

Pouya Ostovari

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Charles W. Davidson College of Engineering
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Education

- **PhD.** Computer and Information Sciences, 2010-2015
Temple University, Philadelphia, USA
Thesis Title: *Priority-Based Data Transmission in Wireless Networks using Network Coding.*
- **M.Sc.** Software Engineering, 2006-2009
Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran
Thesis Title: *Design of a Scheduling Mechanism for Sensor Nodes Activity in Wireless Sensor Networks considering the Cross-Layer Effects.*
- **B.S.** Software Engineering, 2000-2005
Shahid Beheshti University (formerly National University of Iran), Tehran, Iran
Project: *Design and Implementation of a Public Error Handler for Database Applications.*

Research Interests

- Network Coding in Wireless Networks
- Internet of Things (IoT)
- Network Security
- Video Streaming
- Wireless Sensor and Ad-hoc Networks
- Fault Tolerant and Distributed Systems

Employment Record

- Assistant Professor, San Jose State University, 8/2017-current
- Assistant Professor, Temple University, 1/2016-7/2017
- Research Assistant and Teaching Assistant, Temple University, 9/2010-12/2015
- Database designer and Developer, Fararah System Company, 5/2006-3/2007
- Managing Director, Sustainable Development Institute of Damoun, 3/2007-3/2010

Experimental Qualifications

- Programming Languages: C/C++, C#, VB .Net, Python, Java, Prolog, Pascal, and Assembly.
- In depth practical experience with application packages such as: MATLAB, Oracle, SQL Server, Microsoft Office, Photoshop, and LaTeX.
- Operating Systems: Microsoft Windows, Linux, and DOS.

Academic Honors

- Outstanding Research Assistant: 2015-2016 Award for Outstanding Research by a Graduate Student of the College of Science and Technology, Temple University.
- Summer Fellowship, Temple University, 2015.

Peer-Reviewed Publications

Journal Publications

- [Pouya Ostovari](#), Jie Wu, Abdallah Khreishah, and Ness B. Shroff, "[Scalable Video Streaming with Helper Nodes using Random Linear Network Coding](#)," *IEEE/ACM Transactions on Networking (TNET)*, Vol. 23, No. 3, pp. 1574-1587, June 2016.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Cooperative Internet Access using Helper Nodes and Opportunistic Scheduling](#)," *IEEE Transactions on Vehicular Technology (TVT)*, Vol. 66, No. 7, pp. 6439-6448, July 2017.
- [Pouya Ostovari](#) and Jie Wu, "[Robust Wireless Transmission of Scalable Coded Videos using two-Dimensional Network Coding](#)," *Journal of Computer Network*, Vol. 95, pp. 115-126, February 2016.
- [Pouya Ostovari](#), Abdallah Khreishah, and Jie Wu, "[Broadcasting with Hard Deadlines in Wireless Multi-hop Networks Using Network Coding](#)," *Wireless Communications and Mobile Computing*, Vol. 15, No. 5, pp. 983-999, April 2015.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Symbol-Level Reliable Broadcasting of Sensitive Data in Error-Prone Wireless Networks](#)," *Journal of Parallel and Distributed Computing (JPDC)*, Vol. 74, No. 7, pp. 2673-2685, 2014.
- Abdallah Khreishah, Issa M. Khalil, [Pouya Ostovari](#), and Jie Wu, "[Flow Based XOR Network Coding for Lossy Wireless Networks](#)," *IEEE Transactions on Wireless Communications*, Vol.11, No. 6, pp. 2321-2329, June 2012.
- [Pouya Ostovari](#), Abdallah Khreishah, and Jie Wu, "[Trade-off between Accuracy and Feedbacks in Wireless Network Communication](#)," Accepted to appear in *Ad-Hoc & Sensor Wireless Networks*.

Peer-Reviewed Conference Proceedings

- Rajorshi Biswas, Jie Wu, Wei Chang, and [Pouya Ostovari](#) "[Optimal Filter Assignment Policy Against Transit-link Distributed Denial-of-Service Attack](#)," *Proc. of the 38th IEEE Global Communications Conference (IEEE GLOBECOM)*, December 9-13, 2019.
- [Pouya Ostovari](#), Jie Wu, and Alireza Jolfaei "[Data Exchange in Delay Tolerant Networks using Joint Inter- and Intra-Flow Network Coding](#)," *Proc. of the 37th IEEE International Performance Computing and Communications Conference (IEEE IPCCC)*, November 16-18, 2018.
- Ning Wang, Jie Wu, and [Pouya Ostovari](#) "[Coverage and Workload Cost Balancing in Spatial Crowdsourcing](#)," *Proc. of the 14th IEEE International Conference on Ubiquitous Intelligence and Computing (IEEE UIC)*, August 4-8, 2017.
- [Pouya Ostovari](#) and Jie Wu "[Fault-Tolerant and Secure Data Transmission Using Random Linear Network Coding](#)," *Proc. of the 26th IEEE International Conference on Computer Communications and Networks (IEEE ICCCN)*, July 31-August 3, 2017.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah "[Efficient Online Collaborative Caching in Cellular Networks with Multiple Base Stations](#)," *Proc. of the 13th IEEE International Conference on Mobile Ad hoc and Sensor Systems (IEEE MASS)*, October 10-13, 2016.
- [Pouya Ostovari](#) and Jie Wu "[Fault-Tolerant and Secure Distributed Data Storage Using Random Linear Network Coding](#)," *Proc. of International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt 2016)*, May 9-13, 2015.
- [Pouya Ostovari](#) and Jie Wu "[Reliable Broadcast with Joint Forward Error Correction and Erasure Codes in Wireless Communication Networks](#)," *Proc. Of IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2015)*, October 19-22, 2015.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Cooperative Mobile Internet Access with Opportunistic Scheduling](#)," *Proc. of International Symposium on Resilient Communication Systems (ISRCS)*, August 18-20, 2015.
- [Pouya Ostovari](#) and Jie Wu, "[Reliable Videos Broadcast with Network Coding and Coordinated Multiple Access Points](#)," *Proc. of IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)*, June 14-17, 2015.
- [Pouya Ostovari](#) and Jie Wu, "[Robust Wireless Delivery of Scalable Videos using Inter-layer Network Coding](#)," *Proc. of IEEE Wireless Communications and Networking Conference (WCNC)*, March 9-12, 2015.
- [Pouya Ostovari](#), Jie Wu, and Ying Dai, "[Priority-Based Broadcasting of Sensitive Data in Error-Prone Wireless Networks](#)," *Proc. of the 2nd International Symposium on Resilient Communication Systems (ISRCS)*, August 19- 21, 2014.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[The Benefits of Cooperation between the Cloud and Private Data Centers for Multi-rate Video Streaming](#)," *Proc. of the 23rd International Conference on Computer Communications and Networks (ICCCN)*, August 4-7, 2014.
- [Pouya Ostovari](#), Abdallah Khreishah, and Jie Wu, "[Multi-Layer Video Streaming with Helper Nodes using Network Coding](#)," *Proc. of the IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, October 14-16, 2013.

- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Efficient Symbol-Level Transmission in Error-Prone Wireless Networks With Network Coding](#)," *Proc. of the 14th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)*, June 4-7, 2013.
- Pouya Ostovari and Jie Wu, "[Throughput and Fairness Aware Dynamic Network Coding in Wireless Communication Networks](#)," *Proc. of the 6th International Symposium on Resilient Control Systems (ISRCS)*, August 13- 15, 2013.
- [Pouya Ostovari](#), Abdallah Khreishah, and Jie Wu, "[Cache Content Placement Using Triangular Network Coding](#)," *Proc. of IEEE Wireless Communications and Networking Conference (WCNC)*, April 7-10, 2013.
- [Pouya Ostovari](#), Abdallah Khreishah, and Jie Wu, "[Deadline-aware Broadcasting in Sensor Networks with Network Coding](#)," *Proc. of the IEEE Global Telecommunications Conference (GLOBECOM)*, December 2012.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Deadline-aware Broadcasting in Wireless Networks with Local Network Coding](#)," *Proc. of International Conference on Computing, Networking and Communications (ICNC)*, January 30 - February 2, 2012.
- [Pouya Ostovari](#), Mehdi Dehghan, and Jie Wu, "[Connected Point Coverage in Wireless Sensor Networks using Robust Spanning Tree](#)," *Proc. of International Conference on Distributed Computing Systems Workshops (ICDCSW)*, June 20-24, 2011.
- Abdallah Khreishah, Jie Wu, [Pouya Ostovari](#) and Issa M. Khalil, "[Flow Based XOR Network Coding for Lossy Wireless Networks](#)," *Proc. of the IEEE Global Telecommunications Conference (GLOBECOM)*, December 2011.

Book Chapters

- [Pouya Ostovari](#) and Jie Wu, "[Towards Network Coding for Cyber-Physical Systems: Security Challenges and Applications](#)," *Security & Security and Privacy in Cyber-Physical Systems: Foundations and Applications*, Ed. Houbing Song, Ed. Glenn A. Fink, Sabina Jeschke, Ed. Gilad L. Rosner, Wiley, 2017.
- [Pouya Ostovari](#), Jie Wu, and Abdallah Khreishah, "[Network Coding Techniques for Wireless and Sensor Networks](#)," *The Art of Wireless Sensor Networks*, vol. 1, pp. 129-162, H. M. Ammari (ed), Springer, 2014.

Professional Activities

- Area co-chair of the 29th International Conference on Computer Communications and Networks (ICCCN 2020).
- Co-chair of Security Hardening of Industrial IoT Systems (special session) in IEEE International Conference on Industrial Technology (ICIT), 2019.
- Technical program committee member of IEEE International Conference on Mobile Ad-Hoc and Smart Systems (IEEE MASS), 2018 and 2019.
- Publicity chair of the 14th IEEE International Conference on Advanced and Trusted Computing (IEEE ATC), 2017.
- Program committee of the 26th IEEE International Conference on Computer Communication and Networks (IEEE ICCCN), 2017.
- Program committee member of International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage (SpaCCS), 2016.
- Session chair of IEEE Wireless Communications and Networking Conference (WCNC), 2015.
- Reviewer for IEEE/ACM Transactions on Networking, IEEE Transactions on Services Computing, IEEE Transactions on Communications, International Journal of Distributed Sensor Networks, and Kuwait Journal of Science.
- Reviewer for IEEE International Conference on Computer Communications (IEEE INFOCOM), IEEE Communications Society Conference on Sensor and Ad Hoc Communications and Networks (SECON), International Conference on Distributed Computing Systems (ICDCS).

Teaching Experience

- San Jose State University
 - Wireless Network Communications
 - Introduction to Programming in Python
 - Digital Circuits
 - Senior Project
- Temple University:
 - Computer Architecture
 - Introduction to Problem Solving and Programming in Python
 - Network Architecture
 - Cyberspace and Society
 - Networked Application Systems
 - Component-Based Software Design
 - Discrete Structures
 - Network Security
- Amirkabir University of technology, Teaching Assistant:
 - Data Structures

References

- Dr. Jie Wu, Laura H. Carnell Professor, Temple University.
Email: jiewu@temple.edu
- Dr. Abdallah Khreishah, Assistant Professor, New Jersey Institute of Technology.
Email: abdallah@njit.edu
- Dr. Ness B. Shroff, Chaired Professor, Ohio State University.
Email: shroff@ece.osu.edu
- Dr. Mahdi Dehghan, Associate Professor, AmirKabir University of Technology.
Email: dehghan@aut.ac.ir
- Dr. Hossein Pedram, Associate Professor, AmirKabir University of Technology.
Email: pedram@aut.ac.ir