Personal:

Name:	Hamidreza Tavakoli
Academic Rank:	Assistant Professor
Department::	Electrical Engineering
Faculty:	Electrical & Computer Engineering
University::	Hakim Sabzevari University
Email:	tavakoli@hsu.ac.ir
Phone:	+98 51 4401 2827

Education:

- Electrical Engineering, Electronics (PhD, Iran University of Science & Technology, 2014)
- Electrical Engineering, Electronics (MSc, Iran University of Science & Technology, 2003)
- Electrical Engineering, Electronics (BSc, Ferdowsi University of Mashhad, 2000)
- Sabbatical Leave, Toronto Metropolitan University (Ryerson University) (2012-2013)

Research Interests:

- Fault Tolerant Design of Hardware Systems
- Cryptanalysis
- Performance Evaluation of Wireless Networks
- Coding
- Implementation of Cryptographic Algorithms
- Network Security

Professional Experiences:

- Head of Electrical Engineering Department, Hakim Sabzevari University
- Wireless Sensor Networks (Lecturer, several Semesters)
- Fault Detection & Tolerance (Lecturer, several Semesters)
- Member of Iranian Society of Cryptology

Publications

1. Ahmadnia, M.; Hajipour, A.; Tavakoli, H., "**Robust variable-order fractional PID-LP fuzzy controller for Automatic Voltage Regulator systems**", Applied Soft Computing, 167: 112268 (2024).

2. Alizadeh, B.; Hajipour, A.; Tavakoli, H.; Nasrabadi, A., "**Robust Trajectory Tracking of Delta Parallel Robot Using Fractional-Order Sliding Mode Control**", IEEE Access, 11: 86397-86412 (2023).

3. Safkhani, M.; Bagheri, N.; Kumari, S.; Tavakoli, H.; Kumar, S.; Chen, J., A., "**RESEAP: An ECC-Based Authentication and Key Agreement Scheme for IoT Applications**", IEEE Access 8: 200851-200862 (2020).

4. Hosseini, S. A., Hajipour, A.; Tavakoli, H., "**Design and optimization of a CMOS power amplifier using innovative fractional-order particle swarm optimization**", Applied Soft Computing, 85: (2019).

5. Hajipour, A.; Tavakoli, H., "**On adaptive chaos control and synchronization of a novel fractional-order financial system**", Proceedings - 2019 6th International Conference on Control, Instrumentation and Automation, ICCIA 2019.

6. Hajipour, A.; Tavakoli, H., "**Dynamic Analysis and Adaptive Sliding Mode Controller for a Chaotic Fractional Incommensurate Order Financial System**", International Journal of Bifurcation and Chaos 27(13): 1750198:1-1750198:14 (2017).

7. Tavakoli, H.; Mišic, J.; Naderi, M.; Mišic, V.B., "**Adaptive low-energy clustering in slotted beacon-enabled IEEE 802.15.4 networks**", Wireless Communications and Mobile Computing 16(4): 393-407 (2016)

8. Tavakoli, H.; Misic, J.; Misic, V.B., "**Lifetime of a linear IEEE 802.15.4 sensor field with randomized sleep and bridge rotation**", 2016 International Wireless Communications and Mobile Computing Conference, IWCMC 2016/

9. Tavakoli, H.; Misic, J.; Misic, V.B.; Naderi, M., "**Energy-Efficient Cluster-Head Rotation in Beacon-Enabled IEEE 802.15.4 Networks**", IEEE Transactions on Parallel and Distributed Systems 26(12): 3371-3380 (2015)

10. Tavakoli, H.; Mišić, J.; Naderi, M.; Mišić, V.B., "**Evaluation of Single Dimensional Sensor Network Implemented Using Slave-Slave Bridging in IEEE 802.15.4 Technology**", Ad-Hoc and Sensor Wireless Networks 24(3-4): 179-197 (2015)

11. Tavakoli, H.; Misic, J.; Naderi, M.; Misic, V.B., "**Energy-efficient clustering in IEEE 802.15.4 wireless sensor networks**", Proceedings - International Conference on Distributed Computing Systems 2013

12. Tavakoli, H.; Naderi, M., "**Increasing lifetime of a two-dimensional wireless sensor network using radio range adjustments**", IEICE Transactions on Information and Systems 2013

13. Tavakoli, H.; Mišić, J.; Naderi, M.; Mišić, V.B., "**Interaction of clustering period and event sensing reliability in IEEE 802.15.4 based WSNs**", 2013 9th International Wireless Communications and Mobile Computing Conference, IWCMC 2013

14. Tavakoli, H.; Mišiç, J.; Naderi, M.; Mišiç, V.B., "**Lifetime properties in cluster-based IEEE 802.15.4 WSNs**", IEEE Vehicular Technology Conference 2013

15. Kourkchi, H.; Tavakoli, H.; Naderi, M., "**An improvement of collision probability in biased birthday attack against A5/1 stream cipher**", 2010 European Wireless Conference, EW 2010