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Education:

- Ph.D. in Electrical Engineering, Carleton University, Ottawa, Canada, 2002 - 2007.
- M.Sc. in Electrical Engineering, Sharif University of Technology, Tehran, Iran, 1999 - 2001.
- B.Sc. in Electrical Engineering, Sharif University of Technology, Tehran, Iran, 1995 - 1999.

Academic Experience:

- 2017 – Present: TMU, Tehran, Iran
Associate Professor, Department of ECE.
Teaching Experience:
 - “Wireless Communications”, Spring 2019, 2020, 2021
 - “Probability & Stochastic Processes”, Fall 2017-2020
 - “Information Theory”, Spring 2017, 2018
- 2010 – 2016: TMU, Tehran, Iran
Assistant Professor, Department of ECE
Teaching Experience:
 - “Wireless Communications”, Spring 2012, 2013
 - “Information Theory”, Spring 2016
 - “Probability & Stochastic Processes”, Fall 2012 - 2016
 - “Coding and Information Theory”, Spring 2011, 2014, 2015
 - “Digital Communication Theory”, Fall 2010
 - “Detection and Estimation Theory”, Spring 2010
 - “Advanced Coding Theory”, Fall 2010, 2011
- 2008 – 2009: University of Massachusetts, Amherst, MA, USA
Postdoctoral Fellow, Department of ECE
- 2002 – 2008: Carleton University, Ottawa, ON, Canada
Teaching Experience (TF):
 - “Introduction to Wireless Communications”, Winter 2006 and 2007
 - “Introduction to Digital Signal Processing”, Winter 2003, 2004, 2005
 - “Systems and Simulations”, Fall 2002, 2003, 2004, 2005, 2006

Service to Community:

- Associate Editor, *IEEE Transactions on Communications*, 2018 – 2020.
- Associate Editor, *IEEE Communications Letters*, 2014 – 2018.
- Associate Editor, *Elsevier Physical Communications*, 2016 – 2018.
- TPC member of *Global Telecommunications Conference (Globecom)*, 2017.
- TPC member of *International Conference on Communications (ICC)*, 2015 and 2018.
- TPC member of *Wireless Communications and Networking Conference (WCNC)*, 2014, 2015, 2016.

Service to University:

- 2017 – 2020: Director, University International Affairs Office
 - In charge of visa processing for students and researchers
 - Event coordinator for international academic delegates, international grant agencies representatives, people from diplomatic missions
 - Consultant to academic members to participate in international projects with focus on EU Horizon 2020 and Erasmus+ programs
- 2013 – 2017: Telecommunications Division Coordinator, Department of ECE
 - Program course scheduling management
 - Course and curriculum development
 - Student admission
 - Faculty recruitment/evaluation/promotion

Industry Experience:

- 2010 – 2013: Mobile Communication Company of Iran (MCI)
 - Project Head, “Customization of services in 3G and 4G networks for the Iranian market”, 2012-2013, (Delivered Successfully).
 - Project Head, “Development of a network planning license controller software”, 2011-2012, (Delivered Successfully).
 - Member of Project Technical Staff, “MCI roadmap to migrate to next generation of mobile systems”, 2010-2011, (Delivered Successfully).
- 2001-2002: Micro-Modje Industries, Iran, Telecom. Engineer.

Awards & Honors

- Carleton University **Senate Medal** for outstanding academic achievement, 2007, Ottawa, Canada.
- Industrial Research and Development Post-Doctoral Fellowship awarded by Natural Science and Engineering Research Council of Canada (**NSERC-IRDF**), 2007.
- Ontario Graduate Scholarship (**OGS**), 2006-07.
- Ontario Graduate Scholarship for Science and Technology (**OGSST**), 2005-06.
- Ranked 73rd in the Iranian public universities entrance exam for undergraduate studies (among about 0.4 million participants), 1995.

References

- Dr. Daniel J. Costello, University of Notre Dame, IN, USA
- Dr. Hossein Pishro-Nik, University of Massachusetts, Amherst, MA, USA
- Dr. Halim Yanikomeroglu, Carleton University, Ottawa, ON, Canada
- Dr. Amir H. Banihashmi, Carleton University, Ottawa, ON, Canada.

Language Skills

English (Professional), Arabic (Reading: Intermediate, Speaking/Listening: Basic), Persian (mother tongue)

Research Area Keywords: UAV/ABS path planning, Stochastic Geometry, Multiple Access Schemes in 5G, Resource Allocation in Wireless Systems, Coding and Information Theory

IEEE Journal Publications (28):

- M. Khosravi, S. Enayati, H. Saeedi, and H. Pishro-Nik, "Multi-Purpose Drones for Coverage and Transport Applications," accepted for publication in *IEEE Transactions on Wireless Communications*, Jan. 2021.
- N. Gholipour, H. Saeedi, N. Mokari, and E. Jorswieck, "E2E QoS Guarantee for the Tactile Internet via Joint NFV and Radio Resource Allocation," *IEEE Transactions on Network and Service Management*, vol. 17, no. 3, June 2020.
- N. Gholipour, S. Parsaeefard, M. Javan, N. Mokari, H. Saeedi, and H. Pishro-Nik, "Resource Management and Admission Control for Tactile Internet in Next Generation of Radio Access Network," *IEEE Access*, vol. 8, July 2020.
- S. Enayati, H. Saeedi, H. Pishro-Nik, and H. Yanikomeroglu, "Optimal Altitude Selection of Aerial Base Stations to Maximize Coverage and Energy Harvesting Probabilities: A Stochastic Geometry Analysis," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 1, Jan. 2020.
- A. Rajasekaran, M. Vameghestahbanati, M. Farsi ; H. Yanikomeroglu, and H. Saeedi, "Resource Allocation-Based PAPR Analysis in Uplink SCMA-OFDM Systems", *IEEE Access*, vol. 7, no. 11, Nov. 2019.
- S. Enayati, H. Saeedi, H. Pishro-Nik, and H. Yanikomeroglu, "Moving Aerial Base Station Networks: Stochastic Geometry Analysis and Design Perspective," *IEEE Transactions on Wireless Communications*, vol. 18, no. 6, June 2019.
- M. Dabiri and H. Saeedi, "Dynamic SCMA Codebook Assignment Methods: A Comparative Study," *IEEE Communications Letters*, vol. 22, no. 2, Feb. 2018.
- M. Moltafet, N. Mokari, M. R. Javan, H. Saeedi, and H. Pishro-Nik, "A New Multiple Access Technique for 5G: Power Domain Sparse Code Multiple Access (PSMA)", *IEEE Access*, vol. 6, no. 2, Feb. 2018.
- M. Abedi, N. Mokari, H. Saeedi, and H. Yanikomeroglu, "Robust Resource Allocation to Enhance Physical Layer Security in Systems with Full-Duplex Receivers: Active Adversary," *IEEE Transactions on Wireless Communications*, vol. 16, no. 2, Feb. 2017.
- S. Enayati and H. Saeedi, "Deployment of Mixed FSO/RF Links in Backhaul of Rural Area Cellular Networks: Advantages and Performance Analysis," *IEEE Communications Letters*, vol. 20, no. 9, Sept. 2016.
- H. Mani and H. Saeedi, "Message Passing Based Decoding of Convolutional Codes: Complexity and Performance Analysis," *IEEE Communications Letters*, vol. 20, no. 2, Feb. 2016.
- N. Mokari, S. Parsaeefard, P. Azmi, H. Saeedi, and E. Hussain, "Robust Ergodic Uplink Resource Allocation in Underlay OFDMA Cognitive Radio Networks," *IEEE Transactions on Mobile Computing*, vol. 15, no. 2, Feb. 2016.
- N. Mokari, S. Parsaeefard, H. Saeedi, P. Azmi, and E. Hossain, "Secure Robust Ergodic Resource Allocation in Relay-Assisted Cognitive Radio Networks," *IEEE Transactions on Signal Processing*, vol. 63, no. 2, Jan 2015.

- N. Mokari, H. Saeedi, and P. Azmi, “Quantized Ergodic Radio Resource Allocation in Cognitive Femto Networks with Controlled Collision and Power Outage Probabilities”, *IEEE Journal on Selected Areas in Communications*, vol. 32, no. 11, Nov. 2014.
- N. Mokari, P. Azmi, and H. Saeedi, “Quantized Ergodic Radio Resource Allocation in Cognitive Radio Networks with Guaranteed Quality of Service for Primary Network”, *IEEE Transactions on Vehicular Technology*,” vol. 63, no. 8, Oct. 2014.
- N. Mokari, S. Parsaeefard, H. Saeedi, and P. Azmi, “Cooperative Secure Resource Allocation in Cognitive Radio Networks with Guaranteed Secrecy Rate for Primary Users” *IEEE Transactions on Wireless Communications*, vol. 13, no. 3, Feb. 2014.
- N. Mokari, P. Azmi, and H. Saeedi, “Quantized Ergodic Radio Resource Allocation in OFDMA-based Cognitive DF Relay-Assisted Networks,” *IEEE Transactions on Wireless Communications*, vol. 12, no. 10, Oct. 2013.
- S. Hadadi, H. Saeedi, and K. Navaie, “Managing Imperfect Spectrum Sensing in the Secondary Service: Increasing Sensing Time or Adopting Channel Coding?,” *IEEE Communications Letters*, vol. 17, no. 6, pp. 1232-1235, June 2013.
- N. Mokari, H. Saeedi, and K. Navaie, “Channel Coding Increases the Achievable Rate of the Cognitive Networks,” *IEEE Communications Letters*, 2013, vol. 17, no. 3, pp. 495-498, March 2013.
- R. Asvadi, A. H. Banihashemi, Mahmoud Ahmadian-Attari, and H. Saeedi, “LLR Approximation for Wireless Channels Based on Taylor Series and Its Application to BICM with LDPC Codes,” *IEEE Transactions on Communications*, vol. 60, pp. 1226-1236, May 2012.
- H. Saeedi, H. Pishro-Nik and A. H. Banihashemi, “On systematic design of universally capacity approaching rate-compatible sequences of LDPC code ensembles over binary-input output-symmetric memoryless channels,” *IEEE Transactions on Communications*, vol. 59, pp. 1807-1819, July 2011.
- H. Saeedi and A. H. Banihashemi, “New Sequences of Capacity Achieving LDPC Code Ensembles over Binary Erasure Channels,” *IEEE Transactions on Information Theory*, vol. 56, pp. 6332 - 6346, Dec. 2010.
- H. Saeedi and A. H. Banihashemi, “On the Design of LDPC codes ensembles for the BIAWGN channels,” *IEEE Transactions on Communications*, vol.58, May 2010.
- H. Saeedi and A. H. Banihashemi, “Systematic Design of LDPC Codes over Binary Erasure Channels,” *IEEE Transactions on Communications*, vol. 58, pp. 118-127, Jan 2010.
- H. Saeedi and A. H. Banihashemi, “Design of Irregular LDPC Codes for BIAWGN Channels with SNR Mismatch,” *IEEE Transactions on Communications*, vol. 57, pp. 6-11, Jan. 2009.
- H. Saeedi and A. H. Banihashemi, “Performance of Belief Propagation for Decoding LDPC codes in the Presence of Channel Estimation Error,” *IEEE Transactions on Communications*, vol. 55, pp. 83-89, Jan. 2007.

- H. Saeedi and A. H. Banihashemi, “A Note on Signal-to-Noise Ratio Mismatch for Low-Density Parity-Check Coded Magnetic Recording Channels by W. Tan and J. R. Cruz,” *IEEE Transactions on Magnetics*, vol. 42, pp. 3765-3766, Nov. 2006.
- H. Saeedi, M. Sharif, and F. Marvasti, “Clipping Noise Cancellation in OFDM Systems Using Over-sampled Signal Reconstruction,” *IEEE Communications Letters*, vol. 6, pp. 73-75, Feb. 2002.

Selected Conference Presentations:

- S. Enayati, H. Saeedi and H. Pishro-Nik, “Trajectory Processes that Preserve Uniformity: A Stochastic Geometry Perspective,” in Proc. *International Symposium on Information Theory (ISIT)*, Vail, CO, USA, June 2018.
- N. Gholipoor, H. Saeedi, and N. Mokari, “Cross-Layer Resource Allocation for Mixed Tactile Internet and Traditional Data in SCMA Based Wireless Networks,” in Proc. *Wireless Communications and Networking Conference (WCNC)*, Workshop on Flex. and Agile Networks, Barcelona, Spain, April. 2018.
- M. Khas, H. Saeedi, and R. Asvadi, “LDPC code design for correlated sources using EXIT charts”, in Proc. *IEEE International Symposium on Information Theory (ISIT)*, Aachen, Germany, July 2017.
- B. Khamidehi, M. Sabbaghian, H. Saeedi, “Power Allocation in Uplink LTE Femtocells with Zero Forcing Frequency Domain Equalizer,” in Proc. *Wireless Communications and Networking Conference (WCNC)*, Doha, Qatar, April. 2016.
- M. R. Abedi, N. Mokari and H. Saeedi, and H. Yanikomeroglu, “Secure Robust Resource Allocation in the Presence of Active Eavesdroppers using Full-Duplex Receivers,” in Proc. *IEEE Vehicular Technology Conference (VTC)*, Boston, MA, USA, Sept. 2015.
- M. R. Abedi, N. Mokari and H. Saeedi, and H. Yanikomeroglu, “Secure Robust Resource Allocation using Full-Duplex Receivers,” in Proc. *IEEE International Conference on Communications (ICC)* – Workshop on Physical Layer Security, London, UK, June 2015.
- N. Mokari, M. Abedi, H. Saeedi, and P. Azmi, “Ergodic Radio Resource Allocation Based on Imperfect Channel Distribution Information,” in Proc. *IEEE Wireless Communications and Networking Conference (WCNC)*, Istanbul, Turkey, April 2014.
- H. Mamani, H. Saeedi, A. Eslami and H. Pishro-nik, “On Generalized EXIT Charts of LDPC Code Ensembles over Binary-Input Output-Symmetric Memoryless Channels,” in Proc. *IEEE International Symposium on Information Theory (ISIT)*, MIT, Cambridge, MA, USA, July 2012.
- H. Saeedi and H. Pishro-Nik, “On LDPC Codes over Symmetric Channels,” in Proc. *IEEE Information Theory Workshop (ITW)*, Volos, Greece, June 2009.
- H. Saeedi and A. H. Banihashemi, “New Sequences of Capacity Achieving LDPC Code Ensembles over Binary Erasure Channels,” in Proc. *IEEE International Symposium on Information Theory (ISIT)*, Toronto, ON, Canada, July 2008.

- H. Saeedi and Amir H. Banihashemi, “Deterministic Design of LDPC Codes over Binary Erasure Channels,” in Proc. *IEEE Global Telecommunication Conference (Globecom)*, Dec. 2007, Washington DC, USA.
- M. Sabbaghian, D. Falconer, and H. Saeedi,” BER Transfer Chart Analysis of Turbo Frequency Domain Equalization,” in Proc. *IEEE Vehicular Technology Conference (VTC)*, Montreal, QC, Canada, September 2006.