Yasaman Keshtkarjahromi

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Work Authorization Status: U.S. Permanent Resident

Education

University of Illinois at Chicago

Ph.D. in Electrical and Computer Engineering, Aug. 2017 (expected)

GPA: 4.0/4.0

University of Tehran, Iran

M.S. in Electrical and Computer Engineering, Sep. 2010

Shiraz University, Iran

B.S. in Electrical and Computer Engineering, Sep. 2007

Research Interest

- Wireless Networks
- Wireless Communications

Research and Work Experience

Research Assistant at "Networking Research Lab" (Jan. 2014 – present)

University of Illinois at Chicago, Chicago, IL

Ph.D. thesis topic: "Design and Optimization of Cooperative Wireless Networks"

Research Intern at "Huawei R&D" (July 2016 - Sep. 2016)

Wireless Lab

Rolling Meadows, IL

Worked on development and testing of system level simulator for 3GPP 5G standards

Research Intern at "Bell Labs - Nokia" (June 2015 – Aug. 2015)

Mathematics of Networks and Systems Research Department

Murray Hill, NJ

Conducted research on the limit of non-linear precoding methods in terms of complexity and throughput for G-fast standard

Research Assistant at "Multimedia Communications Lab" (Jan. 2011 – Dec. 2013)

University of Illinois at Chicago, Chicago, IL

Conducted research on energy efficiency in heterogeneous wireless sensor networks

Research Assistant at "Wireless Communication Center" (Sep. 2008 – Sep. 2010)

University of Tehran, Tehran, Iran

M.S. thesis topic: "Distributed Variable Length Coding with application in multimedia image and video processing"

Publications

Preprints

1. **Yasaman Keshtkarjahromi**, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "D2D Networking Meets Cellular via Network Coding," *submitted to IEEE/ACM Transactions on Networking in Oct. 2016, received "Minor Revision" decision in Jan. 2017.*

Journal Papers

1. **Yasaman Keshtkarjahromi**, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "Content-Aware Network Coding over Device-to-Device Networks," in *IEEE Transactions on Mobile Computing*, 2016.

Conference Papers

- 1. **Yasaman Keshtkarjahromi**, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "D2D Meets Cellular Using Network Coding," *in ACM CoNext Student Workshop*, Irvine, CA, Dec. 2016.
- Yasaman Keshtkarjahromi, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "Network Coding for Cooperative Mobile Devices with Multiple Interfaces", in Proc. of IEEE Milcom, Tampa, FL, Oct. 2015.
- 3. **Yasaman Keshtkarjahromi**, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "Content-Aware Instantly Decodable Network Coding over Wireless Networks," *in Proc. of IEEE International Conference on Computing, Networking and Communications (ICNC)*, Anaheim, CA, Feb. 2015.
- 4. **Yasaman Keshtkarjahromi**, Mehrdad Valipour, Farshad Lahouti, "Multi-Level Distributed Arithmetic Coding with Nested Lattice Quantization," *in Proc. of IEEE Data Compression Conference (DCC)*, Snowbird, UT, Mar. 2014.
- 5. **Yasaman Keshtkarjahromi**, Rashid Ansari, Ashfaq Khokhar, "Energy Efficient Decentralized Detection Based on Bit-optimal Multi-hop Transmission in One-dimensional Wireless Sensor Network," *in Proc. of IEEE Wireless Days (WD)*, Valencia, Spain, Nov. 2013.
- 6. Daniella Tuninetti, Natasha Devroye, **Yasaman Keshtkarjahromi** "On Cognitive Channels with an Oblivion Constraint," in Proc. of IEEE International ICST Conference on Cognitive Radio Oriented Wireless Networks and Communications (CROWNCOM), Osaka, Japan, June 2011.
- 7. Mehran Yazdi, Zahra Adelpour, Batoul Bahraini, **Yasaman Keshtkarjahromi**, "Novel Ridge Orientation Based Approach for Fingerprint Identification Using Co-occurrence Matrix," *in Proceedings of World Academy of Science, Engineering and Technology*, vol. 26, pp. 371-375, Dec. 2007.

Poster / Invited Talk

- 1. "Quality Improvement in Instantly Decodable Network Coding," Invited Talk in CRAB Workshop, ICNP, Raleigh, NC, Oct. 2014.
- Yasaman Keshtkarjahromi, Hulya Seferoglu, Rashid Ansari, Ashfaq Khokhar, "Content-Aware Instantly Decodable Network Coding over Wireless Networks," Poster Presentation in N2Women Workshop, SIGCOMM, Chicago, IL, Aug. 2014. (Received the best poster award)

Awards and Honors

- Provost Award for Graduate Research (Univ. of Illinois at Chicago, 2016)
- Best Poster Award in N2Women Workshop, SIGCOMM Conference (Chicago, IL, 2014)
- Student Travel Grant (CoNext 2016, Milcom 2015, ICNP 2014)
- Student Travel Presenter's Award, DCC Conference (Snowbird, UT, 2014)
- Member of National Organization for Development of Exceptional Talents (NODET) (Iran, 1999 –2003)

Software Skills

- Programming Languages: C/C++

- Engineering Software: MATLAB, SIMULINK

Professional Activities

Technical Program Committee Member

IEEE WTS 2017

Reviewer for Conferences / Journals:

- Conferences: WCNC 2017, WTS 2017, PIMRC 2015, ICC 2015, N2Women 2014, ICC 2013.
- **Journals:** IEEE Transactions on Mobile Computing, IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, Ad Hoc Networks, International Journal of Electronics and Communications, Computer Networks Journal.

Volunteer Work

- Volunteer at Expanding Your Horizons (EYH) 2015, Chicago, IL
- Volunteer at IEEE Explore the Future Symposium 2014, Chicago, IL
- Volunteer Judge for Future City Competition 2014, Chicago, IL

Membership:

IEEE, ACM, N2Women, WISE