer based on matrix converter***% ++**

Hojjat Daghani, *Ferdowsi university of mashhad, mashhad, iran*
Reza Ghazi, Hadi Ghasemabadi

Bang-Gap Circuits and DC-DC Converters

Room: Room H

Chairs: Ali Medi, Sharif University of Technology
Majid Baghaei-Nejad, Hakim Sabzevari University

Invited Talk Majid Baghaei-Nejad, Hakim Sabzevari University

C4H.1 A Fully CMOS Low Voltage Bandgap Reference without Resistors

Rasoul Dehghani, *Electrical and Computer Engineering Department, Isfahan University of Technology, Isfahan, Iran*

C4H.3 A Low Input Voltage DC-DC Converter with Zero Current Detection Circuit and Delay-Based Timing Control for Thermoelectric Energy Harvesting

M. J. Dezyani, H. Ghafoori Fard, *E.E. Department, Amirkabir University of Technology, Tehran, Iran*

S. Sheikhaei, *School of Electrical & Computer Engineering College of Engineering, University of Tehran, Tehran, Iran*

Multiagent Systems

Room: Room J

Chairs: Hamid Khaloozadeh, K. N. Toosi University of Technology
Mohammad-R. Akbarzadeh-T., Ferdowsi University of Mashhad

Invited Talk M.-R. Akbarzadeh-T., *Ferdowsi University Of Mashhad*
Nanotechnology, Nanomedicine, ... Nanointelligence? "P K

C4J.1 Robust Cooperative Control In The Presence Of Obstacles - %

A. Aghaeeyan, *Department of Electrical Engineering*
Amirkabir University of Technology, Tehran, Iran
F. Abdollahi, H. A. Talebi

C4J.3 Synchronized Coherent Swarming of a Collaborative Multi Agent System in Presence of Disturbance - +

Reihane Rahimi, *Amirkabir University of Technology*
Farzaneh Abdollahi