CONTACT Information School of Electrical, Computer and Energy Engineering,

Arizona State University,

Tempe, AZ.

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RESEARCH INTERESTS Information Theory
Machine Learning

Optimization Self-Driving Cars

Wireless Communications

EDUCATION

Arizona State University, Tempe, AZ, USA

Ph.D., Electrical Engineering, Aug. 2014—Present

- Work on: Capacity Region of Communication Channels in the Presence of Adversaries
- Advisor: Professor Oliver Kosut
- Major GPA: 4.0, and overall GPA: 3.75

Shahid Bahonar University of Kerman, Kerman, Iran

M.Sc., Electrical Engineering, 2011–2013

- Work on: Block Coding for MIMO-OFDM Channels
- Overall GPA: 19.58/20 (with the Highest Honor)

B.Sc., Electrical Engineering, 2007–2011

• Overall GPA: 18.26/20 (with Honors)

Professiona Experiences

PROFESSIONAL Research Assistant

• Arizona State University, Tempe, AZ, USA. Aug. 2014-Present

Lecturer

- Probability, Random Variables and Stochastic Processes, Shahid Bahonar University of Kerman, Iran, spring 2014.
- Engineering Mathematics, Shahid Bahonar University of Kerman, Iran, spring 2014.
- Communication I, Besat Institute of Higher Education of Kerman, Iran, spring 2014.
- Signals and Systems, Besat Institute of Higher Education of Kerman, Iran, spring 2014.

Teaching Assistant

- Digital Signal Processing, Shahid Bahonar University of Kerman, Iran, fall 2013.
- Communication I, Shahid Bahonar University of Kerman, Iran, fall 2012.
- Communication II, Shahid Bahonar University of Kerman, Iran, spring 2012.
- Digital Signal Processing, Shahid Bahonar University of Kerman, Iran, fall 2011.

Publications

- 1. F. Hosseinigoki and O. Kosut, "Capacity of the Gaussian Arbitrarily-Varying Channel with List Decoding," in Proc. *IEEE International Symposium on Information Theory* (ISIT), pp. 471-475, Vail, CO, Jun. 2018.
- 2. F. Hosseinigoki and O. Kosut, "The Gaussian Interference Channel in the Presence of Malicious Jammers," submitted to *IEEE Transaction on Information Theory* on Dec. 2017.
- 3. F. Hosseinigoki and O. Kosut, "The Gaussian Interference Channel in the Presence of a Malicious Jammer," in Proc. 54th Annual Allerton Conference on Communication, Control, and Computing, pp. 679-686, Monticello, IL, 2016.
- 4. M. Samavat, F. Hosseini G. and S. Talebi, "Performance Improving of MIMO-OFDM Block Codes by Achieving a Suboptimum Permutation Distance," in Proc. 2nd Majlesi Int. Symposium on Telecommunication Devices (MISTD), Tehran, Iran, Feb. 2014.
- M. Shahabinejad, F. Hosseini G. and S. Talebi, "Space-Frequency Codes Based on the Space-Time Codes with Very Low Complexity for the Decoder," *IEEE Transaction* on *Vehicular Technology*, vol. 62, no. 9, pp. 46784684, Nov. 2013.
- M. Samavat, F. Hosseini G., and S. Talebi, "Performance Improvement of MIMO-OFDM Block Codes by Achieving a Suboptimum Permutation Distance", Majlesi Journal of Telecommunication Devices, Vol. 2, No. 4, Dec. 2013.
- M. Samavat, F. Hosseini G. and S. Talebi, "Alamouti Coding Scheme for Cooperative Relay Networks with Full Duplex Relaying," in Proc. 1st Iran Workshop on Communication and Information Theory (IWCIT), Tehran, Iran, May. 2013.
- 8. F. Hosseini G., M. Shahabinejad, M. Shahabinejad and S. Talebi, "Block Circular Delay Diversity Space-Frequency Codes with the Enhanced Performance," in Proc. 6th Int. Symposium on Telecommunications (IST), pp. 416-419, Tehran, Iran, Nov. 2012.

PRESENTATIONS AND ATTENDANCE

- 1. F. Hosseinigoki and O. Kosut, "Capacity of the Gaussian Arbitrarily-Varying Channel with List Decoding," Talk Given at *IEEE International Symposium on Information Theory (ISIT)* at Vail, CO, Jun. 2018.
- 2. F. Hosseinigoki and O. Kosut, "The Gaussian Interference Channel in the Presence of Malicious Jammers," Poster Presented at *Information Theory and Application Workshop (ITA)* at University of California San Diego, San Diego, CA, Feb. 2018.
- 3. F. Hosseinigoki, "The Gaussian interference channel in the presence of a malicious jammer," Talk Given at 54th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, Sept. 2016.
- 4. F. Hosseinigoki and O. Kosut, "The Capacity Region of the Deterministic Interference Channel with a Jammer," Poster presented at 8th North American School of Information Theory (NASIT) at University of California San Diego, CA, Aug. 2015.
- 5. Attended Information Theory and Application Workshop (ITA) at University of California San Diego, San Diego, CA, Feb. 2016–2018.
- Attended Joint Symposium on Neural Computation at Caltech University on March 2018.
- Attended Spring School on Quantum Computation at University of California San Diego, San Diego, CA, Mar. 2018.

Honors

- The highest GPA in the whole history of EE department of Shahid Bahonar University of Kerman at the end of M.Sc. program.
- Ranked first in the EE department at the end of the M.Sc. program among 55 students.
- Ranked 2nd in the EE department at the end of the B.Sc. period among 126 students.
- In the top 1% of the accepted students in National Entrance Examinations for Bachelor and Master Program, spring 2007 and 2011.
- Awarded Full Scholarship and Admission for four years undergraduate study at Sharif University of Technology, Iran, in Physics and Mathematics in 2007 (declined).

RELATED Courses

- Machine Learning (at Coursera by Stanford University, Prof. Andrew Ng)
 - Stochastic Processes (Grade: 20/20)
 - Linear Algebra (2nd Grade: 18/20)
- Machine Learning (audited at UCSD,• Communication Systems I, II Prof. S. Dasgupta)
 - (Grade: 19.5/20, 19/20)
- Linear Algebra and Applications (audited at UCSD, Prof. Y.H Kim)
- Advanced Communication Theory (2nd Grade: 19/20)
- Networking for Big Data (A at ASU) Communication Systems (MIMO-OFDM)

(Top Grade: 19.75/20)

- Information Theory (Grade: A at ASU)
- Network Information Theory (A at ASU) Special Topics in Communications I (Cooperative Communications) (19.75/20)
- Detection and Estimation (A at ASU)
- Random Signal Theory (A at ASU)
- Wireless Communications (A at ASU)
- Convex Optimization at ASU
- Real Analysis at ASU

- Signal and Systems Analysis(18/20)
- Digital Signal Processing (Grade: 20/20)
- Image Processing (Grade: 19/20)
- Video Coding (Grade: 19.5/20)

TECHNICAL SKILLS LANGUAGES MATLAB, C++, C, Python (TensorFlow), Latex, SPICE.

Farsi: Native language, English: Fluent, Arabic: Intermediate (Reading)

Hobbies Messier marathon, cycling, hiking, reading

References Available upon request.