

Ebrahim Daneshifar

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1. Personal Information:

Entrepreneur and University Professor with Different Levels of Executives' Experience

A multitask, independent-researcher, motivated, adaptable and responsible post graduate seeking a position in ICT sector which will utilize the academic, professional and technical skills developed through past work experiences in this field. With lots of technical and managerial experiences and skills, I have a methodical, customer-focused approach to work and a strong drive to see things through to completion. In my current job, I have managed the launch and implementation of essential transformations in some large conglomerates' IT department while working on products in ICT startups.

2. Executive and Work Experience

- 2.1 Mayan Chain (2019-2020) CEO and Product Design Lead, focusing on the following products:
 - 2.1.1 SaaD: Award winning enterprise grade provenance technology for verification of academic degrees¹
 - 2.1.2 **SMoney**: Award winning tokenization platform for almost every assets¹
 - 2.1.3 DACS: A blockchain based system for authenticity check of handicrafts using Hyperledger Fabric
 - 2.1.4 βChain: Award winning system to reduce the energy consumption forming P2P energy market for unused/saved energy²
- 2.2 Rahavard Inc. (2020-2023) CTO, focusing on the design and implementation of the following product:
 2.2.1 EzOnTrade: Algorithmic trading for cryptocurrencies
- 2.3 Astan Qods Razavi (2021-now) *CITO*, with the diverse roles of leading the following projects:
 - 2.3.1 Enterprise Architecture, Business Transformation, Industry 4.0 in ICT sector of AQR, Data Governance,
- 2.4 Fava Razavi (2018-2019, 2021-2023) Member, Board of directors
- 2.5 Razavi High-Tech Company (2019-2021) Vice Chairman, Board of directors
- 2.6 Simorgh Soha (2019-2020) Chairman, Board of directors

3. Academic Experiences

- 3.1 Imam Reza International University, Iran (2013-now)
 - 3.1.1 Assistant Professor ECE & BioMed Departments
 - 3.1.2 Vice President for Research and Technology
- 3.2 Linkoping University, Sweden (2011-2012)
 - 3.2.1 Post-doctoral Research Fellow ISY Department (LOLA and T-Rex Projects)

3.3 National University of Singapore, Singapore (2007-2010)

- 3.3.1 PhD Student ECE Department
- 3.3.2 Institute of Micro-Electronic (IME) Research Fellow mmWave Smart Home Project

¹ ictc.isti.ir

² energy_water.isti.ir

3.3.3 Institute of Infocomm Research (I²R) Staff Member– Cognitive Radio Optimization

3.4 Ferdowsi University of Mashhad, Iran (1998-2006)

- 3.4.1 M.Sc. Student, Telecommunications Engineering –Soft computing paradigms in time-serie modeling and prediction
- 3.4.2 Technical member of Computer and Communications Research Center
- 3.4.3 Technical member of FPGA/ASIC Research Lab
- 3.4.4 B.Sc. Student, Telecommunications Engineering

4. Innovations & Research Experience

- 4.1 Design and simulation of AI enabled models to diagnose different diseases
- 4.2 Designing, implementing and deploying different enterprise grade blockchain applications
- 4.3 Designing, implementing and deploying different applications in Fintech
- 4.4 Design and implementation of acoustic binocular using microphone array
- 4.5 Design and implementation of large scale telecommunication systems' simulator in HF-UHF bands
- 4.6 Design and implementation of the base-band block of multi-Gbps data transceiver
- 4.7 Design and implementation of an RSSI based localization system in 60 GHz band
- 4.8 Design, implementation and verification of various cryptographic ASICs like SHA-1 and MD5...
- 4.9 Design, implementation and verification of IPv4 fragmentation engine on FPGA
- 4.10 Diverse signal processing experiences like array and statistical signal processing (time series), robust and probabilistic convex optimization, machine learning and statistical pattern recognition
- 4.11 Diverse telecommunication system design and optimization including beamforming, cognitive radio optimization, relay networks, localization and LTE/LTE-A networks

5. Awards

- 5.1 Best Startup Award for Mayan Chain from ISTI, Iran 2019 and 2020
- 5.2 Distinguished University Professor of Imam Reza International, Iran 2018
- 5.3 Distinguished Researcher of IAF, Iran 2014 and 2016
- 5.4 Rohde & Schwarz's "Get the Signal" Competition Winner, Singapore 2008
- 5.5 PhD Full Scholarship Winner, NUS, Singapore 2007
- 5.6 Best Student Award, Ferdowsi University of Mashhad, Iran 2002 and 2006

6. <u>Skills</u>

6.1 Leadership Skills

Strategic thinking and planning (SWOT), Time and Task Management, Mentorship, Open Communication, Agility and Adaptability

6.2 Software/Platform/Framework Skills

C/C++/C#/C51, MATLAB/Octave, JAVA SE, x86 Assembly, Python, Pine Script, Verilog HDL, Hyperledger Fabric, TOGAF 10, APQC

7. Peer Reviewed Papers (Published/In-preparation)

a. Journals/Magazines

- 1. R. Mohseni, **E. Daneshifar**, "Robust cooperative beamforming for MIMO decode-and-forward one-way relay networks," *Physical Communication*, No. 39, April 2020.
- 2. **E. Daneshifar**, "Computationally efficient robust design in MIMO broadcast channels with norm bounded error models," *Signal Processing*, No. 177, Oct. 2020.
- 3. S.M. Tabataei Nezhad, M. Nazari, and **E.A. Gharavol**, "A Novel DoS and DDoS Attacks Detection Algorithm using ARIMA Time Series and Choatic Systems in Computer networks," *IEEE Comms. Lett.*, vol. 20, no. 4, Apr. 2016.
- 4. **E.A. Gharavol,** and E.G. Larsson, "The sign Definiteness Lemma and its Application to Robust Transceiver Optimization for Multiuser MIMO Systems," *IEEE Trans. Signal Processing*, vol. 61, no. 2, pp. 238-252, Jan. 2013.
- E.A. Gharavol, Y.C. Liang, and K. Mouthaan, "Robust Linear Transceiver Design in MIMO Ad Hoc Cognitive Radio Networks with Imperfect Channel State Information," *IEEE Trans. Wireless Communications*, vol. 10, no. 5, pp. 1448-1457, May 2011.
- E.A. Gharavol, Y.C. Liang, and K. Mouthaan, "Robust Downlink Beamforming in Multiuser MISO Cognitive Radio Networks with Imperfect Channel-State Information," *IEEE Trans. Vehicular Technology*, vol. 59, no. 6, pp. 2852 -2860, Jul. 2010.
- 7. S. Allahzadeh, **E. Daneshifar**, "Simultaneous Wireless Information and Power Transfer Optimization via Convex-Concave Procedure with Imperfect Channel State Information," Signal processing, Volume 182, May 2021, 107953.
- 8. Z. Mohammadi, **E. Daneshifar,** A. Ebrahimi Moghadam, M. Khademi, "Semi-blind restoration of gray-scale images using worst-case robust optimization with norm-bounded uncertainty and Gaussian blur model," *in preparation*.
- 9. E. Daneshifar, "HARQ with probabilistic Service Guarantee," In preparation.
- 10. E. Daneshifar, and M. Ranjbar, "Robust Adaptive Noise Cancellation," In Preparation.
- 11. A. Movahedian, **E. Daneshifar**, "Secure Decentralization via Proof-of-Authority Consensus Based Access", *In Preparation*

b. Conference Proceedings

- 1. Saeed Allahzadeh, **Ebrahim Daneshifar**, "Simultaneous Wireless Information and Power Transfer Optimization in Multiple-Antenna Broad-Cast Systems," *Proc. International Journal of Innovation in Computer Science and Information Technology*, vol.1, no. 4, pp.164 172, Jul. 2019.
- 2. Saeed Allahzadeh, **Ebrahim Daneshifar**, "Simultaneous Wireless Information and Power Transfer Optimization with Imperfect Channel State Information," *Proc. International Journal of Innovation in Computer Science and Information Technology*, vol.2, no. 1, pp.3 13, Mar. 2020.
- 3. Mortezanezhad, and **E. Daneshifar**, "Big-Data Clustering with Genetic Algorithm," *Proc. 5th Conference on Knowledge Based Engineering and Innovation (KBEI)*, pp. 702-706, Tehran, Iran, 2019.
- 4. **E.A. Gharavol**, E.G. Larsson, "Robust Joint Optimization of MIMO Interfering Relay Channels with Imperfect CSI," *Proc. 4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP)*, 2011.
- 5. **E.A. Gharavol**, E.G. Larsson, "Robust Joint Optimization of MIMO Two-Way Relay Channels with Imperfect CSI," *Proc. Allerton Conference on Communication, Control, and Computing*, 2011.
- 6. **E.A. Gharavol**, E.G. Larsson, "Robust Joint Optimization of Non-regenerative MIMO Relay Channels with Imperfect CSI," *Proc. 45th Annual Asilomar Conference on Signals, Systems, and Computers,* 2011.
- 7. H. Fang, G. Cao, **E.A. Gharavol**, K. Tom, K. Mouthaan, "60 GHz short range planar RSS localization", *Proc. Asia Pacific Microwave Conf.*, (APMC'10), 7-10 Dec., 2010.
- 8. **E.A. Gharavol**, Y.C. Liang, K. Mouthaan, "Collaborative Nonlinear Transceiver Optimization in Multi-tier MIMO Cognitive Radio Networks with Deterministically Imperfect CSI," *Proc. IEEE Global Communication Conf.* (*GLOBECOM'10*), 6-10 Dec., 2010.
- 9. E.A. Gharavol, Y.C. Liang, K. Mouthaan, "Robust Linear Beamforming for MIMO Relay with Imperfect Channel State," *Proc. IEEE 21st Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'10)*, 26-30 Sep., 2010.
- E.A. Gharavol, Y.C. Liang, K. Mouthaan, "Robust Cooperative Nonlinear Transceiver Design in Multi-Party MIMO Cognitive Radio Networks with Stochastic Channel Uncertainty," *Proc. IEEE 72nd Vehicular Technology Conf.* (VTC'10-Fall), 6-9 Sep., 2010.

- 11. E.A. Gharavol, Y.C. Liang, K. Mouthaan, "Robust Linear Transceiver Design in MIMO Ad Hoc Cognitive Radio Networks," *Proc. IEEE 71st Vehicular Technology Con. (VTC'10-Spring)*, pp. 1 5, 16-19 May, 2010.
- E.A. Gharavol, Y.C. Liang, K. Mouthaan, "Robust Downlink Beamforming in Multiuser MISO Cognitive Radio Networks," Proc. IEEE 20th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'09), pp. 808 – 812, 13-16 Sep., 2009.
- E.A. Gharavol, B.L. Ooi, K. Mouthaan, "Blind Source Separation and Bearing Estimation Using Fourier- and Wavelet-Based Spectrally Condensed Data and Artificial Neural Networks for Indoor Environments," Proc. IEEE Joint Conference on Neural Network (IJCNN'08), in IEEE World Congress on Computational Intelligence (WCCI'08), pp. 1314 - 1321, 1-8 June, 2008.
- 14. **E.A. Gharavol**, M. Khademi, and M.-R. Akbarzadeh-T., "A New Variable Bit Rate (VBR) Video Traffic Model Based on Fuzzy Systems Implemented Using Generalized Regression Neural Network," *Proc. IEEE International Conf. on Fuzzy Systems, IEEE World Congress on Computational Intelligence (WCCl'06),* pp. 9984 9990, 16-21 July 2006.
- 15. E.A. Gharavol, S.H. Khayat, "High Speed IPv4 Fragmentation Engine on Reconfigurable Hardware," *Proc. 12th Iranian Conference on Electrical Engineering (ICEE'04),* 12-14 May, 2004.
- 16. **E.A. Gharavol**, and S.H. Khayat, "Design and Implementation of High Speed Processor for SHA-1 on an FPGA," *Proc.* 2nd Iranian Society of Cryptography Conference (ISCC'03), 21-23 October, 2003.