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Experience

Roy and Lois Chope Chair Professor in Engineering, The Ohio State University, OH	Jan. 2020–present
Professor, Electrical and Computer Engineering, The Ohio State University, OH	Jan. 2020–present
Professor, Computer Science and Engineering, The Ohio State University, OH	Jan. 2020–present
Professor, Integrated Systems Engineering, The Ohio State University, OH	Jan. 2020–present
University Distinguished Professor, Electrical Engineering, Penn State University, PA	Jan.-Dec. 2019
Deans Fellow, Penn State University, PA	Jan. 2017–Dec. 2019
Visiting Professor, Electrical Engineering, Stanford University, CA	Sep. 2016–Jan. 2018
Professor, Electrical Engineering, Penn State University, PA	Jul. 2010–Jan. 2019
Associate Professor, Electrical Engineering, Penn State University, PA	Jul. 2006–Jul. 2010
Visiting Associate Professor, Electrical Engineering, Stanford University, CA	Oct. 2008–Aug. 2009
Assistant Professor, Electrical Engineering, Penn State University, PA	Jan. 2002–Jul. 2006
Assistant Professor, Electrical and Computer Engineering, Lehigh University, PA	Aug. 2000–Dec. 2001
Graduate Research Assistant, WINLAB, Rutgers University, NJ	Sep. 1993–Aug. 2000
Member of Technical Staff (Summer Internship), LUCENT Technologies, NJ	Jun. 1997–Sep. 1997

Education

PhD, WINLAB, Electrical and Computer Engineering Dept., Rutgers University, NJ	May 2000
MS, WINLAB, Electrical and Computer Engineering Dept., Rutgers University, NJ	Oct. 1994
BS, Electrical and Electronics Engineering Dept., Bogazici University, Istanbul, Turkey	Jun. 1991
BS, Physics Dept., Bogazici University, Istanbul, Turkey	Jun. 1991

Selected Synergistic and Leadership Activities

Professional Community

IEEE Vice President (VP) for Technical Activities (2027), VP-Elect (2026) (a three-year strategic leadership position at the top of IEEE's all Technical Activities; leading 39 Societies and 8 Councils of the IEEE, chairing the IEEE Technical Activities Board (TAB), and serving as IEEE Board director as VP-TAB; chairing TAB Nominations and Appointments as VP-TAB-Elect among other leadership responsibilities, chairing strategic committees as Past-VP-TAB (2028); elected by the membership October 2025).

IEEE Division IX: Division Director (2024-2025), Director Elect (2023) (leading the Division consisting of the following IEEE Societies: Aerospace and Electronic Systems Society; Geoscience and Remote Sensing Society; Information Theory Society; Intelligent Transportation Systems Society; Oceanic Engineering Society; Signal Processing Society; Vehicular Technology Society; IEEE Technical Activities Board member, and IEEE Board director; elected by the membership).

IEEE Information Theory Society: President (2020) (preside over the board of governors, leading all organizational activities and society affairs including meetings, outreach, initiatives, presiding over society level award committees, representing the society at the IEEE Technical Activities Board (TAB)).

IEEE Information Theory Society: Past president (2021-2022) (nominations and appointments, constitutions and bylaws revisions, board of governors).

IEEE Transactions on Green Communications and Networking: Editor-in-Chief (2022-present), cosponsored by IEEE Communications Society, IEEE Signal Processing Society and IEEE Vehicular Technology Society (manage/recruit area editors and editors, oversee the review process of papers, build an execute vision of the journal).

IEEE Transactions on Information Theory, Area Editor (2021-2024) for the Editorial Area Security and Privacy (work with the Editor-in-Chief, manage associate editors in the area).

IEEE Systems Council: Administrative committee member (2020-2023) (governance decisions).

IEEE Information Theory Society: Vice president (2018-2019): 1st Vice president (coordinating the paper award committees), 2nd Vice president (coordinating membership activities).

IEEE Information Theory Society: Treasurer (2012-2014) (manage the budget coordinating activities and allocating resources; several financial initiatives led to significant reduction in expenses freeing funds for outreach and membership development; left the society finances with large reserves and surplus).

IEEE North American School of Information Theory: Co-founder (2008), Chair (2008, 2009, 2010). This summer school initiative brings together graduate students interested in information theory and senior information theorist in a campus setting, annually in North American universities (IEEE outreach commendation 2014).

External Boards and Academies

Member: The Science Academy, Turkey (elected in Dec. 2022).

Board member and delegate: (Division IX) IEEE Board of Directors (2024-2025)

Member, Research Council, NextG Alliance (2025-present).

Panel Chair: European Research Council (2023-2024).

External Advisory Board Member: Electrical and Electronics Engineering Department, Bogazici University (2022-present).

Insitutional

Founder of the interdisciplinary research group INSPIRE@OhioState (OSU)

Founder of 6G and Beyond at Ohio State (OSU)

Member of the Research Security Governance Board at OSU

Member of the AI Steering Committee at OSU (2022)

Featured faculty in a series focusing on thought leaders and their transformative research, presented by the office of advancement and the office of research at OSU (2020)

Member of College of Engineerings Womens Faculty Advisory Board to the Dean at OSU

Member of College of Engineerings Strategic Plan Working Group at OSU

Completed Better Mentoring = Better Science program at OSU (2021)

Completed How Bystanders Can Change the Conversation about Social Bias training at OSU (2021)

Affiliate Faculty in Sustainability Institute at OSU

Affiliate Faculty in Translational Data Analytics Institute at OSU

Member of community of practice on Responsible Data Science at OSU

Member of advisory committees at the department (ECE, OSU), school (EECS, Penn State) and college (for cyber environments) levels (Penn State)

Founding director of Wireless Communications and Networking Laboratory at Penn State

Mentoring Focused

Organizer of Big Ten Women Workshop (BTWW), June 2022 (Chicago, IL): This is an in-person two-day workshop designed and organized by several senior Big Ten women faculty for junior female faculty at our institutions. Activities in 2022 included mentorship events, guided peer discussions, networking events, deans panel and keynote. Moderator of the deans panel.

Interviewee, Data Science Women Summer Camp, July 2021, Virtual: This was a week-long summer camp for middle-school students organized by TDAI. My part was an interview the organizer conducted with me about being a woman who does data science, emphasizing the potential impact on the society and the planet, and explaining the importance of math and statistics.

Alumna of High Wire Acts: Changing the Future for Senior Faculty Women in STEM (2019): Leadership Program for Senior Faculty Women in STEM at Penn State: This is a year long program that is designed to prepare senior women faculty for academic administrative and leadership positions. Activities include in-person several cohort workshops from story telling to handling difficult situations, a long term trust circle sub group, various networking events, graduation day (with presentation of personal success stories) and on-going alumna events connecting to new cohorts.

Organizer of Advancement of Women in Engineering (AWE) Workshop, October 2018 (w/ M. Frecker, current head of MNE at Penn State): This was a one-day workshop for all women faculty in engineering and included talks, community building activities and discussions of improving the college climate towards women.

Keynote speaker in women in engineering events: Typical titles Women in Academia: Being a change agent, Being a woman in academia: A personal journey, primarily at IEEE events including by Women in Engineering (WiE) and Women in Communications Engineering (WICE).

Awards and Honors

IEEE Information Theory Society Joy Thomas Tutorial Paper Award (2025)

Professional Member Eta-Kappa-Nu (HKN) (Inducted 2025)

Fellow of American Association for the Advancement of Science (AAAS) (2023)

IEEE Communications Society Communication Theory Technical Achievement Award (2020)

IEEE Information Theory Society President (2020)

IEEE Communications Society Best Tutorial Paper Award (2019)

Distinguished Lecturer of IEEE Information Theory Society (2019-2021)

IEEE Information Theory Society Vice President (2019)

IEEE Information Theory Society 2nd Vice President (2018)

IEEE Women In Communications Engineering Outstanding Achievement Award (2018)

Fellow of IEEE *for contributions to wireless communication theory and wireless information security* (2015)

IEEE Communications Society Marconi Prize Paper Award (2014)

Distinguished Lecturer of IEEE Communications Society (2018-2019)

Distinguished Lecturer of IEEE Vehicular Technology Society (2017-2021)

Distinguished Speaker of IEEE Vehicular Technology Society (2021-present)

Fellow, Asia-Pacific Artificial Intelligence Association (AAIA) (2021)

Clarivate Analytics Highly Cited Researcher (2017)

Best Paper Award, Communication Theory, IEEE International Conference on Communications (2010)

DARPA Young Investigator Team Award for ITMANET Program (2006)

National Science Foundation CAREER Award (2003)

Penn State Engineering Alumni Society (PSEAS) Premier Research Award (2014)

Penn State Engineering Alumni Society (PSEAS) Outstanding Research Award (2010)

Leonard A. Doggett Award for Outstanding Writing in Electrical Engineering, Penn State (2014)

P.C. Rossin Endowed Assistant Professorship, Lehigh University (2001)

Graduation Honor List, Bogazici University (1991)

Research Related Statistics

Number of publications: 8 book chapters, 118 journal papers, 280 conference papers.

Citation count: 18044, h-index: 61 (Google Scholar).

Research supervision: Postdoc: 5 previous; PhD: 16 graduated, 5 current; MS: 15 graduated.

Keynotes/Invited Talks/Tutorials (since 2011): 77.

Research Funding: 19 NSF grants, 2 DARPA, 1 ARL CTA, 1 NSA, 1 DOT, 12 Industrial/other grants.

Research Focus

My research area is in **Networked Systems** broadly defined. The focus is on system level design insights drawn from characterization of fundamental performance limits of such systems. We are generally interested in systems consisting of multiple entities that **communicate, network, sense, learn and compute**. These can be large systems consisting of entities with heterogeneous capabilities and resources, and represent the vision of the *connected world*, expected from 6G (and beyond). We seek for designs that ensure secure, reliable and sustainable operations. Core research disciplines and tools that we engage include *information theory, optimization, communication theory and signal processing*. We are interested in developing algorithmic design principles that are inspired by real-life use cases. There are diverse applications domains of our research in next generation connectivity, with topics including edge facilitated AI, convergent networks (sensing, computing, communications, learning, and control), wired and wireless communication networks of the future, i.e., 6G, semantic communications and distributed intelligence, computing and content delivery networks, and energy-sustainable networks. More specifics topics are:

- Next generation communications and networks
  - Semantic Communications
  - Smart radio environments for 6G
  - AI for wireless communications
  - Wireless distributed, federated and decentralized learning (Wireless for AI)
  - Co-design paradigms for 6G

  - Emerging joint communication, sensing and computing paradigms
  - Age of Information
- Sustainable/Green Communications and Learning
  - Wireless networks with energy harvesting nodes
  - Energy and signal cooperation in communication networks
  - Sustainable distributed and centralized learning
- Artificial Intelligence
  - Semantic Reasoning
  - Robustness against adversaries, interpretability
  - Distributed and federated learning
  - Private learning
- Information Security
  - Information theoretic security and privacy
  - New models and information theoretic guarantees for powerful adversaries
  - Game theoretic models for information theoretic security
  - Secure Integrated Sensing and Communications
  - Security and privacy in distributed learning and computation

Selected Invited Talks, Keynotes and Tutorials*

(* Since 2011)

[77] Semantic Task-Oriented Communications for 6G and Beyond, **Invited Talk**, 1st Online Workshop on Goal-Oriented Semantic Communications, September 2025.

[76] Connecting with Purpose for 6G and Beyond, **Keynote**, IEEE 33rd Sinyal Isleme ve Iletisim Uygulamalari Kurultayi (SIU), Istanbul, Turkey, June 2025.

[75] Connecting with Purpose for 6G and Beyond, **Keynote**, IEEE Vehicular Technology Conference, Oslo, Norway, June 2025.

[74] Overview of Spectrum X and its Education and Workforce Development Activities, **Invited Presentation**, National Spectrum Management Association (NSMA) Annual Meeting, Washington DC, May 2025.

[73] Connecting with Purpose at the Wireless Edge, **Keynote**, IEEE Wireless Communications and Networking Conference, Milan, Italy, March 2025.

[72] Connecting with Purpose at the Wireless Edge, **Distinguished Seminar**,University of Bologna, Italy, March 2025.

[71] Connecting with Purpose: The Next Wireless Revolution, **Keynote**, IEEE Global Communications Conference, Cape Town, South Africa, December 2024.

[70] Semantic Communications for AI-Native 6G, **Keynote**, 2024 International Conference on Future Communications and Networks, online, November 2024.

[69] Semantic Communications for AI-Native 6G, **Keynote**, 7th O-RAN 6G Workshop, online, October 2024.

[68] Semantic communication networks: The next frontier for 6G and beyond, **Keynote**, 25th IEEE International Workshop on Signal Processing Advances in Wireless Communications, Lucca, Italy, September 2024.

[67] The Role of Semantics in AI-native 6G, **Keynote**, IEEE Hong Kong 6G Wireless Summit, Hong Kong, China, September 2024.

[66] The Role of Pre-trained Models and Generative AI in Semantic Communication, **Keynote**, IEEE International Conference on Communications Task-Oriented and Generative Communications Workshop, Denver, CO, USA, June 2024.

[65] Using Wireless to Better Federated Learning, **Keynote**, IEEE International Conference on Communications Edge Learning Over 5G Mobile Networks and Beyond Workshop, Denver, CO, USA, June 2024.

[64] Will 6G be Semantic Communications?, **Talk**, American University of Beirut Workshop on AI for communications and semantic communications, online, April 2024.

[63] Wireless is back: The 6G Revolution Towards Connected Intelligence, **IEEE Vehicular Technology Society Distinguished Speaker Webinar**, Kerala Chapter, India, March 2024.

[62] Not Beyond, but with Shannon, **Plenary**, Information Theory and Applications Workshop, ITA24, San Diego, CA, February 2024.

[61] Wireless is back: The 6G Revolution Towards Connected Intelligence, **Distinguished Seminar**, Koc University, Istanbul, Turkey, December 2023.

[60] Wireless is back: The 6G Revolution Towards Connected Intelligence, **Distinguished Seminar**, Central Supelec, Paris, France, December 2023.

[59] Wireless is back: The 6G Revolution Towards Connected Intelligence, **Communications and Signal Processing Seminar**, University of Michigan, October 2023.

[58] Semantic Text Classification for 6G and Beyond, **Keynote**, VTC 2023 Fall workshop on Taskoriented communications and networking, October 2023.

[57] Semantic Text Classification for 6G and Beyond, **Invited Talk**, ComSoc Next Generation IoT Webinar, online, August 2023

[56] Semantic Communications and Compression for 6G and Beyond, **Invited Talk**, 2nd 6G Wireless Foundations Forum, French Riviera, France, July 2023.

[55] Machine Learning Training for Sustainable Career Growth, **Invited Presentation/Panelist**, NSF IEEE Workshop: Towards Explainable, Reliable and Sustainable Machine Learning in Signal and Data Science, University of Maryland, College Park, MD, March 2023.

[54] Semantic Communications for 6G: Connecting Human and Machine intelligence, **Invited Talk**, 3rd 6G Summit on Connecting the Unconnected, Jeddah, Saudi Arabia, January 2023.

[53] The Role of Wireless Communications in 6G Revolution: Connecting Human and Artificial Intelligence, **Keynote**, IEEE Communication Theory Workshop (CTW), Marbella, Spain, October 2022.

[52] Selected Topics in 6G, **Invited Lectures**, 2022 Joint Telematics Group/IEEE Information Theory Society Summer School on Signal Processing, Communications and Networks, virtual, June 2022.

[51] Semantic Communication Theory: Past, Present and 6G, **Keynote**, IEEE International Conference on Communications (ICC), Semantic Communications Workshop, virtual, May 2022.

[50] 6G for Information Security and Information Security for 6G, **Invited Talk**, IEEE Technical Committee on Cognitive Networks (TCCN) Monthly Seminar, virtual, March 2022.

[49] 6G: The Era of the Edge, **Distinguished Seminar**, Bilkent University, virtual, February 2022.

[48] Information Security for the 6G Connected Future, **Distinguished Colloquium**, University of Illinois Urbana-Champaign ECE Distinguished Colloquium Series, online, April 2021.

[47] Securing a Wireless Connected Future, **Invited Presentation/Panelist**, NSF NextG Security Workshop, online, October 2020.

[46] Security for and by Caching Networks, **Keynote**, IEEE International Workshop on Privacy and Security for Information Systems (WPS) 2020, online, July 2020.

[45] Information Security for the All-Connected World, **Invited Presentation**, JASON (via NRO), online, June 2020.

[44] The Evolving Role of Physical Layer for the Wireless World, **Invited Presentation/Panelist**, NSF Spectrum Innovation Initiative Workshop, online, May 2020.

[43] Information Security for the Connected World, **Invited Talk**, ESE Seminar, University of Pennsylvania, Philadelphia, PA, October 2019.

[42] Information Security for the All-Connected World, **Plenary**, Information Theory Workshop, Visby, Sweden, August 2019.

[41] Information Security for the Connected World, **Distinguished Seminar**, The Ohio State University, Columbus, OH, April 2019.

[40] What Can Machine Learning Do for Communications?, **Invited Talk**, NYU Data Science Center, New York, NY, January 2019.

[39] Recent Advances in Cache-Aided Wireless Networks, **Invited Talk**, University of Virginia, Charlottesville, VA, January 2019.

[38] Recent Advances in Cache-Aided Wireless Networks, **IEEE Communications Society Distinguished Lecture**, University of Utah, Salt Lake City, UT, December 2018.

[37] Recent Advances in Cache-Aided Wireless Networks, **Invited Talk**, Sun Yat-sen University Coding and Information Theory Workshop, Guangzhou, China, November 2018.

[36] Foundations of Energy Harvesting and Energy Cooperating Wireless Networks, **Keynote**, The Fifth International Workshop on Next Generation Green Wireless Networks (Next-GWiN 2018), Sheffield, England, September 2018.

[35] Women in Engineering Academia: A Lunch Discussion, **IEEE WiE Keynote**, IEEE VTC Fall, Chicago, IL, August 2018.

[34] Towards Design Principles of Next Generation Networked Systems: Information Security and Energy Sustainability, **Physics and Theory Colloquium**, Los Alamos National Laboratory, Los Alamos, NM, July 2018.

[33] Foundations of Energy Harvesting and Energy Cooperating Wireless Networks, **IEEE Vehicular Technology Society Distinguished Lecture Tour**, Imperial College, London; Kings College, London; Trinity College, Dublin; University of Edinburgh, Edinburgh, July 2018.

[32] Recent Advances in Cache-Aided Wireless Networks, **Keynote**, 22nd International ITG Workshop on Smart Antennas (WSA 2018), Bochum, Germany, March 2018.

[31] Energy Harvesting and Energy Cooperating Wireless Networks: A New Frontier for Communication Theory and Information Theory, **Invited Talk**, Systems Seminar, California Institute of Technology, Pasadena, CA, November 2017.

[30] Foundations of Energy Harvesting Communications, **Invited Lecture**, 10th Annual School of Information Theory GeorgiaTech, June 2017.

[29] Foundations of Energy Harvesting and Energy Cooperating Wireless Networks, **Keynote**, WiOpt 2017 GREENNET Workshop, Paris, France, May 2017.

[28] Foundations of Energy Harvesting Wireless Communications, **Keynote**, IEEE Wireless Communications and Networking Conference, WCNC17 Workshop on Energy Harvesting and Remotely Powered Wireless Communications for IoT, San Francisco, CA, March 2017.

[27] Energy Harvesting Wireless Networks: A New Frontier for Communication Theory and Information Theory, **Invited Talk**, Institute for Pure and Applied Mathematics, Emerging Wireless Networks Workshop, University of California Los Angeles, CA, February 2017.

[26] Energy Harvesting Wireless Networks: A New Frontier for Communication Theory and Information Theory, **Invited Talk**, Massachusetts Institute of Technology, Cambridge MA, September 2016.

[25] Energy Harvesting Wireless Networks: A New Frontier for Communication Theory and Information Theory, **Invited Talk**, Ecole Polytechnique Federale de Lausanne, Switzerland, July 2016.

[24] Energy Harvesting Wireless Networks: A New Frontier for Communication Theory and Information Theory, **Invited Talk**, Technical University of Delft, Netherlands, July 2016.

[23] Energy Harvesting and Remotely Powered Wireless Networks, **Tutorial**, IEEE International Symposium on Information Theory, ISIT16, July 2016, Barcelona.

[22] Information Theoretic Security, **Invited Lecture**, 9th Annual North American School of Information Theory, Duke University, Durham, NC, June 2016.

[21] Towards Design Principles of Next Generation Networked Systems: Information Security and Energy Sustainability, **Distinguished Lecture**, Bradley Distinguished Lecture Series, Virginia Tech, Blacksburg, VA, April 2016.

[20] MIMO Wiretap Channel with a Cooperative Jammer, **Invited Talk**, Mathematical Tools of Information Theoretic Security Workshop, Huawei Technologies/Supelec, Paris, France, September 2015.

[19] Security by the Physical Layer: A Promising Direction for Next Generation Wireless Network Design, **Invited Lecture**, Gray Communications Advances in Information Theory Workshop, London Probability Seminar, Imperial College, London, England, June 2015.

[18] Energy Harvesting Wireless Communications, **Tutorial**, IEEE International Conference on Communications, ICC15, London, England, June 2015.

[17] Energy Harvesting Wireless Communication Networks, **Invited Talk**, Department Colloquium, Electrical Engineering and Computer Science Department, Syracuse University, Syracuse, NY, April 2015.

[16] Design Principles for Energy Harvesting Wireless Communication Networks, **Invited Talk**, Analytical Tools for Next Generation Heterogeneous Wireless Networks Workshop, Macquarie University, Sydney, Australia, June 2014.

[15] Security by the Physical Layer: A Promising Direction for Next Generation Wireless Network Design, **Keynote**, ICC 2014 Workshop on Physical Layer Security, Sydney, Australia, June 2014.

[14] Energy Harvesting Wireless Communications, **Tutorial**, IEEE Wireless Communications and Networking Conference, WCNC14, Istanbul, Turkey, April 2014.

[13] Energy Harvesting Wireless Communication Networks, **Invited Talk**, ISL Colloquium, Electrical Engineering Department, Stanford University, Stanford, CA, March 2014.

[12] Energy Harvesting Wireless Communications, **Tutorial**, IEEE Global Communications Conference, Globecom13, Atlanta, GA, December 2013.

[11] Wireless Networks and Information Security: Models and Metrics, **Invited Talk**, Workshop on Multi Spectrum Metrics for Cyber Defense, MIT, Cambridge, MA, October 2013.

[10] Two-way Green Cooperative Networking with Energy Harvesting, **Invited Talk**, IEEE Communication Theory Workshop, Phuket, Thailand, June 2013.

[9] Energy Harvesting Wireless Networks, **Invited Talk**, Wireless Communications and Economics Workshop, Chinese University of Hong Kong, Hong Kong, June 2013.

[8] Energy Harvesting Wireless Communications, **Tutorial**, IEEE International Conference on Communications, ICC13, Budapest, Hungary, June 2013.

[7] Green Wireless Communications, **Tutorial**, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC12, Sydney, Australia, September 2012.

[6] Green Wireless Networking with Energy Harvesting Nodes, **Invited Talk**, Workshop on Methodological Foundations of Green Radio, Paris, France June 2012.

[5] Multiuser Wireless Secrecy: Lessons Learned from Information Theory, **Invited Talk**, Supelec, France, June 2012.

[4] Secrecy: Benefits of Interaction, **Invited Talk**, Banff International Research Station (BIRS) Workshop on Interactive Information Theory, Banff, Canada, January 2012.

[3] Interference, Structured Random Codes and Secrecy, **Invited Talk**, Banff International Research Station Workshop on Algebraic Structure in Information Theory, Banff, Canada, August 2011.

[2] Energy Efficiency of Future Networks, **Invited Lecture**, Wireless Information Theory Summer School, Oulu, Finland, July 2011.

[1] Cooperation, Interference and Secrecy: Lessons Learned from Information Theory, **Keynote**, ICC 2011 Workshop on Physical Layer Security, Kyoto, Japan, June 2011.

SELECTED PANELS*

(* Since 2023)

[5] Future Communications, Future Publications: Building Impact in the 6G Era, **Panelist**, IEEE Global Telecommunications Conference (GLOBECOM), Taipei, Taiwan, December 2025.

[4] Wireless Futures Panel: From 6G to Ultimately Secure Quantum Communications, **Panelist**, IEEE Vehicular Technology Conference (VTC2025-Spring), Oslo, Norway, June 2025.

[3] 6G Key Enablers: Opportunities and Roadblocks Toward the Next-Generation Wireless Networks, **Panelist**, IEEE International Conference on Communications (ICC), Young Professionals Program, Montreal, Canada, June 2025.

[2] Embracing Value and Impact of Artificial Intelligence in Wireless Communications, **Panelist**, IEEE Global Telecommunications Conference (GLOBECOM), Cape Town, South Africa, December 2024.

[1] Graduate Training in ML for Sustained Career Growth, **Panelist**, NSF-IEEE Workshop: Toward Explainable, Reliable, and Sustainable Machine Learning in Signal and Data Science, University of Maryland, March 2023.

PUBLICATIONS

Citation Numbers *Source: Google Scholar*

h-index: 61; i10-index: 226; citations: 18044

Chapters

[8] E. Kutay and A. Yener, "Semantic Compression and Communication: Fundamentals and Methodologies," *Foundations of Semantic Communication Networks*, Wiley, Ed: W. Saad, C. Chaccour, C. Thomas, M. Debbah, 2025.

[7] Y. E. Sagduyu, A. Yener, S. Ulukus, "Securing Semantic Communications against Adversarial Attacks," *Foundations of Semantic Communication Networks*, Wiley, Ed: W. Saad, C. Chaccour, C. Thomas, M. Debbah, 2025.

[6] M. Nafea and A. Yener, "Secrecy of Edge Caching," *Edge Caching for Mobile Networks*, Editors: V. Poor and W. Chen, The Institution of Engineering and Technology 2021.

[5] B. Guler and A. Yener, "Influence Propagation in Social Networks with Positive and Negative Relationships," *Encyclopedia of Social Network Analysis and Mining*, Editors: R. Alhajj and J. Rokne, Springer 2018.

[4] S. Leng and A. Yener, "Resource Allocation in Body Area Networks for Energy Harvesting Healthcare Monitoring," *Handbook of Large-Scale Distributed Computing in Smart Healthcare*, Editors: S. Khan, A. Zomaya, and A. Abbas, Springer 2017.

[3] M. Nafea and A. Yener, "MIMO wiretap channels," *Information Theoretic Security and Privacy of Information Systems*, Editors: R. Schaefer, H. Boche, A. Khisti, and V. Poor, Cambridge University Press 2017.

[2] Xiang He and A. Yener, "Secrecy with Feedback," *Physical Layer Security in Wireless Communications*, Editors: X. Zhou, L. Song and Y. Zhang, CRC Press 2013.

[1] Xiang He and A. Yener, "Cooperative Jamming: The Tale of Friendly Interference for Secrecy," *Securing Wireless Communications at the Physical Layer*, Editors: R. Liu and W. Trappe, Springer 2009.

Preprints

[4] X. Zheng and A. Yener, "Asynchronous Decentralized Learning under Deployment Cost and Communication Constraints," submitted for publication, Dec. 2025.

[3] J. Mao, R. Sun, M. Poletti, R. Gandotra, H. Guo, A. Yener, "AI-Driven Spectrum Occupancy Prediction Using Real-World Spectrum Measurements," submitted for publication, Dec. 2025.

[2] E. Arda, E. Kutay, and A. Yener, "Semantic Relaying for Next Generation Networks: Harnessing Advances on Large Language Models," submitted for publication, Dec. 2024.

[1] T. Welling, O. Gunlu and A. Yener, "Secure Integrated Sensing and Communications: Fundamental Limits-inspired Designs for Next Generation Systems," submitted for publication, Oct. 2024.

Articles

[116] X. Tan, T. Xie, X. Zheng, A. Yener, M. Lee, A. Payani, H. Latapie, X. Zhang, "Federated Learning under Evolving Distribution Shifts," *Entropy*, submitted for publication, Oct. 2025, revised Dec. 2025.

[115] Y. Liu, M. Li, A. Liu, L. Ong, and A. Yener, "Fundamental Limits of Bistatic Integrated Sensing and Communications over Memoryless Relay Channels," *IEEE Transactions on Information Theory,* submitted for publication, Jul. 2025, revised Nov.2025.

[114] J. Mao, T. Yin, A. Yener and M. Liu, "Providing Differential Privacy for Federated Learning Over Wireless: A Cross-layer Framework," submitted for publication, Nov. 2025.

[113] E. Arda and A. Yener, "Fundamental Limits for Text Summarization: A Rate–Distortion–Perception Approach," *IEEE Transactions on Communications,* submitted for publication, Oct. 2025.

[112] X.Zheng, T. Xie, X. Tan, X. Zheng, A. Yener, "Performative Robust Optimal Federated Learning" *IEEE Transactions on Sognal Processing,* submitted for publication, Oct. 2025.

[111] J. Mao and A. Yener, "Adaptive Personalized Over-the-Air Federated Learning with Reflecting Intelligent Surfaces," *Nature Wireless Technology,* submitted for publication, Oct. 2025.

[110] E. Kutay and A. Yener, "Harnessing the Power of PreTrained Models for Efficient Semantic Communication of Text and Images," *Entropy, Special Issue on Semantic Information Theory*, Entropy, 27(8), 813, Jul. 2025.

[109] Y. Liu, M. Li, A. Liu, L. Ong, and A. Yener, "Fundamental Limits of Multiple-Access Integrated Sensing and Communication Systems," *IEEE Transactions on Information Theory*, 71(6), pp. 4317-4341, Jun. 2025.

[108] R. Gu, W. Xu, Z. Yang, D. Niyato, and A. Yener, "Task-Oriented Low-Label Semantic Communication With Self-Supervised Learning,", *IEEE Transactions on Wireless Communications*, accepted for publication, May 2025.

[107] R. Chou, J. Kliewer and A. Yener, "Private Sum Computation: Trade-Offs between Communication, Randomness, and Privacy," *IEEE Transactions on Information Theory*, submitted for publication, Feb. 2025.

[106] M. Mittelbach, R. F. Schaefer, M. Bloch, A. Yener and O. Günlü, "Sensing-Assisted Secure Communications over Correlated Rayleigh Fading Channels," Entropy, 27(3), 225, Feb. 2025.

[105] C. You, Y. Cai, Y. Liu, M. Di Renzo, T. M. Duman, A. Yener and A. L. Swindlehurst, "Next Generation Advanced Transceiver Technologies for 6G," *IEEE Journal on Selected Areas in Communications*, 43(3), pp. 582-627, Jan. 2025.

[104] Y. E. Sagduyu, T. Erpek, A. Yener and S. Ulukus, "Will 6G be Semantic Communications? Opportunities and Challenges from Task Oriented and Secure Communications to Integrated Sensing," *IEEE Network Magazine*, 38(6), pp. 72-80, Nov. 2024.

[103] R. A. Chou and A. Yener, "The Gaussian Multiple Access Wiretap Channel with Selfish Transmitters: A Coalitional Game Theory Perspective," *IEEE Transactions on Information Theory*, 70(10), pp. 7432-7446, Oct. 2024.

[102] Y. E. Sagduyu, T. Erpek, A. Yener and S. Ulukus, "Joint Sensing and Semantic Communications with Multi-Task Deep Learning," *IEEE Communications Magazine*, vol. 62, no. 9, pp. 74-81, September 2024.

[101] H. Shahzad, C. Veliky, E. Shin, A. Yener and S. N. Khan, "Preserving Privacy in Big Data Spine Surgery Research," *in International Society for the Advancement in Spine Surgery Vertebral Columns Winter 2024* Issue 23-27, Jan. 2024.

[100] Y. E. Sagduyu, T. Erpek, S. Ulukus and A. Yener, "Is Semantic Communications Secure? A Tale of Multi-Domain Adversarial Attacks," *IEEE Communications Magazine*, vol. 61, no. 11, pp. 50-55, November 2023.

[99] Y. E. Sagduyu, S. Ulukus and A. Yener, "Task-Oriented Communications for NextG: End-to-End Deep Learning and AI Security Aspects," *IEEE Wireless Communications, Special Issue on Task-oriented Communications for Future Wireless Networks*, 30(3), pp. 52-60, June 2023.

[98] O. Gunlu, M. Bloch, R. Schaefer and A. Yener, "Secure Integrated Sensing and Communications," *IEEE Journal on Selected Areas in Information Theory*, 4, pp. 40-53, May 2023.

[97] D. Gunduz, Z. Qin, I. E. A., H. S. Dhillon, Z. Yang, A. Yener, K. K. Wong and C. B. Chae, "Beyond Transmitting Bits: Context, Semantics, and Task-Oriented Communications," *IEEE Journal on Selected Areas in Communications*, 41(1), pp. 5-41, Jan. 2023.

[96] S. Leng and A. Yener, "Learning to Transmit Fresh Information in Energy Harvesting Networks," *IEEE Transactions on Green Communications and Networking*, 6(4), pp. 2032-2042, Dec. 2022.

[95] R. A. Chou and A. Yener, "Gaussian Multiuser Wiretap Channels in the Presence of a Jammer-Aided Eavesdropper, Entropy, 24(11)," *Special Issue on Information Theoretic Methods for Future Communication Systems*, 1595, Nov. 2022.

[94] V. Renganathan, E. Yurtsever, Q. A. and A. Yener, "Valet attack on privacy: a cybersecurity threat in automotive Bluetooth infotainment systems," *Cybersecurity*, 5(30), Oct. 2022.

[93] A. Ibrahim, A. Zewail and A. Yener, "Benefits of Edge Caching with Coded Placement for Asymmetric Networks and Shared Caches," *IEEE Journal on Selected Areas in Information Theory*, 2(4), pp. 1240-1252, Dec. 2021.

[92] R. Chou, M. Bloch and A. Yener, "Universal Covertness for Discrete Memoryless Sources," *IEEE Transactions on Information Theory*, 67(8), pp. 5432 - 5442, Aug. 2021.

[91] M. Bloch, O. Günlü, A. Yener, Frédérique Oggier, H. Vincent Poor, Lalitha Sankar, and R. F. Schaefer, "An Overview of Information-Theoretic Security and Privacy: Metrics, Limits and Applications," *IEEE Journal on Selected Areas in Information Theory*, 2(1), pp. 5-22, Mar. 2021. **(IEEE Information Theory Society 2025 Joy Thomas Paper Award)**

[90] M. Nafea and A. Yener, "Coded Caching in Presence of a Wire and Cache Tapping Adversary of Type II," *IEEE Journal on Selected Areas in Information Theory*, 2(1), pp. 65-81, Mar. 2021.

[89] A. Ibrahim, A. Zewail, and A. Yener, "Device-to-Device Coded Caching with Distinct Cache Sizes," *IEEE Transactions on Communications*, 68(5), pp. 2748-2762, May. 2020.

[88] M. Tahmasbi, M. Bloch, and A. Yener, "Learning an Adversary's Actions for Secret Communication," *IEEE Transactions on Information Theory*, 66(3), pp. 1607-1624, Mar. 2020.

[87] A. Zewail and A. Yener, "Device-to-Device Secure Coded Caching," *IEEE Transactions on Information Forensics and Security*, 15, pp. 1513-1524, Jan. 2020.

[86] R. Chou and A. Yener, "Strongly Secure Multiuser Communication and Authentication with Anonymity Constraints," *IEEE Transactions on Information Theory*, 66(1), pp. 572-586, Jan. 2020.

[85] S. Fong, J. Yang and A. Yener, "Non-Asymptotic Achievable Rates for Gaussian Energy-Harvesting Channels: Save-and-Transmit and Best-Effort," *IEEE Transactions on Information Theory*, 65(11), pp. 7233-7252, Nov. 2019.

[84] S. S. Bidokhti, M. Wigger, and A. Yener, "Benefits of Cache Assignment on Degraded Broadcast Channels," *IEEE Transactions on Information Theory*, 65(11), pp. 6999-7019, Nov. 2019.

[83] S. Leng and A. Yener, "Relay-Centric Two-Hop Networks with Asymmetric Wireless Energy Transfer: Stackelberg Games," *IEEE Transactions on Green Communications and Networking*, 3(3), pp. 739-750, Sep. 2019.

[82] A. Ibrahim, A. Zewail, and A. Yener, "Coded Caching for Heterogeneous Systems: An Optimization Perspective," *IEEE Transactions on Communications*, 67(8), pp. 5321-5335, Aug. 2019.

[81] M. Nafea and A. Yener, "Generalizing Multiple Access Wiretap and Wiretap II Channel Models: Achievable Rates and Cost of Strong Secrecy," *IEEE Transactions on Information Theory*, 65(8), pp. 5125 - 5143, Aug. 2019.

[80] R. Chou and A. Yener, "Secret-Key Generation in Many-to-One Networks: An Integrated Game-Theoretic and Information-Theoretic Approach," *IEEE Transactions on Information Theory*, 65(8), pp. 5144-5159, Aug. 2019.

[79] S. Leng and A. Yener, "Age of Information Minimization for an Energy Harvesting Cognitive Radio," *IEEE Transactions on Cognitive Communications and Networking*, 5(2), pp. 427-439, Jun. 2019.

[78] B. Guler, A. Yener, and A. Swami, "The Semantic Communication Game," *IEEE Transactions on Cognitive Communications and Networking*, 4(4), pp. 787-802, Dec. 2018.

[77] R. Chou and A. Yener, "Polar Coding for the Multiple Access Wiretap Channel via Rate-Splitting and Cooperative Jamming," *IEEE Transactions on Information Theory*, 64(12), pp. 7903-7821, Dec. 2018.

[76] E. MolavianJazi and A. Yener, "Subset Source Coding," *IEEE Transactions on Information Theory*, 64(9), pp. 5989-6012, Sep. 2018.

[75] B. Guler, D. Gunduz, and A. Yener, "Lossy Coding of Correlated Sources Over a Multiple Access Channel: Necessary Conditions and Separation Results," *IEEE Transactions on Information Theory*, 64(9), pp. 6081-6097, Sep. 2018.

[74] A. Zewail and A. Yener, "Combination Networks with or without Secrecy Constraints: The Impact of Caching Relays," *IEEE Journal on Selected Areas in Communications*, 36(6), pp. 1140-1152, Jun. 2018.

[73] M. Nafea and A. Yener, "A New Wiretap Channel Model and its Strong Secrecy Capacity," *IEEE Transactions on Information Theory*, 64(3), pp. 2077-2092, Mar. 2018.

[72] B. Varan and A. Yener, "Matching Games for Ad Hoc Networks with Wireless Energy Transfer," *IEEE Transactions on Green Communications and Networking*, 1(4), pp. 503-515, Dec. 2017.

[71] B. Guler, A. Yener, P. Basu, and A. Swami, "Two-Party Zero-Error Function Computation with Asymmetric Priors," *Entropy*, 19(12), 635, Nov. 2017.

[70] M. Nafea and A. Yener, "Secure Degrees of Freedom for the MIMO Wire-tap Channel with a Multi-antenna Cooperative Jammer," *IEEE Transactions on Information Theory*, 63(11), pp. 7420-7441, Nov. 2017.

[69] A. Zewail and A. Yener, "Multi-Terminal Two-Hop Untrusted-Relay Networks with Hierarchical Security Guarantees," *IEEE Transactions on Information Forensics and Security*, 12(9), pp. 2052-2066, Sep. 2017.

[68] K. Tutuncuoglu, O. Ozel, A. Yener, and S. Ulukus, "The Binary Energy Harvesting Channel with a Unit-Sized Battery," *IEEE Transactions on Information Theory*, 63(7), pp. 4240-4256, Jul. 2017.

[67] A. Ibrahim, A. Zewail, and A. Yener, "Green Distributed Storage Using Energy Harvesting Nodes," *IEEE Journal on Selected Areas in Communications: Series on Green Communications and Networking: Second Issue*, 34(5), pp. 1590-1603, May. 2016.

[66] B. Varan and A. Yener, "Delay Constrained Energy Harvesting Networks with Limited Energy and Data Storage," *IEEE Journal on Selected Areas in Communications: Series on Green Communications and Networking: Second Issue*, 34(5), pp. 1550-1564, May. 2016.

[65] B. Varan and A. Yener, "Incentivizing Signal and Energy Cooperation in Wireless Networks," *IEEE Journal on Selected Areas in Communications: Series on Green Communications and Networking*, 33(12), pp. 2554-2566, Dec. 2015.

[64] K. Tutuncuoglu and A. Yener, "Energy Harvesting Networks with Energy Cooperation: Procrastinating Policies," *IEEE Transactions on Communications*, 63(11), pp. 4525-4538, Nov. 2015.

[63] A. Yener and S. Ulukus, "Wireless Physical Layer Security: Lessons Learned from Information Theory," *Proceedings of the IEEE*, 103(10), pp. 1814-1825, Oct. 2015.

[62] K. Tutuncuoglu, B. Varan, and A. Yener, "Throughput Maximization for Two-way Relay Channels with Energy Harvesting Nodes: The Impact of Relaying Strategies," *IEEE Transactions on Communications*, 63(6), pp. 2081-2093, Jun. 2015.

[61] O. Ozel, K. Tutuncuoglu, S. Ulukus, and A. Yener, "Fundamental Limits of Energy Harvesting Communications," *IEEE Communications Magazine*, 53(4), pp. 126-132, Apr. 2015.

[60] K. Tutuncuoglu, A. Yener, and S. Ulukus, "Optimum Policies for an Energy Harvesting Transmitter Under Energy Storage Losses," *IEEE Journal on Selected Areas in Communications: Wireless Communications Powered by Energy Harvesting and Wireless Energy Transfer*, 33(3), pp. 467-481, Mar. 2015.

[59] S. Ulukus, A. Yener, E. Erkip, O. Simeone, M. Zorzi, P. Grover, and K. Huang, "Energy Harvesting Wireless Communications: A Review of Recent Advances," *IEEE Journal on Selected Areas in Communications: Wireless Communications Powered by Energy Harvesting and Wireless Energy Transfer*, 33(3), pp. 360-381, Mar. 2015. **(IEEE Communication Society 2019 Best Tutorial Paper Award)**

[58] Y. Tian and A. Yener, "Relaying for Multiuser Networks in the Absence of Codebook Information," *IEEE Transactions on Information Theory*, 61(3), pp. 1247-1256, Mar. 2015.

[57] B. Guler, B. Varan, K. Tutuncuoglu, M. Nafea, A. Zewail, A. Yener, and D. Octeau, "Using Social Sensors for Influence Propagation in Networks with Positive and Negative Relationships," *IEEE Journal of Selected Topics in Signal Processing: Signal Processing for Situational Awareness from Networked Sensors and Social Media*, 9(2), pp. 360-373, Mar. 2015.

[56] B. Varan and A. Yener, "The Energy Harvesting Multi-Way Relay Channel with Intermittent Data: The Impact of Buffer Sizes," *EURASIP Journal on Wireless Communications and Networking, Special Issue on Energy Harvesting Wireless Communications*, 2015(63), pp. 1-15, Mar. 2015.

[55] E. N. Ciftcioglu, A. Michaloliakos, A. Yener, K. Psounis, T. F. La Porta, and R. Govindan, "Operational Information Content Sum Capacity: From Theory to Practice," *Elsevier Journal of Computer Networks*, 75(A), pp. 1-17, Dec. 2014.

[54] X. He and A. Yener, "MIMO Wiretap Channels with Unknown and Varying Eavesdropper Channel States," *IEEE Transactions on Information Theory*, 60(11), pp. 6844-6869, Nov. 2014.

[53] Y. Tian and A. Yener, "Degrees of Freedom for the MIMO Multi-way Relay Channel," *IEEE Transactions on Information Theory*, 60(5), pp. 2495-2511, May. 2014.

[52] B. Guler and A. Yener, "Uplink Interference Management for Coexisting MIMO Femtocell and Macrocell Networks: An Interference Alignment Approach," *IEEE Transactions on Wireless Communications*, 13(4), pp. 2246-2257, Apr. 2014.

[51] X. He and A. Yener, "Providing Secrecy With Structured Codes: Two-User Gaussian Channels," *IEEE Transactions on Information Theory*, 60(4), pp. 2121-2138, Apr. 2014.

[50] B. Guler and A. Yener, "Selective Interference Alignment for MIMO Cognitive Femtocell Networks," *IEEE Journal on Selected Areas in Communications: Cognitive Radio Series*, 32(3), pp. 439-450, Mar. 2014.

[49] X. He, A. Khisti and A. Yener, "MIMO Broadcast Channel with an Unknown Eavesdropper: Secrecy Degrees of Freedom," *IEEE Transactions on Communications*, 62(1), pp. 246-255, Jan. 2014.

[48] M. Li, O. Simeone and A. Yener, "Degraded Broadcast Diamond Channels with Noncausal State Information at the Source," *IEEE Transactions on Information Theory*, 59(12), pp. 8210-8223, Dec. 2013.

[47] X. He and A. Yener, "The Role of Feedback in Two-way Secure Communications," *IEEE Transactions on Information Theory*, 59(12), pp. 8115-8130, Dec. 2013.

[46] G. Xiong, S. Kishore and A. Yener, "Spectrum Sensing in Cognitive Radio Networks: Performance Evaluation and Optimization," *Physical Communication (PHYCOM), Special Issue on Cognitive Radio*, vol. 9, pp. 171-183, Dec. 2013.

[45] E. N. Ciftcioglu, A. Yener and M. J. Neely, "Maximizing Quality of Information from Multiple Sensor Devices: The Exploration vs Exploitation Tradeoff," *IEEE Journal of Selected Topics in Signal Processing, Special Issue on Learning-Based Decision Making in Dynamic Systems under Uncertainty*, 7(5), pp. 883-894, Oct. 2013.

[44] R. Bassily, E. Ekrem, X. He, E. Tekin, J. Xie, M. Bloch, S. Ulukus and A. Yener, "Cooperative Security at the Physical Layer," *IEEE Signal Processing Magazine*, 30(5), pp. 16-28, Sep. 2013.

[43] Y. Tian and A. Yener, "Guiding the Blind Transmitters: Degrees of Freedom Optimal Interference Alignment Using Relays," *IEEE Transactions on Information Theory*, 59(8), pp. 4819-4832, Aug. 2013.

[42] X. He and A. Khisti and A. Yener, "MIMO Multiple Access Channel with an Arbitrarily Varying Eavesdropper: Secrecy Degrees of Freedom," *IEEE Transactions on Information Theory*, 59(8), pp. 4733-4745, Aug. 2013.

[41] M. Li, O. Simeone and A. Yener, "Multiple Access Channels with States Causally Known at Transmitters," *IEEE Transactions on Information Theory*, 59(3), pp. 1394-1404, Mar. 2013.

[40] X. He and A. Yener, "End-to-end Secure Multi-hop Communication with Untrusted Relays," *IEEE Transactions on Wireless Communications*, 12(1), pp. 1-11, Jan. 2013.

[39] I. Stanojev and A. Yener, "Improving Secrecy Rate via Spectrum Leasing for Friendly Jamming," *IEEE Transactions on Wireless Communications*, 12(1), pp. 134-145, Jan. 2013.

[38] X. He and A. Yener, "Strong Secrecy and Reliable Byzantine Detection in the Presence of an Untrusted Relay," *IEEE Transactions on Information Theory*, 59(1), pp. 177-192, Jan. 2013.

[37] D. Gunduz, A. Yener, A. Goldsmith, and H. V. Poor, "The Multiway Relay Channel," *IEEE Transactions on Information Theory*, 59(1), pp. 51-63, Jan. 2013.

[36] Y. Tian and A. Yener, "Symmetric Capacity of the Gaussian Interference Channel with an Out-of-Band Relay to within 1.15 Bits," *IEEE Transactions on Information Theory*, 58(8), pp. 5151-5171, Aug. 2012.

[35] K. Tutuncuoglu and A. Yener, "Sum-Rate Optimal Power Policies for Energy Harvesting Transmitters in an Interference Channel," *JCN Special issue on Energy Harvesting in Wireless Networks*, 14(2), pp. 151-161, Apr. 2012.

[34] K. Tutuncuoglu and A. Yener, "Optimum Transmission Policies for Battery Limited Energy Harvesting Nodes," *IEEE Transactions on Wireless Communications*, 11(3), pp. 1180-1189, Mar. 2012. **(IEEE Marconi Prize Paper Award in Wireless Communications 2014)**

[33] E. N. Ciftcioglu, Y. E. Sagduyu, R. Berry, and A. Yener, "Cost-Delay Tradeoffs for Two-Way Relay Networks," *IEEE Transactions on Wireless Communications*, 10(12), pp. 4100-4109, Dec. 2011.

[32] O. Ozel, K. Tutuncuoglu, J. Yang, S. Ulukus and A. Yener, "Transmission with Energy Harvesting Nodes in Fading Wireless Channels: Optimal Policies," *IEEE Journal on Selected Areas in Communcations: Energy-Efficient Wireless Communications*, 29(8), pp. 1732-1743, Sep. 2011.

[31] S. Goel, V. Aggarwal, A. Yener and A. R. Calderbank, "The Effect of Eavesdroppers on Network Connectivity: A Secrecy Graph Approach," *IEEE Transactions on Information Forensics and Security, Special Issue on Using the Physical Layer for Securing the Next Generation of Communication Systems*, 6(3), pp. 712-724, Sep. 2011.

[30] Y. Tian and A. Yener, "The Gaussian Interference Relay Channel: Improved Achievable Rates and Sum Rate Upperbounds Using a Potent Relay," *IEEE Transactions on Information Theory, Special Issue on Interference Networks*, 57(5), pp. 2865-2879, May. 2011.

[29] X. He and A. Yener, "The Gaussian Many-to-One Interference Channel with Confidential Messages," *IEEE Transactions on Information Theory, Special Issue on Interference Networks*, 57(5), pp. 2730-2745, May. 2011.

[28] X. He and A. Yener, "Cooperation with an Untrusted Relay: A Secrecy Perspective," *IEEE Transactions on Information Theory*, 56(8), pp. 3807-3827, Aug. 2010.

[27] K. Lee, A. Yener and X. He, "Resource Allocation for the Multi-Band Relay Channel: A Building Block for Hybrid Wireless Networks," *Eurasip Journal on Wireless Communications and Networking*, vol. 2010, Article ID 792410, 13 pages, Mar. 2010. doi:10.1155/2010/792410.

[26] M. Chen and A. Yener, "Power Allocation for F/TDMA Multiuser Two-way Relay Networks," *IEEE Transactions on Wireless Communications*, 9(2), pp. 546-551, Feb. 2010.

[25] X. He and A. Yener, "Two-hop Secure Communication Using an Untrusted Relay," *Eurasip Journal on Wireless Communication and Networking, Special Issue on Wireless Physical Layer Security*, vol. 2009, Article ID 305146, 13 pages, Nov. 2009. doi:10.1155/2009/305146.

[24] M. Chen and A. Yener, "Multiuser Two-Way Relaying: Detection and Interference Management Strategies," *IEEE Transactions on Wireless Communications*, 8(8), pp. 4296 - 4305, Aug. 2009.

[23] J. Andrews, N. Jindal, M. Haenggi, R. Berry, S. Jafar, D. Guo, S. Shakkottai, R. Heath, M. Neely, S. Weber, A. Yener, "Rethinking Information Theory for Mobile Ad Hoc Networks," *IEEE Communications Magazine*, 46(12), pp. 94 - 101, Dec. 2008.

[22] E. Tekin and A. Yener, "The Gaussian Multiple Access Wire-Tap Channel," *IEEE Transactions on Information Theory*, 54(12), pp. 5747 - 5755, Dec. 2008.

[21] J. Eom, T. Lee, R. Rietman, and A. Yener, "An Efficient Framed-Slotted ALOHA Algorithm with Pilot Frame and Binary Selection for Anti-Collision of RFID Tags," *IEEE Communications Letters*, 12(11), pp. 861 - 863, Nov. 2008.

[20] E. Tekin and A. Yener, "The General Gaussian Multiple Access and Two-Way Wire-Tap Channels: Achievable Rates and Cooperative Jamming," *IEEE Transactions on Information Theory*, 54(6), pp. 2735 - 2751, Jun. 2008.

[19] S. Serbetli and A. Yener, "Relay Assisted F/TDMA Ad Hoc Networks: Node Classification, Power Allocation and Relaying Strategies," *IEEE Transactions on Communications*, 56(6), pp. 937 - 947, Jun. 2008.

[18] M. Chen, S. Serbetli and A. Yener, "Distributed Power Allocation Strategies for Parallel Relay Networks," *IEEE Transactions on Wireless Communications*, 7(2), pp. 552 - 561, Feb. 2008.

[17] C. Oh and A. Yener, "Power Controlled CDMA Cell Sectorization with Multiuser Detection: A Comprehensive Analysis of Uplink and Downlink," *Eurasip Journal on Wireless Communications and Networking*, vol. 2007, Article ID 62379, 13 pages, 2007. doi:10.1155/2007/62379.

[16] C. Oh and A. Yener, "Downlink Throughput Maximization for Interference Limited Multiuser Systems: TDMA versus CDMA," *IEEE Transactions on Wireless Communications*, 6(7), pp. 2454 - 2463, Jul. 2007.

[15] G. Khandelwal, K. Lee, A. Yener, and S. Serbetli, "ASAP: A MAC Protocol for Dense and Time-Constrained RFID Systems," *Eurasip Journal on Wireless Communications and Networking*, vol. 2007, Article ID 18730, 13 pages, 2007. doi:10.1155/2007/18730.

[14] S. Serbetli and A. Yener, "MMSE Transmitter Design for Correlated MIMO Systems with Imperfect Channel Estimates: Power Allocation Trade-offs," *IEEE Transactions on Wireless Communications*, 5(8), pp. 2295 - 2304, Aug. 2006.

[13] S. Serbetli and A. Yener, "MIMO-CDMA Systems: Signature and Beamformer Design with Various Levels of Feedback," *IEEE Transactions on Signal Processing*, 54(7), pp. 2758 - 2772, Jul. 2006.

[12] J. Shin, K. Lee, A. Yener, and T. F. La Porta, "On Demand Diversity Wireless Relay Networks," *ACM Transactions on Mobile Networking and Applications, Special Issue On Soft Radio-Enabled Heterogeneous Wireless Networks*, 11(4), pp. 593 - 611, Aug. 2006.

[11] S. Serbetli and A. Yener, "Time Slotted Multiuser MIMO Systems: Beamforming and Scheduling Strategies," *Eurasip Journal on Wireless Communications and Networking, Special Issue on Multiuser MIMO Networks*, vol. 2004, pp. 286 - 296, Dec. 2004.

[10] S. Ulukus and A. Yener, "Iterative Transmitter and Receiver Optimization for CDMA Networks," *IEEE Transactions on Wireless Communications*, 3(6), pp. 1879 - 1884, Nov. 2004.

[9] O. Filiz and A. Yener, "Rank Constrained Temporal-Spatial Matrix Filters for CDMA Systems," *IEEE Transactions on Wireless Communications*, 3(6), pp. 1974 - 1979, Nov. 2004.

[8] S. Serbetli and A. Yener, "Transceiver Optimization for Multiuser MIMO Systems," *IEEE Transactions on Signal Processing*, 52(1), pp. 214 - 226, Jan. 2004.

[7] R. Sinha, A. Yener and R. D. Yates, "Noncoherent Multiuser Communications: Multistage Detection and Selective Filtering," *Eurasip Journal on Applied Signal Processing, Special Issue on Multiuser Detection and Blind Estimation*, vol. 2002, pp. 1415 - 1426, Dec. 2002.

[6] A. Yener, R. D. Yates and S. Ulukus, "Combined Multiuser Detection and Beamforming for CDMA Systems: Filter Structures," *IEEE Transactions on Vehicular Technology*, 51(5), pp. 1087 - 1095, Sep. 2002.

[5] A. Yener, R. D. Yates and S. Ulukus, "CDMA Multiuser Detection: A Nonlinear Programming Approach," *IEEE Transactions on Communications*, 50(6), pp. 1016 - 1024, Jun. 2002.

[4] A. Yener, R. D. Yates and S. Ulukus, "Interference Management for CDMA Systems Through Power Control, Multiuser Detection and Beamforming," *IEEE Transactions on Communications*, 49(7), pp.1227 - 1239, Jul. 2001.

[3] C. U. Saraydar and A. Yener, "Adaptive Cell Sectorization for CDMA Systems," *IEEE Journal on Selected Areas in Communications*, 19(6), pp. 1041 - 1051, Jun. 2001.

[2] A. Yener and C. Rose, "Highly Mobile Users and Paging: Optimal Polling Strategies," *IEEE Transactions on Vehicular Technology*, 47(4), pp. 1251 - 1257, Nov. 1998.

[1] A. Yener and C. Rose, "Genetic Algorithms Applied to Cellular Call Admission Problem: Local Policies," *IEEE Transactions on Vehicular Technology*, 46(1), pp. 72 - 79, Feb. 1997.

Proceedings

[281] C. Ren, R. Underwood, S. Di, E. Kutay, Z. Lukic, A. Yener, F. Cappello, H. Guo, "FFCz: Fast Fourier Correction for Spectrum-Preserving Lossy Compression of Scientific Data," *to appear in Proceedings of the 40th IEEE International Parallel & Distributed Processing Symposium (IPDPS)*, May 2026.

[280] J. Mao and A. Yener, Distributed Client Selection for Over-the-Air Federated Learning with Energy-Harvesting Devices, *in Proceedings of the IEEE Global Communications Conference, GLOBECOM25*, Taiwan, Dec. 2025.

[279] T. Welling and A. Yener, How to Mitigate a Timing Attack on Vehicular Networks: Cooperative Resetting Strategies, *in Proceedings of the IEEE Global Communications Conference, GLOBECOM25*, Taiwan, Dec. 2025.

[278] E. Kutay and A. Yener, Unifying Modalities Through Semantic Embeddings, *in Proceedings of the IEEE Global Communications Conference, GLOBECOM25*, Taiwan, Dec. 2025.

[277] J. Mao and A. Yener, Coordinated Online Client Selection for Energy-Harvesting Over-the-Air Federated Learning, *in Proceedings of the Asilomar Conference on Signals, Systems, and Computers, Asilomar25*, Pacific Grove, CA, Oct. 2025.

[276] E. Arda and A. Yener, Rate-Distortion-Perception Trade-off in Summarization, *in Proceedings of the 61st Allerton Conference on Communication, Control and Computing*, Champaign, IL, Sept. 2025.

[275] T. Welling, R. A. Chou, and A. Yener, Secret Sharing Over a Two Receiver Classical-Quantum Broadcast Channel, *in Proceedings of the IEEE International Symposium on Information Theory, ISIT25*, Ann Arbor, Michigan, Jun. 2025.

[274] E. Kutay and A. Yener, Perception-Aware Clustering, *in Proceedings of the IEEE International Symposium on Information Theory, ISIT25*, Ann Arbor, Michigan, Jun. 2025.

[273] E. Arda and A. Yener, A Rate-Distortion Framework for Summarization, *in Proceedings of the IEEE International Symposium on Information Theory, ISIT25*, Ann Arbor, Michigan, Jun. 2025.

[272] W. Harrison and A. Yener, Authorship Identification: From Fundamental Limits to Practice, *in Proceedings of the IEEE International Symposium on Information Theory, ISIT25*, Ann Arbor, Michigan, Jun. 2025.

[271] E. Arda, E. Kutay and A. Yener, Semantic Relaying of Sentences, *in Proceedings of the IEEE International Conference on Communications, ICC25*, Montreal, Canada, Jun. 2025.

[270] Y. E. Sagduyu, T. Erpek, A. Yener and S. Ulukus, "Low-Latency Task-Oriented Communications with Multi-Round, Multi-Task Deep Learning," *in Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (ACM MobiCom 24), NY, USA,* Dec. 2024.

[269] T. Welling, O. Gunlu and A. Yener, "Low-latency Secure Integrated Sensing and Communication with Transmitter Actions," *in Proceedings of the IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC24, Lucca, Italy,* Sep. 2024.

[268] Y. Liu, M. Li, L. Ong and A. Yener, "Bistatic Integrated Sensing and Communication over Memoryless Relay Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT24*, Athens, Greece, Jul. 2024.

[267] R. Chou, J. Kliewer, and A. Yener, "Private Sum Computation: Trade-Off between Shared Randomness and Privacy," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT24*, Athens, Greece, Jul. 2024.

[266] T. Welling, O. Gunlu and A. Yener, "Transmitter Actions for Secure Integrated Sensing and Communication," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT24*, Athens, Greece, Jul. 2024.

[265] J. Mao, T. Yin, A. Yener and M. Liu, "Leveraging the Physical Layer for Differential Privacy in Over-the-Air Federated Learning," *in Proceedings of the IEEE International Conference on Communications, ICC24*, Denver, USA, Jun. 2024.

[264] Y. E. Sagduyu, T. Erpek, A. Yener and S. Ulukus, "Joint Sensing and Task-Oriented Communications with Image and Wireless Data Modalities for Dynamic Spectrum Access," *in Proceedings of the IEEE International Symposium on Dynamic Spectrum Access Networks Workshops*, Washington, DC, USA, May 2024.

[263] O. Gunlu, M. Bloch, R. F. Schaefer and A. Yener, "Nonasymptotic Performance Limits of Low-Latency Secure Integrated Sensing and Communication Systems," *in Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP24*, Seoul, Korea, Apr. 2024.

[262] E. Kutay and A. Yener, "Classification-Oriented Semantic Wireless Communications," *in Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP24*, Seoul, Korea, Apr. 2024.

[261] J. Mao and A. Yener, "Personalized Over-the-Air Federated Learning with Personalized Reconfigurable Intelligent Surfaces," *in Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP24*, Seoul, Korea, Apr. 2024.

[260] E. Arda, E. Kutay and A. Yener, "Semantic Forwarding for Next Generation Relay Networks," *in 2024 58th Annual Conference on Information Sciences and Systems, CISS24*, Princeton, NJ, USA, Mar. 2024.

[259] Y. E. Sagduyu, T. Erpek, A. Yener and S. Ulukus, "Multi-Receiver Task-Oriented Communications via Multi-Task Deep Learning," *IEEE Future Networks World Forum*, Baltimore, MD, Nov. 2023.

[258] X. Zheng and A. Yener, "Privacy-Preserving Clustered Peer-to-Peer Learning," *in Proceedings of the Asilomar Conference on Signals, Systems, and Computers, Asilomar23*, CA, USA, Oct. 2023.

[257] E. Kutay and A. Yener, "Semantic Text Compression for Classification," *in Proceedings of the IEEE International Conference on Communications Workshops, ICC23*, Rome, Italy, May 2023.

[256] J. Mao and A. Yener, "RIS-Assisted Over-the-Air Adaptive Federated Learning with Noisy Downlink," *in Proceedings of the IEEE International Conference on Communications Workshops, ICC23*, Rome, Italy, May 2023.

[255] J. Mao and A. Yener, "ROAR-Fed: RIS-Assisted Over-the-Air Adaptive Resource Allocation for Federated Learning," *in Proceedings of the IEEE International Conference on Communications, ICC23*, Rome, Italy, May 2023.

[254] Y. E. Sagduyu, S. Ulukus and A. Yener, "Age of Information in Deep Learning-Driven Task-Oriented Communications," *in Proceedings of the IEEE INFOCOM Age of Information Workshop, INFOCOM23*, NY, USA, May 2023.

[253] Y. E. Sagduyu, T. Erpek, S. Ulukus and A. Yener, "Vulnerabilities of Deep Learning-Driven Semantic Communications to Backdoor (Trojan) Attacks," *in 2023 57th Annual Conference on Information Sciences and Systems, CISS23*, Baltimore, MD, USA, Mar. 2023.

[252] O. Gunlu, M. Bloch, R. F. Schaefer and A. Yener, "Secure Integrated Sensing and Communication for Binary Input Additive White Gaussian Noise Channels," *in Proceedings of the 3rd IEEE International Symposium on Joint Communications & Sensing, JC&S23*, Austria and online, Mar. 2023.

[251] S. Lin, M. Shi, A. Arora, R. Bassily, E. Bertino, C. Caramanis, K. Chowdhury, E. Ekici, A. Eryilmaz, S. Ioannidis, N. Jiang, G. Joshi, J. Kurose, Y. Liang, Z. Lin, J. Liu, M. Liu, T. Melodia, A. Mokhtari, R. Nowak, S. Oh, S. Parthasarathy, C. Peng, H. Seferoglu, N. Shroff, S. Shakkottai, K. Srinivasan, A. Talwalkar, A. Yener and L. Ying, "Leveraging Synergies Between AI and Networking to Build Next Generation Edge Networks," *in Proceedings of the IEEE International Conference on Collaboration and Internet Computing, CIC'22*, virtual, Dec. 2022.

[250] E. Kutay and A. Yener, "Semantic Communications: A Paradigm Whose Time Has Come," *in Proceedings of the IEEE International Conference on Collaboration and Internet Computing, CIC22*, virtual, Dec. 2022.

[249] J. Mao and A. Yener, "Iterative Power Control for Wireless Networks with Distributed Reconfigurable Intelligent Surfaces," *in Proceedings of the IEEE Global Communications Conference, GLOBECOM22*, Rio de Janeiro, Brazil, Dec. 2022.

[248] E. Bingol and A. Yener, "Peak Age of Information with Receiver Induced Service Interruptions," *in Proceedings of Military Communications Conference, MILCOM22*, Rockville, MD, USA, Nov. 2022.

[247] X. Zheng, P. Naghizadeh and A. Yener, "DiPLe: Learning Directed Collaboration Graphs for Peer-to-Peer Personalized Learning," *in Proceedings of the IEEE Information Theory Workshop, ITW22*, Mumbai, India, Nov. 2022.

[246] J. Mao, H. Yang, P. Qiu, J. Liu and A. Yener, "CHARLES: Channel-Quality-Adaptive Over-the-Air Federated Learning over Wireless Networks," *in Proceedings of the IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC22*, Oulu, Finland, Jul. 2022.

[245] M. Nafea, E. Shin and A. Yener, "Proportional Fair Clustered Federated Learning," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT22*, Helsinki, Finland, Jun. 2022.

[244] H. Yang, P. Qiu, J. Liu and A. Yener, "Over-The-Air Federated Learning With Joint Adaptive Computation and Power Control," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT22*, Helsinki, Finland, Jun. 2022.

[243] O. Ozel, A. Yener and S. Ulukus, "State Amplification and Masking While Timely Updating," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT22*, Helsinki, Finland, Jun. 2022.

[242] O. Günlü, M. Bloch, R. F. Schaefer and A. Yener, "Secure Joint Communication and Sensing," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT22*, Helsinki, Finland, Jun. 2022.

[241] T. Erpek, Y. E. Sagduyu, A. Alkhateeb, and A. Yener, "Autoencoder-Based Communications with Reconfigurable Intelligent Surfaces," *in Proceedings of the IEEE International Symposium on Dynamic Spectrum Access Networks, DySPAN21*, virtual, Dec. 2021.

[240] S. Leng and A. Yener, "Learning to Transmit Fresh Information in Energy Harvesting Networks Using Supervised Learning," *in Proceedings of the 55th Asilomar Conference on Signals, Systems and Computers*, virtual, Nov 2021.

[239] B. Guler and A. Yener, "A Framework for Sustainable Federated Learning," *in Proceedings of the IEEE International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt21*, virtual, Oct. 2021.

[238] M. Nafea and A. Yener, "Secure Communication in a Multi-antenna Wiretap Channel with a Reconfigurable Intelligent Surface," *in Proceedings of the International Symposium on Wireless Communication Systems, ISWCS'21*, virtual, Sep. 2021.

[237] B. Guler and A. Yener, "Energy Harvesting Distributed Machine Learning," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT21*, virtual, Jul. 2021.

[236] S. S. Bidokthi and A. Yener, "On the Timeliness of Arithmetic Coding," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT21*, virtual, Jul. 2021.

[235] S. Leng, and A. Yener, "An Actor-Critic Reinforcement Learning Approach to Minimum Age of Information Scheduling in Energy Harvesting Networks," *in Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP21*, Toronto, ON, Canada, Jun. 2021.

[234] H. Nikbakht, S. Kamel, M. Wigger, and A. Yener, "Stochastic D2D Caching with Energy Harvesting Nodes," *in Proceedings of the IEEE International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt20*, Volos, Greece, Jun. 2020.

[233] O. M. Sleem, S. Leng, and A. Yener, "Age of Information Minimization in Wireless Powered Stochastic Energy Harvesting Networks," *in Proceedings of the IEEE Conference on Information Sciences and Systems, CISS20*, Princeton, NJ, Mar. 2020.

[232] S. Leng and A. Yener, "Age of Information Minimization for Wireless Ad Hoc Networks: A Deep Reinforcement Learning Approach," *in Proceedings of the IEEE Global Communications Conference, GLOBECOM19*, Waikoloa, HI, Dec. 2019.

[231] S. Leng, X. Ni, and A. Yener, "Age of Information for Wireless Energy Harvesting Secondary Users in Cognitive Radio Networks," *in Proceedings of the 16th IEEE International Conference on Mobile Ad-Hoc and Smart Systems, MASS19*, Monterey, CA, Nov. 2019.

[230] N. Abuzainab, T. Erpek, K. Davaslioglu, Y. E. Sagduyu, Y. Shi, S. J. Mackey, M. Patel, F. Panettieri, M. A. Quareshi, V. Isler and A. Yener, "QoS and Jamming-Aware Wireless Networking Using Deep Reinforcement Learning," *in Proceedings of the IEEE Military Communications Conference, MILCOM19*, Norfolk, VA, Nov. 2019.

[229] A. A. Zewail, A. M. Ibrahim, and A. Yener, "An Optimization Framework for Secure Delivery in Heterogeneous Coded Caching Systems," *in Proceedings of the 53nd Asilomar Conference on Signals, Systems and Computers*, Pacific Grove, California, USA, Nov 2019.

[228] A. A. Zewail and A. Yener, "Secure Caching and Delivery for Combination Networks with Asymmetric Connectivity," *in Proceedings of the IEEE Information Theory Workshop, ITW19*, Visby, Gotland, Sweden, Aug. 2019.

[227] R. Chou and A. Yener, "The Degraded Gaussian Many-Access Wiretap Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT19*, Paris, France, Jul. 2019.

[226] M. Tahmasbi, M. Bloch, and A. Yener, "In-Band Sensing of the Adversary's Channel for Secure Communication in Wireless Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT19*, Paris, France, Jul. 2019.

[225] A. A. Zewail and A. Yener, "Untrusted Caches in Two-layer Networks," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT19*, Paris, France, Jul. 2019.

[224] A. A. Zewail and A. Yener, "Cache-Aided Combination Networks with Asymmetric End Users," *in Proceedings of the IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC19*, Cannes, France, Jul. 2019.

[223] S. Leng and A. Yener, "Impact of Imperfect Spectrum Sensing on Age of Information in Energy Harvesting Cognitive Radios," *in Proceedings of the IEEE International Conference on Communications, ICC19*, Shanghai, China, May. 2019.

[222] A. Ibrahim, A. Zewail, and A. Yener, "Coded Placement for Systems with Shared Caches," *in Proceedings of the IEEE International Conference on Communications, ICC19*, Shanghai, China, May. 2019.

[221] S. Leng and A. Yener, "Minimizing Age of Information for an Energy Harvesting Cognitive Radio," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC19*, Marrakech, Morocco, Apr. 2019.

[220] M. Nafea and A. Yener, "The Caching Broadcast Channel with a Wire and Cache Tapping Adversary of Type II," *in Proceedings of Information Theory Workshop, ITW18*, Guangzhou, China, Nov. 2018.

[219] A. Ibrahim, A. Zewail, and A. Yener, "Benefits of Coded Placement for Networks with Heterogeneous Cache Sizes," *in Proceedings of the 52nd Asilomar Conference on Signals, Systems and Computers, Asilomar18*, Pacific Grove, CA, Oct. 2018.

[218] M. Nafea and A. Yener, "The Caching Broadcast Channel with a Wire and Cache Tapping Adversary of Type II: Multiple Library Files," *in Proceedings of the 56th Annual Allerton Conference on Communication, Control, and Computing, Allerton18*, Monticello, IL, Oct. 2018.

[217] A. Zewail and A. Yener, "The Wiretap Channel with a Cache," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT18*, Vail, CO, Jun. 2018.

[216] A. Baknina, O. Ozel, J. Yang, S. Ulukus, and A. Yener, "Sending Information Through Status Updates," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT18*, Vail, CO, Jun. 2018.

[215] S. Fong, J. Yang, and A. Yener, "Non-Asymptotic Achievable Rates for Gaussian Energy-Harvesting Channels: Best-Effort and Save-and-Transmit," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT18*, Vail, CO, Jun. 2018.

[214] S. Leng and A. Yener, "Relay-Centric Two-Hop Networks with Asymmetric Wireless Energy Transfer: A Multi-Leader-Follower Stackelberg Game," *in Proceedings of the IEEE International Conference on Communications, ICC18*, Kansas City, MO, May. 2018.

[213] A. Ibrahim, A. Zewail, and A. Yener, "Device-to-Device Coded Caching with Heterogeneous Cache Sizes," *in Proceedings of the IEEE International Conference on Communications, ICC18*, Kansas City, MO, May. 2018.

[212] S. Leng and A. Yener, "A Multi-Leader Stackelberg Game for Two-Hop Systems with Wireless Energy Transfer," *in Proceedings of the Workshop on Energy Harvesting and Remotely Powered Communications for Sustainable Future Networks and IoT, in conjunction with IEEE WCNC 2018*, Barcelona, Spain, Apr. 2018.

[211] A. Zewail and A. Yener, "Cache-Aided Combination Networks with Secrecy Guarantees," *in Proceedings of the IEEE Conference on Information Sciences and Systems, CISS18*, Princeton, NJ, Mar. 2018.

[210] A. Ibrahim, A. Zewail, and A. Yener, "On Coded Caching with Heterogeneous Distortion Requirements," *in Proceedings of the 2018 Information Theory and Applications Workshop, ITA18*, San Diego, CA, Feb. 2018.

[209] S. Leng, A. Ibrahim, and A. Yener, "Energy Cooperative Multiple Access Channels with Energy Harvesting Transmitters and Receiver," *in Proceedings of the 2nd IEEE GLOBECOM Workshop on Wireless Energy Harvesting Communication Networks*, Singapore, Dec. 2017.

[208] S. S. Bidokhti, M. Wigger, A. Yener, and A. E. Gamal, "State-Adaptive Coded Caching for Symmetric Broadcast Channels," *in Proceedings of the 51st Asilomar Conference on Signals, Systems and Computers, Asilomar17*, Pacific Grove, CA, Nov. 2017.

[207] A. Zewail and A. Yener, "Coded Caching for Combination Networks with Cache-Aided Relays," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[206] R. Chou and A. Yener, "The Gaussian Multiple Access Wiretap Channel when the Eavesdropper can Arbitrarily Jam," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[205] R. Chou and A. Yener, "The Degraded Gaussian Multiple Access Wiretap Channel with Selfish Transmitters: A Coalitional Game Theory Perspective," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[204] R. Chou and A. Yener, "A Game Theoretic Treatment for Pair-wise Secret-Key Generation in Many-to-One Networks," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[203] M. Nafea and A. Yener, "A New Broadcast Wiretap Channel Model," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[202] M. Nafea and A. Yener, "New Models for Interference and Broadcast Channels with Confidential Messages," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[201] M. Tahmasbi, M. Bloch, and A. Yener, "Learning Adversary's Actions for Secret Communication," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[200] B. Guler, D. Gunduz, and A. Yener, "On the Necessary Conditions for Transmitting Correlated Sources over a Multiple Access Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[199] S. S. Bidokhti, M. Wigger, and A. Yener, "Benefits of Cache Assignment in Degraded Broadcast Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[198] R. Yates, P. Ciblat, A. Yener, and M. Wigger, "Age-Optimal Constrained Cache-Updating," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT17*, Aachen, Germany, Jun. 2017.

[197] S. S. Bidokhti, M. Wigger, and A. Yener, "Gaussian Broadcast Channels with Receiver Cache Assignment," *in Proceedings of the IEEE International Conference on Communications, ICC17*, Paris, France, May. 2017.

[196] A. Ibrahim, A. Zewail, and A. Yener, "Optimization of Heterogeneous Caching Systems with Rate Limited Links," *in Proceedings of the IEEE International Conference on Communications, ICC17*, Paris, France, May. 2017.

[195] S. Wang, P. Giridhar, H. Wang, L. Kaplan, T. Pham, A. Yener, and T. Abdelzaher, "StoryLine: Unsupervised Geo-event Demultiplexing in Social Spaces without Location Information," *in Proceedings the 2nd ACM/IEEE International Conference on Internet-of-Things Design and Implementation, IoTDI17*, Pittsburgh, PA, Apr. 2017.

[194] A. Ibrahim, A. Zewail, and A. Yener, "Centralized Coded Caching with Heterogeneous Cache Sizes," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC17*, San Francisco, CA, Mar. 2017.

[193] B. Varan and A. Yener, "Online Transmission Policies for Cognitive Radio Networks with Energy Harvesting Secondary Users," *in Proceedings of the Workshop on Energy Harvesting and Remotely Powered Wireless Communication for the IoT, in conjunction with IEEE WCNC 2017*, San Francisco, CA, Mar. 2017.

[192] B. Guler, A. Yener, and A. Swami, "Learning Causal Information Flow Structures in Multi-Layer Networks," *in Proceedings of the IEEE GlobalSIP Symposium on Non-Commutative Theory and Applications,GlobalSIP16*, Washington DC, Dec. 2016.

[191] A. Zewail and A. Yener, "Two-Hop Untrusted Relay Channel with an External Eavesdropper Under Layered Secrecy Constraints," *in Proceedings of the IEEE Global Communications Conference, Globecom16*, Washington DC, Dec. 2016.

[190] A. Zewail and A. Yener, "Fundamental Limits of Secure Device-to-Device Coded Caching," *in Proceedings of the 50th Asilomar Conference on Signals, Systems and Computers, Asilomar16*, Pacific Grove, CA, Nov. 2016. **(Best Student Paper Award Finalist, Asilomar 2016)**

[189] A. Zewail and A. Yener, "Coded Caching for Resolvable Networks with Security Requirements," *in Proceedings of the 3rd Workshop on Physical-Layer Methods for Wireless Security, in conjunction with IEEE CNS16*, Philadelphia, PA, Oct. 2016.

[188] R. Chou, M. Bloch, and A. Yener, "Universal Covertness for Discrete Memoryless Sources," *in Proceedings of the 54th Annual Allerton Conference on Communication, Control, and Computing, Allerton16*, Monticello, IL, Sep. 2016.

[187] M. Nafea and A. Yener, "A New Multiple Access Wiretap Channel Model," *in Proceedings of Information Theory Workshop, ITW16*, Cambridge, UK, Sep. 2016.

[186] B. Guler, D. Gunduz, and A. Yener, "On Lossy Transmission of Correlated Sources over a Multiple Access Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[185] R. Chou and A. Yener, "Polar Coding for the Multiple Access Wiretap Channel via Rate-Splitting and Cooperative Jamming," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[184] R. Chou and A. Yener, "Multiuser Authentication with Anonymity Constraints over Noisy Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[183] M. Nafea and A. Yener, "A New Wiretap Channel Model and Its Strong Secrecy Capacity," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[182] M. Nafea and A. Yener, "The Multiple Access Wiretap Channel II with a Noisy Main Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[181] E. MolavianJazi and A. Yener, "Two-way Lossy Compression via a Relay with Self Source," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT16*, Barcelona, Spain, Jul. 2016.

[180] S. Yao, S. Hu, S. Li, Y. Zhao, L. Su, L. Kaplan, A. Yener, and T. Abdelzaher, "On Source Dependency Models for Reliable Social Sensing: Algorithms and Fundamental Error Bounds," *in Proceedings of the 36th IEEE International Conference on Distributed Computing Systems, ICDCS16*, Nara, Japan, Jun. 2016.

[179] B. Guler, A. Yener, and A. Swami, "The Semantic Communication Game," *in Proceedings of the IEEE International Conference on Communications, ICC16*, Kuala Lumpur, Malaysia, May. 2016.

[178] B. Varan and A. Yener, "Matching Games for Wireless Networks with Energy Cooperation," *in Proceedings of the Workshop on Green Networks (GREENNET), in conjunction with IEEE WiOpt 2016*, Tempe, AZ, May. 2016.

[177] S. Yao, M. T. Amin, L. Su, S. Hu, S. Li, S. Wang, Y. Zhao, T. Abdelzaher, L. Kaplan, C. Aggarwal, and A. Yener, "Recursive Ground Truth Estimator for Social Data Streams," *in Proceedings of the 15th ACM/IEEE International Conference on Information Processing in Sensor Networks, IPSN16*, Vienna, Austria, Apr. 2016.

[176] B. Guler, A. Yener, E. MolavianJazi, P. Basu, A. Swami, and C. Andersen, "Interactive Function Compression with Asymmetric Priors," *in Proceedings of the IEEE Data Compression Conference, DCC16*, Snowbird, UT, Mar. 2016.

[175] E. MolavianJazi and A. Yener, "Lossy Subset Source Coding," *in Proceedings of the 2016 Information Theory and Applications Workshop, ITA16*, San Diego, CA, Feb. 2016.

[174] E. MolavianJazi and A. Yener, "Low-Latency Communications over Zero-Battery Energy Harvesting Channels," *in Proceedings of the IEEE Global Communications Conference, Globecom15*, San Diego, CA, Dec. 2015.

[173] B. Varan and A. Yener, "Auction Schemes for Energy and Signal Cooperation in Two-Hop Networks," *in Proceedings of the IEEE Global Communications Conference, Globecom15*, San Diego, CA, Dec. 2015.

[172] A. Ibrahim, A. Zewail, and A. Yener, "Towards Green Distributed Storage Systems," *in Proceedings of the 49th Asilomar Conference on Signals, Systems and Computers, Asilomar15*, Pacific Grove, CA, Nov. 2015.

[171] A. Zewail and A. Yener, "The Two-Hop Interference Untrusted-Relay Channel with Confidential Messages," *in Proceedings of Information Theory Workshop, ITW15*, Jeju Island, South Korea, Oct. 2015.

[170] B. Guler, K. Tutuncuoglu, and A. Yener, "Maximizing Recommender's Influence in a Social Network: An Information Theoretic Perspective," *in Proceedings of Information Theory Workshop, ITW15*, Jeju Island, South Korea, Oct. 2015.

[169] E. MolavianJazi and A. Yener, "Subset Source Coding," *in Proceedings of the 53rd Annual Allerton Conference on Communication, Control, and Computing, Allerton15*, Monticello, IL, Sep. 2015.

[168] M. Nafea and A. Yener, "Wiretap Channel II with a Noisy Main Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT15*, Hong Kong, Jun. 2015.

[167] B. Guler, E. MolavianJazi, and A. Yener, "Remote Source Coding with Two-Sided Information," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT15*, Hong Kong, Jun. 2015.

[166] O. Ozel, K. Tutuncuoglu, S. Ulukus, and A. Yener, "The Binary Energy Harvesting Channel with On-Off Fading," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT15*, Hong Kong, Jun. 2015.

[165] M. Nafea and A. Yener, "Secure Degrees of Freedom of N Œ N Œ M Wiretap Channel with a K-Antenna Cooperative Jammer," *in Proceedings of the IEEE International Conference on Communications, ICC15*, London, UK, Jun. 2015.

[164] A. Yener, "New Directions in Information Theoretic Security: Benefits of Bidirectional Signaling," *in Proceedings of Information Theory Workshop, ITW15*, Jerusalem, Israel, Apr. 2015.

[163] C. Andersen, P. Basu, B. Guler, A. Yener and E. Molavianjazi, "Protocols for Efficient Inference Communication," *in Proceedings of the Seventh International Workshop on Information Quality and Quality of Service for Pervasive Computing (IQ2S15) in Conjunction with IEEE PERCOM 2015*, St. Louis, MO, Mar. 2015.

[162] B. Varan and A. Yener, "Throughput Maximizing Games in the Two-Hop Relay Channel with Energy Cooperation," *in Proceedings of the 49th Annual Conference on Information Sciences and Systems, CISS15*, Baltimore, MD, Mar. 2015.

[161] K. Tutuncuoglu and A. Yener, "The Energy Harvesting and Energy Cooperating Two-way Channel with Finite-Sized Batteries," *in Proceedings of the IEEE Global Communications Conference, Globecom14*, Austin, TX, Dec. 2014.

[160] B. Varan and A. Yener, "Energy Harvesting Communications with Energy and Data Storage Limitations," *in Proceedings of the IEEE Global Communications Conference, Globecom14*, Austin, TX, Dec. 2014.

[159] B. Guler, A. Yener, P. Basu, C. Andersen and A. Swami, "A Study on Compressing Graphical Structures," *in Proceedings of the IEEE GlobalSIP Symposium on Network Theory, GlobalSIP14*, Atlanta, GA, Dec. 2014.

[158] B. Guler, B. Varan, K. Tutuncuoglu, M. Nafea, A. Zewail, A. Yener and D. Octeau, "Communicating in a Socially-Aware Network: Impact of Relationship Types," *in Proceedings of the IEEE GlobalSIP Symposium on Network Theory, GlobalSIP14*, Atlanta, GA, Dec. 2014.

[157] A. Zewail and A. Yener, "The Multiple Access Channel with an Untrusted Relay," *in Proceedings of Information Theory Workshop, ITW14*, Hobart, Australia, Nov. 2014.

[156] M. Nafea and A. Yener, "Secure Degrees of Freedom for the MIMO Wiretap Channel with a Multiantenna Cooperative Jammer," *in Proceedings of Information Theory Workshop, ITW14*, Hobart, Australia, Nov. 2014.

[155] K. Tutuncuoglu, O. Ozel, A. Yener and S. Ulukus, "State Amplification and State Masking for the Binary Energy Harvesting Channel," *in Proceedings of Information Theory Workshop, ITW14*, Hobart, Australia, Nov. 2014.

[154] O. Ozel, K. Tutuncuoglu, S. Ulukus and A. Yener, "Capacity of the Energy Harvesting Channel with Energy Arrival Information at the Receiver," *in Proceedings of Information Theory Workshop, ITW14*, Hobart, Tasmania, Australia, Nov. 2014.

[153] B. Varan and A. Yener, "Energy Harvesting Two-Way Communications with Limited Energy and Data Storage," *in Proceedings of the 48th Asilomar Conference on Signals, Systems and Computers, Asilomar14*, Pacific Grove, CA, Nov. 2014.

[152] A. Zewail, M. Nafea and A. Yener, "Multi-terminal Networks with an Untrusted Relay," *in Proceedings of the 52nd Annual Allerton Conference on Communication, Control, and Computing, Allerton14*, Monticello, IL, Oct. 2014.

[151] B. Guler, B. Varan, K. Tutuncuoglu, M. Nafea, A. Zewail, A. Yener and D. Octeau, "Optimal Strategies for Targeted Influence in Signed Networks," *in Proceedings of the 2014 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM14*, Beijing, China, Aug. 2014.

[150] K. Tutuncuoglu, O. Ozel, A. Yener, and S. Ulukus, "Improved Capacity Bounds for the Binary Energy Harvesting Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT14*, Honolulu, HI, Jul. 2014.

[149] O. Ozel, K. Tutuncuoglu, S. Ulukus, and A. Yener, "Capacity of the Discrete Memoryless Energy Harvesting Channel with Side Information," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT14*, Honolulu, HI, Jul. 2014.

[148] E. N. Ciftcioglu, A. Michaloliakos, K. Psounis, T. F. La Porta and A. Yener, "Power Minimization with Quality-of-Information Outages," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC14*, Istanbul, Turkey, Apr. 2014.

[147] B. Guler and A. Yener, "Semantic Index Assignment," *in Proceedings of the Sixth International Workshop on Information Quality and Quality of Service for Pervasive Computing (IQ2S14) in Conjunction with IEEE PERCOM 2014*, Budapest, Hungary, Mar. 2014.

[146] B. Guler and A. Yener, "Compressing Semantic Information with Varying Priorities," *in Proceedings of the IEEE Data Compression Conference, DCC14*, Snowbird, UT, Mar. 2014.

[145] B. Varan, K. Tutuncuoglu and A. Yener, "Energy Harvesting Communications with Continuous Energy Arrivals," *in Proceedings of the 2014 Information Theory and Applications Workshop, ITA14*, San Diego, CA, Feb. 2014.

[144] M. Nafea and A. Yener, "Degrees of Freedom of the Single Antenna Gaussian Wiretap Channel with a Helper Irrespective of the Number of Antennas at the Eavesdropper," *in Proceedings of the IEEE GlobalSIP Symposium on Cyber-Security and Privacy, GlobalSIP13*, Austin, TX, Dec. 2013.

[143] B. Guler, A. Yener and P. Basu, "A Study of Semantic Data Compression," *in Proceedings of the IEEE GlobalSIP Symposium on Network Theory, GlobalSIP13*, Austin, TX, Dec. 2013.

[142] B. Varan and A. Yener, "Two-Hop Networks with Energy Harvesting: The (Non-)Impact of Buffer Size," *in Proceedings of the IEEE GlobalSIP Symposium on Energy Harvesting and Green Wireless Communications, GlobalSIP13*, Austin, TX, Dec. 2013.

[141] B. Varan and A. Yener, "The Energy Harvesting Two-Way Decode-and-Forward Relay Channel with Stochastic Data Arrivals," *in Proceedings of the IEEE GlobalSIP Symposium on Energy Harvesting and Green Wireless Communications, GlobalSIP13*, Austin, TX, Dec. 2013.

[140] B. Varan and A. Yener, "Multi-pair and Multi-way Communications Using Energy Harvesting Nodes," *in Proceedings of the 47th Asilomar Conference on Signals, Systems and Computers, Asilomar13*, Pacific Grove, CA, Nov. 2013.

[139] M. Nafea and A. Yener, "How Many Antennas Does a Cooperative Jammer Need for Achieving the Degrees of Freedom of Multiple Antenna Gaussian Channels in the Presence of an Eavesdropper?," *in Proceedings of the 51st Annual Allerton Conference on Communication, Control, and Computing, Allerton13*, Monticello, IL, Oct. 2013.

[138] K. Tutuncuoglu and A. Yener, "Cooperative Energy Harvesting Communications with Relaying and Energy Sharing," *in Proceedings of Information Theory Workshop, ITW13*, Seville, Spain, Sep. 2013.

[137] K. Tutuncuoglu, O. Ozel, A. Yener and S. Ulukus, "Binary Energy Harvesting Channel with Finite Energy Storage," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT13*, Istanbul, Turkey, Jul. 2013.

[136] Y. Tian and A. Yener, "Degrees of Freedom for the MIMO Multi-way Relay Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT13*, Istanbul, Turkey, Jul. 2013.

[135] K. Tutuncuoglu, B. Varan and A. Yener, "Energy Harvesting Two-Way Half-Duplex Relay Channel with Decode-and-Forward Relaying: Optimum Power Policies," *in Proceedings of the IEEE International Conference on Digital Signal Processing, DSP13*, Santorini, Greece, Jul. 2013.

[134] Y. Tian and A. Yener, "Degrees of Freedom Optimal Transmission for the Two-Cluster MIMO Multi-way Relay Channel," *in Proceedings of the IEEE International Conference on Communications, ICC13*, Budapest, Hungary, Jun. 2013.

[133] B. Guler and A. Yener, "Selective Interference Alignment for MIMO Femtocell Networks," *in Proceedings of the IEEE International Conference on Communications, ICC13*, Budapest, Hungary, Jun. 2013.

[132] I. Stanojev and A. Yener, "Relay Selection for Flexible Multihop Communication via Competitive Spectrum Leasing," *in Proceedings of the IEEE International Conference on Communications, ICC13*, Budapest, Hungary, Jun. 2013.

[131] K. Tutuncuoglu, B. Varan and A. Yener, "Optimum Transmission Policies for Energy Harvesting Two-way Relay Channels," *in Proceedings of the IEEE ICC13 Workshop on Green Broadband Access: Energy Efficient Wireless and Wired Network Solutions*, Budapest, Hungary, Jun. 2013.

[130] K. Tutuncuoglu and A. Yener, "Multiple Access and Two-way Channels with Energy Harvesting and Bidirectional Energy Cooperation," *in Proceedings of the 2013 Information Theory and Applications Workshop, ITA13*, San Diego, CA, Feb. 2013.

[129] M. Li, O. Simeone and A. Yener, "The State-Dependent Degraded Broadcast Diamond Channel," *in Proceedings of the 14th annual Australian Communications Theory Workshop, AusCTW13*, Adelaide, Australia, Jan. 2013.

[128] K. Tutuncuoglu and A. Yener, "Energy Harvesting Broadcast Channel with Inefficient Energy Storage," *in Proceedings of Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2012.

[127] I. Stanojev and A. Yener, "Facilitating Flexible Multihop Communication via Spectrum Leasing," *in Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC12*, Sydney, Australia, Sep. 2012.

[126] X. He and A. Yener, "The Interference Wiretap Channel with an Arbitrarily Varying Eavesdropper: Aligning Interference with Artificial Noise," *in Proceedings of the 50th Annual Allerton Conference on Communication, Control, and Computing, Allerton12*, Monticello, IL, Oct. 2012.

[125] K. Tutuncuoglu and A. Yener, "The Energy Harvesting Multiple Access Channel with Energy Storage Losses," *in Proceedings of Information Theory Workshop, ITW 2012*, Lausanne Switzerland, Sep. 2012.

[124] Y. Tian and A. Yener, "Signal Space Alignment and Degrees of Freedom for the Two-Cluster Multi-way Relay Channel," *in Proceedings of International Conference on Communications in China*, Beijing, China, Aug. 2012.

[123] F. Saremi, P. Jayachandran, F. Iandola, M. Y. SarwarUddin, T. Abdelzaher and A. Yener, "On Schedulability and Time Composability of Data Aggregation Networks," *in Proceedings of ISIF International Conference on Information Fusion, Fusion12*, Singapore, Jul. 2012.

[122] Y. Tian and A. Yener, "Guiding Blind Transmitters: Relay-aided Interference Alignment for the X channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT12*, Cambridge, MA, Jul. 2012.

[121] X. He and A. Yener, "The Gaussian Interference Wiretap Channel When the Eavesdropper Channel is Arbitrarily Varying," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT12*, Cambridge, MA, Jul. 2012.

[120] Y. Tian and A. Yener, "Relays Can Provide Alignment for the K-user Interference Channel without Channel State Information at the Transmitters," *in Proceeding of the IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC12*, Çesme, Turkey, Jun. 2012.

[119] Y. Tian and A. Yener, "Relay-aided Interference Alignment for the X Channel with Limited CSI," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC12*, Paris, France, Apr. 2012.

[118] E. N. Ciftcioglu and A. Yener, "Maximizing Credibility-based Network Utility via Power Allocation," *in Proceedings of The Fourth International Workshop on Information Quality and Quality of Service for Pervasive Computing (IQ2S) in Conjunction with IEEE PERCOM 2012*, Lugano, Switzerland, Mar. 2012.

[117] K. Tutuncuoglu and A. Yener, "Optimal Power Policy for Energy Harvesting Transmitters with Inefficient Energy Storage," *in Proceedings of the 46th Annual Conference on Information Sciences and Systems, CISS12*, Princeton, NJ, Mar. 2012.

[116] K. Tutuncuoglu and A. Yener, "Communicating with Energy Harvesting Transmitters and Receivers," *in Proceedings of the 2012 Information Theory and Applications Workshop, ITA12*, San Diego, CA, Feb. 2012.

[115] K. Tutuncuoglu and A. Yener, "Transmission Policies for Asymmetric Interference Channels with Energy Harvesting Nodes," *in Proceedings of the International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP11*, San Juan, Puerto Rico, Dec. 2011.

[114] B. Guler and A. Yener, "Interference Alignment for Cooperative MIMO Femtocell Networks," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom11*, Houston, TX, Dec. 2011.

[113] X. He, A. Khisti and A. Yener, "MIMO Broadcast Channel with Arbitrarily Varying Eavesdropper Channel: Secrecy Degrees of Freedom," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom11*, Houston, TX, Dec. 2011.

[112] X. He and A. Yener, "Gaussian Two-way Wiretap Channel with an Arbitrarily Varying Eavesdropper," *in Proceedings of the IEEE Global Telecommunications Conference Workshop on Physical Layer Security, Globecom11*, Houston, TX, Dec. 2011.

[111] S. T. Rager, E. N. Ciftcioglu, A. Yener, T. F. La Porta and M. J. Neely, "Distributed Backpressure Protocols with Limited State Feedback," *in Proceedings of the IEEE Military Communications Conference, MILCOM11*, Baltimore, MD, Nov. 2011.

[110] E. N. Ciftcioglu and A. Yener, "Quality-of-Information Aware Transmission Policies with Time-Varying Links," *in Proceedings of the IEEE Military Communications Conference, MILCOM11*, Baltimore, MD, Nov. 2011.

[109] Y. Tian and A. Yener, "Relaying for Multiple Sources in the Absence of Codebook Information," *in Proceedings of 2011 Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2011.

[108] K. Tutuncuoglu and A. Yener, "Optimal Power Control for Energy Harvesting Transmitters in an Interference Channel," *in Proceedings of 2011 Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2011.

[107] X. He, A. Khisti and A. Yener, "MIMO Multiple Access Channel with an Arbitrarily Varying Eavesdropper," *in Proceedings of the 49th Annual Allerton Conference on Communication, Control, and Computing, Allerton11*, Monticello, IL, Sep. 2011.

[106] I. Stanojev and A. Yener, "Recruiting Multi-Antenna Transmitters as Cooperative Jammers: An Auction-Theoretic Approach," *in Proceedings of the 49th Annual Allerton Conference on Communication, Control, and Computing, Allerton11*, Monticello, IL, Sep. 2011.

[105] X. He and A. Yener, "Secrecy When the Eavesdropper Controls its Channel States," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT11*, Saint Petersburg, Russia, Jul. 2011.

[104] M. Li, O. Simeone and A. Yener, "Leveraging Strictly Causal State Information at the Encoders for Multiple Access Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT11*, Saint Petersburg, Russia, Jul. 2011.

[103] E. N. Ciftcioglu, A. Yener, R. Govindan, and K. Psounis, "Operational Information Content Sum Capacity: Formulation and Examples," *in Proceedings of the ISIF International Conference on Information Fusion, Fusion11*, Chicago, IL, Jul. 2011.

[102] F. Iandola, F. Saremi, T. Abdelzaher, P. Jayachandran and A. Yener, "Real-Time Capacity of Networked Data Fusion," *in Proceedings of the ISIF International Conference on Information Fusion, Fusion11*, Chicago, IL, Jul. 2011.

[101] Y. Tian and A. Yener, "Harnessing Interference with an Out-of-Band Relay: an Approximate Capacity Result," *in Proceedings of the IEEE International Conference on Communications, ICC11*, Kyoto, Japan, Jun. 2011.

[100] K. Tutuncuoglu and A. Yener, "Short-Term Throughput Maximization for Battery Limited Energy Harvesting Nodes," *in Proceedings of the IEEE International Conference on Communications, ICC11*, Kyoto, Japan, Jun. 2011.

[99] I. Stanojev and A. Yener, "Cooperative Jamming via Spectrum Leasing," *in Proceedings of the 2011 International Symposium of Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt11*, Princeton, NJ, May. 2011.

[98] R. Urgaonkar, E. N. Ciftcioglu, A. Yener, and M. J. Neely, "Quality of Information Aware Scheduling in Task Processing Networks," *in Proceedings of the 7th International Workshop on Resource Allocation and Cooperation in Wireless Networks (RAWNET), in conjunction with IEEE WiOpt 2011*, Princeton, NJ, May. 2011.

[97] O. Ozel, K. Tutuncuoglu, J. Yang, S. Ulukus, and A. Yener, "Resource Management for Fading Wireless Channels with Energy Harvesting Nodes," *in Proceedings of the IEEE International Conference on Computer Communications - Mini Conference, INFOCOM11*, Shanghai, China, Apr. 2011.

[96] O. Ozel, K. Tutuncuoglu, J. Yang, S. Ulukus, and A. Yener, "Adaptive Transmission Policies for Energy Harvesting Wireless Nodes in Fading Channels," *in Proceedings of Conference of Information Sciences and Systems, CISS11*, Baltimore, MD, Mar. 2011.

[95] A. Bar-Noy, G. Cirincione, R. Govindan, S. Krishnamurthy, T. F. LaPorta, P. Mohapatra, M. Neely, and A. Yener, "Quality-of-Information Aware Networking for Tactical Military Networks," *in Proceedings of the Third International Workshop on Information Quality and Quality of Service for Pervasive Computing, IQ2S 2011*, Seattle, WA, Mar. 2011.

[94] M. Li, O. Simeone and A. Yener, "Message and State Cooperation in a Relay Channel When the Relay Has Strictly Causal State Information," *in Proceedings of the Information Theory and Applications Workshop, ITA11*, San Diego, CA, Feb. 2011.

[93] G. Xiong, C. Chen, S. Kishore and A. Yener, "Smart (In-home) Power Scheduling for Demand Response on the Smart Grid," *in Proceedings of the IEEE Power and Energy Society (PES) Conference on Innovative Smart Grid Technologies*, Anaheim, CA, Jan. 2011.

[92] X. He and A. Yener, "Providing Secrecy Irrespective of Eavesdropper's Channel State," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom10*, Miami, FL, Dec. 2010.

[91] X. He and A. Yener, "Providing Secrecy When the Eavesdropper Channel Is Arbitrarily Varying: A Case for Multiple Antennas," *in Proceedings of the 48th Annual Allerton Conference on Communication, Control, and Computing, Allerton10*, Monticello, IL, Sep. 2010.

[90] Y. Tian and A. Yener, "Sum Capacity of the Deterministic Interference Channel with an Out-of-Band Half-Duplex Relay," *in Proceedings of the 48th Annual Allerton Conference on Communication, Control, and Computing, Allerton10*, Monticello, IL, Sep. 2010.

[89] X. He and A. Yener, "The Role of Channel States in Secret Key Generation," *in Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC10*, Istanbul, Turkey, Sep. 2010.

[88] S. Goel and A. Yener, "Connectivity in Wireless Networks with Dynamic Key Compromise and Recovery," *in Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC10*, Istanbul, Turkey, Sep. 2010.

[87] S. Goel, V. Aggarwal, A. Yener and A. R. Calderbank, "Modeling Location Uncertainty for Eavesdroppers: A Secrecy Graph Approach," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT10*, Austin, TX, Jun. 2010. **(Best Student Paper Award Finalist, ISIT 2010)**

[86] Y. Tian and A. Yener, "The Ergodic Fading Interference Channel with an On-and-Off Relay," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT10*, Austin, TX, Jun. 2010.

[85] X. He and A. Yener, "A New Outer Bound for the Secrecy Capacity Region of the Gaussian Two-Way Wiretap Channel," *in Proceedings of the IEEE International Conference on Communications, ICC10*, Cape Town, South Africa, May. 2010. **(Best Paper Award, ICC 2010 Communication Theory Symposium)**

[84] Y. Tian and A. Yener, "Improved Achievable Rates for the Gaussian Interference Relay Channel," *in Proceedings of the IEEE International Conference on Communications, ICC10*, Cape Town, South Africa, May. 2010.

[83] E. N. Ciftcioglu, Y. E. Sagduyu, A. Yener, and R. A. Berry, "Queue Based Compression in a Two-Way Relay Network," *in Proceedings of the Conference on Information Sciences and Systems, CISS10*, Princeton, NJ, Mar. 2010.

[82] G. Xiong, S. Kishore and A. Yener, "Cost Constrained Spectrum Sensing in Cognitive Radio Networks," *in Proceedings of the Conference on Information Sciences and Systems, CISS10*, Princeton, NJ, Mar. 2010.

[81] G. Xiong, S. Kishore and A. Yener, "On Performance Evaluation of Cooperative Spectrum Sensing in Cognitive Radio Networks," *in Proceedings of the Conference on Information Sciences and Systems, CISS10*, Princeton, NJ, Mar. 2010.

[80] X. He and A. Yener, "Secrecy and Reliable Byzantine Detection in a Gaussian Untrusted Two-Hop Link," *in Proceedings of the IEEE Information Theory Workshop on Information Theory, ITW10*, Cairo, Egypt, Jan. 2010.

[79] X. He and A. Yener, "Secure Degrees of Freedom for Gaussian Channels with Interference: Structured Codes Outperform Gaussian Signaling," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom09*, Honolulu, HI, Dec. 2009.

[78] Y. Tian and A. Yener, "The Gaussian Interference Relay Channel with a Potent Relay," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom09*, Honolulu, HI, Dec. 2009.

[77] G. Xiong, S. Kishore and A. Yener, "On Low Complexity Cooperative Spectrum Sensing for Cognitive Networks," *in Proceedings of the IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP09*, Aruba, Dutch Antilles, Dec. 2009.

[76] X. He and A. Yener, "Interference Channels with Strong Secrecy," *in Proceedings of the 47th Annual Allerton Conference on Communication, Control, and Computing, Allerton09*, Monticello, IL, Sep. 2009.

[75] E. N. Ciftcioglu, Y. E. Sagduyu, R. Berry, and A. Yener, "Cost Sharing with Network Coding in Two-Way Relay Networks," *in Proceedings of the 47th Annual Allerton Conference on Communication, Control, and Computing, Allerton09*, Monticello, IL, Sep. 2009.

[74] D. Gunduz , A. Yener, A. Goldsmith and H. V. Poor, "The Multi-way Relay Channel," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT09*, Seoul, Korea, Jul. 2009.

[73] X. He and A. Yener, "Secure Communication with a Byzantine Relay," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT09*, Seoul, Korea, Jul. 2009.

[72] X. He and A. Yener, "The Gaussian Many-to-One Interference Channel with Confidential Messages," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT09*, Seoul, Korea, Jul. 2009.

[71] M. Chen and A. Yener, "Power Allocation for Multi-Access Two-Way Relaying," *in Proceedings of the IEEE International Conference on Communications, ICC09*, Dresden, Germany, Jun. 2009.

[70] X. He and A. Yener, "K-user Interference Channels: Achievable Secrecy Rate and Degrees of Freedom," *in Proceedings of the IEEE Information Theory Workshop on Networking and Information Theory, ITW09*, Volos, Greece, Jun. 2009.

[69] X. He and A. Yener, "A New Outer Bound for the Gaussian Interference Channel with Confidential Messages," *in Proceedings of the Conference on Information Sciences and Systems, CISS09*, Baltimore, MD, Mar. 2009.

[68] O. Simeone and A. Yener, "The Cognitive Multiple Access Wire-tap Channel," *in Proceedings of the Conference on Information Sciences and Systems, CISS09*, Baltimore, MD, Mar. 2009.

[67] X. He and A. Yener, "Two-hop Secure Communication Using an Untrusted Relay: A Case for Cooperative Jamming," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom08*, New Orleans, LA, Dec. 2008.

[66] X. He and A. Yener, "End-to-end Secure Multi-hop Communication with Untrusted Relays is Possible," *in Proceedings of the 42nd Annual Asilomar Conference on Signals, Systems, and Computers, Asilomar08*, Pacific Grove, CA, Oct. 2008.

[65] X. He and A. Yener, "On the Role of Feedback in Two-way Secure Communication," *in Proceedings of the 42nd Annual Asilomar Conference on Signals, Systems, and Computers, Asilomar08*, Pacific Grove, CA, Oct. 2008.

[64] E. N. Ciftcioglu, A. Yener and R. Berry, "Stability Regions for Two-Way Relaying with Network Coding," invited paper, *in Proceedings of the Wireless Internet Conference, WICON08*, Maui, HI, Nov. 2008.

[63] X. He and A. Yener, "Providing Secrecy with Lattice Codes," *in Proceedings of the 46th Annual Allerton Conference on Communications, Control, and Computing, Allerton08*, Monticello, IL, Sep. 2008.

[62] X. He and A. Yener, "The Role of an Untrusted Relay in Secret Communication," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT08*, Toronto, Canada, Jul. 2008.

[61] M. Chen and A. Yener, "Multiuser Two-Way Relaying for Interference Limited Systems," *in Proceedings of the IEEE International Conference on Communications, ICC08*, Beijing, China, May. 2008.

[60] L. Huie, X. He and A. Yener, "Joint Power Scheduling and Estimator Design for Sensor Networks Across Parallel Channels," *in Proceedings of the IEEE International Conference on Communications, ICC08*, Beijing, China, May. 2008.

[59] E. N. Ciftcioglu, A. Yener and R. Berry, "Stability of Bi-Directional Cooperative Relay Networks," *in Proceedings of the IEEE Information Theory Workshop, ITW08*, Porto, Portugal, May. 2008.

[58] X. He and A. Yener, "On the Energy Delay Trade-off of a Two-Way Relay Network," *in Proceedings of the Conference on Information Sciences and Systems, CISS08*, Princeton, NJ, Mar. 2008.

[57] M. Chen and A. Yener, "Interference Management for Multiuser Two-Way Relaying," *in Proceedings of the Conference on Information Sciences and Systems, CISS08*, Princeton, NJ, Mar. 2008.

[56] Z. Shen, Y. Li, S. Kishore and A. Yener, "Distributed and Collaborative Primary Signal Feature Estimation for Cognitive Radios under Communication Constraints," *in Proceedings of the 41st Annual Asilomar Conference on Signals, Systems, and Computer, Asilomar07*, Pacific Grove, CA, Nov. 2007.

[55] X. He and A. Yener, "On the Equivocation Region of Relay Channels with Orthogonal Components, invited paper," *in Proceedings of the 41st Annual Asilomar Conference on Signals, Systems, and Computers, Asilomar07, Pacific Grove*, CA, Nov. 2007.

[54] K. Lee and A. Yener, "Throughput Enhancing Cooperative Spectrum Sensing Strategies for Cognitive Radios," invited paper, *in Proceedings of the 41st Annual Asilomar Conference on Signals, Systems, and Computers, Asilomar07*, Pacific Grove, CA, Nov. 2007.

[53] E. Tekin and A. Yener, "Secrecy Sum-Rates for the Multiple-Access Wire-Tap Channel with Ergodic Block Fading," *in Proceedings of the 45th Annual Allerton Conference on Communication, Control, and Computing, Allerton07*, Monticello, IL, Sep. 2007.

[52] E. Tekin and A. Yener, "Achievable Rates for Two-Way Wire-Tap Channels," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT07*, Nice, France, Jun. 2007.

[51] E. Tekin and A. Yener, "The Gaussian Multiple Access Wire-Tap Channel: Wireless Secrecy and Cooperative Jamming," *in Proceedings of the Information Theory and Applications Workshop, ITA07*, San Diego, CA, Jan. 2007.

[50] K. Lee and A. Yener, "Outage Performance of Cognitive Wireless Relay Networks," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom06*, San Francisco, CA, Nov. 2006.

[49] K. Lee and A. Yener, "Spectrum-Sensing Opportunistic Wireless Relay Networks: Outage and Diversity Performance," *in Proceedings of the 40th Annual Asilomar Conference on Signals, Systems, and Computers, Asilomar06*, Pacific Grove, CA, Oct. 2006.

[48] E. Tekin and A. Yener, "Achievable Rates for the General Gaussian Multiple Access Wire-Tap Channel with Collective Secrecy," *in Proceedings of the 44th Annual Allerton Conference on Communication, Control, and Computing, Allerton06*, Monticello, IL, Sep. 2006.

[47] M. Chen, C. Oh and A. Yener, "Efficient Scheduling for Delay Constrained CDMA Wireless Sensor Networks," *in Proceedings of the IEEE 64th Vehicular Technology Conference, VTC06*, Montreal, Canada, Sep. 2006.

[46] M. Chen, C. Oh and A. Yener, "Efficient Scheduling for Delay Constrained Multi-Rate CDMA System," *in Proceedings of the IEEE 9th International Symposium on Spread Spectrum Techniques and Applications, ISSSTA06*, Manaus, Brazil, Aug. 2006.

[45] E. Tekin and A. Yener, "The Gaussian Multiple Access Wire-Tap Channel with Collective Secrecy Constraints," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT06*, Seattle, WA. Jul. 2006.

[44] G. Khandelwal, A. Yener and M. Chen, "OPT: Optimal Protocol Tree for Efficient Tag Identification in Dense RFID Systems," *in Proceedings of the IEEE International Conference on Communications, ICC06*, Istanbul, Turkey, Jun. 2006.

[43] G. Khandelwal, A. Yener, K. Lee and S. Serbetli, "ASAP: A MAC Protocol for Dense and Time Constrained RFID Systems," *in Proceedings of the IEEE International Conference on Communications, ICC06*, Istanbul, Turkey, Jun. 2006.

[42] S. Serbetli and A. Yener, "Power Allocation and Hybrid Relaying Strategies for F/TDMA Ad Hoc Networks," *in Proceedings of the IEEE International Conference on Communications, ICC06*, Istanbul, Turkey, Jun. 2006.

[41] K. Lee and A. Yener, "Iterative Power Allocation Algorithms for AmplifyEstimateCompress-and-Forward Multi-Band Relay Channels," *in Proceedings of the Conference on Information Sciences and Systems, CISS06*, Princeton, NJ, Mar. 2006.

[40] M. Chen, S. Serbetli and A. Yener, "Distributed Power Allocation for Parallel Relay Networks," *in Proceedings of the IEEE Global Telecommunications Conference, Globecom05*, St.Louis, MO, Nov. 2005.

[39] E. Tekin, S. Serbetli and A. Yener, "On Secure Signaling for the Gaussian Multiple Access Wire-Tap Channel," *in Proceedings of the 39th Asilomar Conference on Signals, Systems and Computers, Asilomar05*, Pasific Grove, CA, Nov. 2005.

[38] K. Lee and A. Yener, "On the Achievable Rate of Three-Node Cognitive Hybrid Wireless Networks," *in Proceedings of the International Conference on Wireless Networks, Communications, and Mobile Computing, WirelessCom05*, Maui, HI, Jun. 2005.

[37] S. Serbetli and A. Yener, "Optimal Power Allocation for Relay Assisted F/TDMA Ad Hoc Networks," *in Proceedings of the International Conference on Wireless Networks, Communications, and Mobile Computing, WirelessCom05*, Maui, HI, Jun. 2005.

[36] S. Serbetli and A. Yener, "Transmission Strategies for Correlated MIMO Links with Imperfect Channel Estimates," *in Proceedings of the IEEE International Conference on Communications, ICC05*, Seoul, South Korea, May. 2005.

[35] K. Lee and A. Yener, "On Resource Allocation for the Multi-band Relay Channel," *in Proceedings of the Conference on Information Sciences and Systems, CISS05*, Baltimore, MD, Mar. 2005.

[34] S. Serbetli and A. Yener, "Optimal Power Allocation for Multiuser Relay Networks," *in Proceedings of the Conference on Information Sciences and Systems, CISS05*, Baltimore, MD, Mar. 2005.

[33] C. Oh and A. Yener, "Downlink Throughput Maximization: TDMA vs CDMA," *in Proceedings of the Conference on Information Sciences and Systems, CISS05*, Baltimore, MD, Mar. 2005.

[32] S. Serbetli and A. Yener, "Beamforming and Scheduling Strategies for Time Slotted Multiuser MIMO Systems," *in Proceedings of the 38th Asilomar Conference on Signals, Systems and Computers, Asilomar04*, Pasific Grove, CA, Nov. 2004.

[31] A. Yener and S. Kishore, "Distributed Power Control and Routing for Clustered CDMA Wireless Ad Hoc Networks," *in Proceedings of the Vehicular Technology Conference, VTC04 Fall*, Los Angeles, CA, Sep. 2004.

[30] S. Serbetli and A. Yener, "Signature Sequence Selection for CDMA Systems with Multiple Receiver Antennas," *in Proceedings of the IEEE International Conference on Communications, ICC04*, Paris, France, Jun. 2004.

[29] H. Zhu, G. Cao, A. Yener and A. D. Mathias, "EDCF-DM: A Novel Enhanced Distributed Coordination Function for Wireless Ad Hoc Networks," *in Proceedings of the IEEE International Conference on Communications, ICC04*, Paris, France, Jun. 2004.

[28] S. Serbetli, S. Bethanabhotla and A. Yener, "The Effect of Channel Estimation on Transceiver Design for MIMO Systems with QoS Constraints," *in Proceedings of the Conference on Information Sciences and Systems, CISS04*, Princeton, NJ, Mar. 2004.

[27] S. Serbetli and A. Yener, "Signature and Beamformer Design for MIMO-CDMA with Various Levels of Feedback," *in Proceedings of the Conference on Information Sciences and Systems, CISS04*, Princeton, NJ, Mar. 2004.

[26] A. Yener and O. Filiz, "Rank Constrained Temporal-Spatial Filters for CDMA Systems in Multipath Channels," *in Proceedings of the Global Telecommunications Conference, Globecom03*, San Francisco, CA, Nov. 2003.

[25] C. Oh and A. Yener, "Further Results on Adaptive CDMA Cell Sectorization with Linear Multiuser Detection," *in Proceedings of the 37th Asilomar Conference on Signals, Systems and Computers, Asilomar03*, Pasific Grove, CA, Nov. 2003.

[24] C. Oh and A. Yener, "Adaptive CDMA Cell Sectorization with Linear Multiuser Detection," *in Proceedings of the Vehicular Technology Conference, VTC03 Fall*, Orlando, FL, Oct. 2003.

[23] O. Filiz and A. Yener, "Rank Constrained Temporal-Spatial Filters for CDMA Systems with Base Station Antenna Arrays," *in Proceedings of the Conference on Information Sciences and Systems, CISS03*, Baltimore, MD, Mar. 2003.

[22] S. Serbetli and A. Yener, "Signature and Beamformer Optimization for MIMO-CDMA Based on the Mean Squared Error Criterion," *in Proceedings of the Conference on Information Sciences and Systems, CISS03*, Baltimore, MD, Mar. 2003.

[21] S. Serbetli and A. Yener, "Iterative Transceiver Optimization for Multiuser MIMO Systems," *in Proceedings of the 40th Allerton Conference on Communications, Control and Computing, Allerton02*, Monticello, IL, Oct. 2002.

[20] A. Yener and S. Serbetli, "Transmitter Optimization for Multiuser MIMO Systems," invited paper, *in Proceedings of the IEEE International Symposium on Advances in Wireless Communications, ISWC02*, Victoria, BC, Canada, Sep. 2002.

[19] S. Ulukus and A. Yener, "Iterative Transmitter and Receiver Optimization for Synchronous CDMA Systems," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT02*, Lausanne, Switzerland, Jul. 2002.

[18] S. Ulukus and A. Yener, "Iterative Joint Optimization of CDMA Signature Sequences and Receiver Filters," *in Proceedings of the Conference on Information Sciences and Systems, CISS02*, Princeton, NJ, Mar. 2002.

[17] P. Spasojevic and A. Yener, "Constrained Slowest Descent Detectors for Multiuser CDMA Systems," *in Proceedings of the IEEE International Symposium on Information Theory, ISIT01*, Washington DC, Jun. 2001.

[16] P. Spasojevic and A. Yener, "Improving Soft Interference Cancellation for CDMA Systems," *in Proceedings of the IEEE International Conference on Communications, ICC01*, Helsinki, Finland, Jun. 2001.

[15] A. Yener and S. Ulukus, "On the Fading Channel Performance of Temporal-Spatial Filters for CDMA," *in Proceedings of the Vehicular Technology Conference, VTC01 Spring*, Rhodes, Greece, May. 2001.

[14] A. Yener, "Nonlinear Programming Based Detectors for Multiuser Systems," *in Proceedings of the International Conference on Information Technology: Coding and Computing, ITCC01*, Las Vegas, NV, Apr. 2001.

[13] R. Sinha, A. Yener and R. D. Yates, "Constrained Detection for Noncoherent Nonlinear Multiuser Communications," *in Proceedings of the 34th Asilomar Conference on Signals, Systems and Computers, Asilomar00*, Pasific Grove, CA, Oct. 2000.

[12] A. Yener, R. D. Yates and S. Ulukus, "Combined Temporal and Spatial Filter Structures for CDMA Systems," *in Proceedings of the Vehicular Technology Conference, VTC00 Fall*, Boston, MA, Sep. 2000.

[11] A. Yener and R. D. Yates, "Acquisition Dependent Random Access for Connectionless CDMA Systems," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC00*, Chicago, IL, Sep. 2000.

[10] A. Yener and R. D. Yates, "Decorrelating Acquisition and Access for Connectionless CDMA," *in Symposium for Interference Rejection and Signal Separation, IRSS00*, Newark, NJ, Mar. 2000.

[9] A. Yener, R. D. Yates and S. Ulukus, "A Nonlinear Programming Approach to CDMA Multiuser Detection," *in Proceedings of the 33rd Asilomar Conference on Signals, Systems and Computers, Asilomar99*, Pasific Grove, CA, Oct. 1999.

[8] C. U. Saraydar and A. Yener, "Capacity Enhancement for CDMA Systems Through Adaptive Cell Sectorization," *in Proceedings of the IEEE Wireless Communications and Networking Conference, WCNC99*, New Orleans, LA, Sep. 1999.

[7] A. Yener, R. D. Yates and S. Ulukus, "Joint Power Control, Multiuser Detection and Beamforming for CDMA Systems," *in Proceedings of the Vehicular Technology Conference, VTC99 Spring*, Houston, TX, May. 1999.

[6] A. Yener and R. D. Yates, "Multiuser Access Capacity of Packet Switched CDMA Systems," *in Proceedings of the Vehicular Technology Conference, VTC99 Spring*, Houston, TX, May. 1999 (Also in IRSS00, Newark, NJ, Mar. 2000, Invited).

[5] A. Yener and R. D. Yates, "Multiuser Access Detection for CDMA Systems," *in Proceedings of the Conference on Information Sciences and Systems, CISS98*, Princeton, NJ, Mar. 1998.

[4] A. Yener, C. Rose and R. D. Yates, "Optimum Power Scheduling for CDMA Access Channels," *in Proceedings of the Global Telecommunications Conference, Globecom97, Phoenix, AZ, Nov. 1997 (Also in INFORMS Spring98 Meeting*, Montreal, Canada, Apr. 1998, Invited).

[3] A. Yener and C. Rose, "Paging Strategies for Highly Mobile Users," *in Proceedings of the IEEE Vehicular Technology Conference, VTC96*, Atlanta, GA, Apr. 1996.

[2] A. Yener and C. Rose, "Local Call Admission Policies for Cellular Networks Using Genetic Algorithms," *in Proceedings of the Conference on Information Sciences and Systems, CISS95*, Baltimore, MD, Mar. 1995.

[1] A. Yener and C. Rose, "Near Optimal Call Admission Policies for Cellular Networks Using Genetic Algorithms," *in Proceedings of the 6th International Conference on Wireless Communications, Wireless94*, Calgary, Jul. 1994.

Funded Research Grants

NSF

- NSF AI Institute for Future Edge Networks and Distributed Intelligence, (10/2021-9/2026), NSF-CNS, (PI: N. Shroff (OSU), multi-institution, Role: Senior Personnel).
- SpectrumX: An NSF Spectrum Innovations Center, (09/2023-8/2025), NSF-SII, (PI: N. Laneman (Notre Dame), multi-institution, Role: Education and Workforce Development Director).
- SII Planning: Escaping Gravity: The End of Gs (8/2020-5/2022), NSF-AST (**PI** with co-PIs M. Medard (MIT), T. Javidi (UCSD), J. Johnson (OSU), D. Starobinski (BU)).
- Coded Caching for Heterogeneous and Energy Harvesting Systems (9/2017-8/2022), NSF-CCF, (**Sole PI**).
- Game-theoretic Approaches to Energy Cooperation (9/2017-2/2021), NSF-ECCS, (**Sole PI**).
- Rechargeable Networks with Energy Cooperation (10/2015-10/2019), NSF-CNS, (**PI**, with S. Ulukus, UMD).
- Incentive Compatible Security (10/2013-10/2018), NSF-SaTC, (**PI**, with R. Berry, Northwestern and S. Ulukus, UMD).

- Foundations of Energy Harvesting Wireless Communications (7/2014-7/2018), NSF-CCF, (**PI**, with S. Ulukus, UMD).
- Realizing the Vision of Information-Theoretic Security for Wireless Communications (09/2013-09/2017), NSF-CCF, (**PI**, with M. Bloch, Georgia Tech).
- Optimizing Communications with Harvested Energy in Energy Starved Environments: A Tailored Fit for Healthcare Monitoring (01/2016-09/2016), Seed Grant from NSF-ERC Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST), (**PI)**.
- Support for North American School for Information Theory (05/2014-05/2015), NSF-CIF, (**PI**).
- Interactive Security (05/2010-05/2015), NSF-CCF, (**PI**, with S. Ulukus, UMD and K. Ramchandran, UC Berkeley).
- Rechargeable Networks (03/2010-02/2015), NSF-CNS, (**PI**, with S. Ulukus, UMD and R. Yates, Rutgers).
- Cognition, Collaboration, and Competition in Hybrid Wireless Networks (09/2007-06/2012), NSF-CNS, (**PI**, with S. Kishore Lehigh).
- Secure Capacity of Wireless Networks (09/2007-08/2011), NSF-Cybertrust, (**PI**, with S. Ulukus, ECE, UMD).
- Multi-tier Hybrid Wireless Networks (10/2006-09/2008), NSF-CNS, (**PI**, with S. Kishore, Lehigh).
- Multiuser Wireless Security (07/2005-06/2010), NSF-CCF, (**PI**, with S. Ulukus, ECE, UMD).
- Exploratory Research in Relay Networks of Agile Radios (04/2005-09/2006), NSF-CNS, (**co-PI**, with PI T. La Porta, CSE, PSU).
- CAREER: Signal Processing for Multiuser Multiantenna Wireless Communications (02/2003-01/2010), NSF-CCR, (**Sole PI**).

DoD/Federal

- Center for Automated Vehicle Research with Multimodal Assured Navigation (CARMEN) (2023-2028), **Department of Transportation**, (**co-PI**, PI: Z. Kassas, Team: OSU, UCI, UT Austin, NC A&T)
- HAVARO: Hardware-assisted vulnerability analysis and resilience optimization (09/2022-09/24), **National Security Agency**, (**co-PI**, PI: C. Yagemann)
- Quality-of-Information-Aware Networks for Tactical Applications (QUANTA) (10/2009-09/2019), **US Army Research Laboratory**: Network Science Collaborative Science Alliance (CTA), Communication Network Center, (**co-PI**, PI:T. La Porta).
- Rethinking Mobile Ad Hoc Networks: A Non-equilibrium Information Theory (11/2006-5/2011), **DARPA ITMANET**: Information Theory for Mobile Ad Hoc Networks Program (Team: D. Katabi, MIT; R. Berry, D. Guo, Northwestern; M . Haenggi, Notre Dame; **A. Yener, PSU**; S. Jafar, University of California Irvine; N. Jindal, Minnesota; M. Neely, USC; J. Andrews (PI), R. Heath, S. Shakkottai, UT Austin; S. Weber, Drexel).
- Control Over Network Coding for Enhanced Radio Transmission Optimization (07/2006-12/2007), **DARPA CB-MANET**: Control Based Mobile Ad Hoc Networks Program (**co-PI**, with PI T. La Porta, CSE, PSU. Other PIs/co-PIs of CONCERTO team: G. Lauer, R. Ghanadan, BAE Systems; M. Effros, T. Ho, CalTech; P. Francis, Z. Haas, Cornell; M. Medard, A. Ozdaglar, MIT; M. Steenstrup, Stow Research; R. Koetter, UIUC; J. Kurose, D. Towsley, UMass).
- Enabling Logistics with Portable and Wireless Technology (07/2003-08/2004), **USMC** (Team: D.Hall, S. Purao, I. Petrick, School of IST, PSU; S. Kumara, N. Gautam, T. Kim, Industrial Engineering, PSU; Z. Rado, PTI, PSU; R. Gray, Penn State Erie; **A. Yener, EE, PSU**, A. Garga, ARL).

Industry&State

- 6G and Beyond Initiative: Spectrum Sharing (11/1/2025-6/1/2025), **Cable Labs**, (**PI**)
- Federated Learning with Edge Dynamics (09/2022-12/2023), **Cisco Research**, (**co-PI**, with PI X. Zhang.)
- Security Assurance for Vehicular Systems (09//2020-09/2021), **Honda R&D Americas, Inc.** (**co-PI**, with PI Q. Ahmed).

- Networking and Security Research Center Designation (01/2007-07/2008), **Ben Franklin Technology Partners**, (**co-PI**, with PI T. La Porta, co-PIs R. Acharya, G. Cao, T. Jaeger, P. McDaniel).
- Sustainable Wireless Networks (01/2007-10/2007), **Raytheon** (via Networking and Security Research Center, PSU), (**co-PI** with T. Jeager and T. La Porta, CSE, PSU).
- Technology RoadMap for 3G and Beyond (05/2006-12/2006), **Raytheon** (via Networking and Security Research Center, PSU), (**co-PI** with T. La Porta, CSE, PSU).
- Clustering for Wireless Ad Hoc Networks: A Joint Physical Layer, Multiple Access, and Routing Perspective (07/2005-06/2006), **Pennsylvania Infrastructure Technology Alliance**, (**co-PI**, with PI S. Kishore, ECE, Lehigh).
- Design of Efficient RFID Systems (01/2005-12/2005), **Pittsburgh Digital Greenhouse** (The Tech Collaborative), (**PI**).
- Lifetime Optimization of Ad Hoc Sensor Networks (06/2005-12/2005), **Telcordia** (via Networking and Security Research Center, PSU), (**PI**, with G. Cao, T. La Porta, CSE, PSU).
- Center of Excellence in Wireless Communications and Networking at Lehigh University (05/2001-05/2003), **AT&T Foundation**, (**PI** with R. Blum, T. Boult, J. Hwang, EECS, Lehigh).
- Advances in Wireless Networking (Lehigh University) (09/2001-09/2002), **PADCOM** and **Ben Franklin Technology Partners**, (**co-PI**, with PI T. Boult, EECS, Lehigh).

PROFESSIONAL ACTIVITIES

Elected/Appointed Positions

Vice President, Chair Technical Activities, IEEE, 2027 (Elected in IEEE General Election, Oct. 2025, VP-elect 2026).

Director, IEEE Division IX, 2024-2025 (Elected in IEEE General Election, Oct. 2022, Director-elect 2023).

Member, IEEE Board of Directors, 2024-2025; 2027.

Board of Directors Coordinator, IEEE Fellow Committee, 2025.

Board of Directors Coordinator, IEEE Ad Hoc Committee on One IEEE Education Strategy for Empowering Technical Innovation, 2025.

Member, IEEE Ad Hoc Committee on Education for Technical Innovation, 2025-present.

Member, IEEE Technical Activities Board (TAB), 2024-present.

Chair, Ad Hoc Committee on Future of TAB Meetings, 2024-present.

Member, IEEE TAB working group on enhancing collaboration within a division, 2025-present.

Member, IEEE TAB Nominations and Appointments Committee (elected by the TAB from society and council presidents), 2022-2023.

Senior Past President, IEEE Information Theory Society, 2022.

Junior Past President, IEEE Information Theory Society, 2021.

President, IEEE Information Theory Society, 2020.

Vice President, IEEE Information Theory Society, 2019.

Second Vice President, IEEE Information Theory Society, 2018.

Member of the Board of Governors, IEEE Information Theory Society, 2015-2017 and 2018-2020 (Elected by the membership for two consecutive terms).

Treasurer, Member of the Board of Governors, IEEE Information Theory Society, 2012-2014 (Appointed).

Member of Adcom, IEEE Systems Council, 2021-2023.

Chair, Cooperation Committee, IEEE Systems Council, 2022-present.

Member, IEEE Fellow Strategic Planning Committee (FSPC), 2021.

Member, IEEE Fellow Committee, 2018-2020.

Chair, IEEE Richard W. Hamming Medal Committee, 2019-2021 (Member 2017-2019, Past Chair, 2022).

Chair, Shannon Award Selection Committee, IEEE Information Theory Society, 2020 (Member, 2019)

Chair, Wyner Award Selection Committee, IEEE Information Theory Society, 2020 (Member, 2021).

Chair, Awards Committee, IEEE Information Theory Society, 2019.

Chair, Membership Committee, IEEE Information Theory Society, 2018.

Chair, Information Theory School Sub-committee, IEEE Information Theory Society, 2014-2017.

Chair, Student Committee, IEEE Information Theory Society, 2007-2011.

Member, Ad-Hoc Committee for Assessment of IEEE-wide multi-disciplinary publication that addresses climate science, climate change and climate solutions, 2023.

Member, Ad Hoc Committee on Open Access, IEEE Information Theory Society, 2020-2024.

Member, Best Paper Awards Committee, Globecom 2022, IEEE Communications Society, 2022.

Member, Editor-in-Chief Selection Committee, Best Readings, IEEE Communications Society, 2022.

Member, Ad-Hoc Committee for Assessment of IEEE Transactions on Molecular, Biological and Multiscale Communications, IEEE Communications Society, 2022.

Member, Cover Award Selection Committee, IEEE Information Theory Society, 2019.

Member, IEEE Ad Hoc Committee on Society Finances, IEEE Information Theory Society, 2018-2020

Member, Conference Committee, IEEE Information Theory Society, 2019, 2020

Member, IEEE Ad Hoc Committee on Best Practices for Society/Technical Council Fellow Evaluating Committees, 2018.

Editorial Advisory Board Member, IEEE Transactions on Wireless Communications, 2011-2013.

Editorships

Editor-in-Chief, IEEE Transactions on Green Communication and Networking, 2022-Present.

Area Editor for Security and Privacy, IEEE Transactions on Information Theory, 2021-2024.

Senior Editor, IEEE Journal on Selected Areas in Information Theory (JSAIT), 2019-Present.

Senior Editor, IEEE Journal on Selected Areas in Communications (JSAC), 2016-Present.

Editor, IEEE Journal on Selected Topics in Signal Processing (JSTSP), Special Series on AI in Signal and Data Science Toward Explainable, Reliable, and Sustainable Machine Learning, 2023-Present.

Associate Editor, IEEE Transactions on Mobile Computing, Jan. 2016-Nov. 2018.

Editor, IEEE Transactions on Communications, 2009-2012.

Editor, IEEE Transactions on Wireless Communications, 2001-2010.

Guest Editor, IEEE Open Journal on Communications, Special Issue on Resilient and Trustworthy 6G Communications, 2025-2026.

Guest Editor, IEEE Journal on Selected Areas in Information Theory, Special Issue on The Role of Freshness and Semantic Measures in the Transmission of Information for Next Generation Networks, 2023.

Guest Editor, IEEE Journal on Selected Areas in Information Theory (JSAIT), Special Issue on Information Security and Privacy, 2021.

Guest Editor, IEEE Journal on Selected Areas in Communications (JSAC), Special Issue on Wireless Communications Powered by Energy Harvesting and Wireless Energy Transfer, 2015.

Guest Editor, IEEE Transactions on Information Forensics and Security, Special Issue on Using the Physical Layer for Securing the Next Generation of Communication Systems, 2011.

Conference Chair Positions

General Chair, Third North American School of Information Theory, Los Angeles, CA, August 2010.

General Chair, Second North American School of Information Theory, Evanston, IL, August 2009.

Organizer and General Chair, First School of Information Theory, University Park, PA, June 2008.

Technical Program Committee (TPC) Chair, IEEE International Symposium on Information Theory (ISIT22), Helsinki, Finland, July 2022.

TPC Chair, *Communication Theory Symposium*, IEEE International Conference on Communications (ICC18), Kansas City, MO, May 2018.

TPC Chair, *Communication Theory Symposium*, IEEE International Conference on Communications (ICC09), Dresden, Germany, June 2009.

TPC Chair, *Communication Track*, 42nd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, October 2008.

TPC Co-chair, *Green Networks (GREENNET) Workshop*, 14th International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt16), Tempe, AZ, May 2016.

TPC Co-chair, *2nd Workshop on Green Broadband access: energy efficient wireless and wired network solutions*, IEEE Global Telecommunications Conference 2014, Austin, TX, December 2014.

TPC Co-chair, *PHY and Fundamentals Track*, IEEE Wireless communications and Networking Conference (WCNC14), Istanbul, Turkey, April 2014.

TPC Co-chair, *Workshop on Energy Harvesting and Green Wireless Communications*, IEEE Global Signal and Information Processing Conference (GlobalSIP13), Austin, TX, Dec. 2013.

TPC Co-chair, *Workshop on Green Broadband access: energy efficient wireless and wired network solutions*, IEEE International Conference on Communications (ICC13), Budapest, Hungary, June 2013.

TPC Co-chair, *Cognitive Radio and Spectrum Sensing Track*, IEEE Vehicular Technology Conference (VTC12-Spring), Yokohama, Japan, May 2012.

TPC Co-chair, *Track 2: MAC and Cross-Layer Design*, 21st Annual IEEE International Symposium on Personal Radio and Mobile Communications (PIMRC10), Istanbul, Turkey, September 2010.

TPC Co-chair, *Wireless Communications Symposium*, IEEE International Conference on Communications (ICC08), Beijing, China, May 2008.

TPC Co-chair, *Communications and Networking Track*, 39th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, Pacific Grove, November 2005.

TPC Co-chair, *Symposium on Information Theory*, IEEE WirelessCom 2005, Maui, HI, June 2005.

Faculty Co-Chair, Wireless of the Students, by the Students, for the Students workshop (3S), to be held in conjunction with WiOpt11, Princeton, NJ, May 2011.

Recent Results Chair, IEEE International Symposium on Information Theory (ISIT13), Istanbul, Turkey, July 2013.

Tutorial Chair, IEEE International Symposium on Information Theory (ISIT12), Boston, MA, June 2012.

Publications Co-chair, IEEE International Symposium on Information Theory (ISIT11), St.Petersburg, July 2011.

Conference Steering Committees

International Advisory Committee Member, IEEE SPACE, 2026, 2025.

Steering Committee Member, ACM Workshop on Wireless Security and Machine Learning (WiseML 2023), 2023.

Conference Program Committee Membership

Technical Program Committee (TPC) Member, IEEE International Symposium on Information Theory, ISIT26, Guangzhou, China, June 2026.

TPC Member, IEEE Information Theory Workshop, ITW24, Shenzhen, China, November 2024.

TPC Member, IEEE International Symposium on Information Theory, ISIT24, Athens, July 2024.

TPC Member, IEEE International Symposium on Information Theory, ISIT23, Taipei, June 2023.

TPC Member, IEEE Information Theory Workshop, ITW23, Saint-Malo, France, April 2023.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference, Madrid, Spain, December 2021.

TPC Member, IEEE International Symposium on Information Theory, ISIT21, online, July 2021.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference, Taiwan, December 2020.

TPC Member, IEEE International Symposium on Information Theory, ISIT20, online, June 2020.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference, Hawaii, December 2019.

TPC Member, IEEE International Symposium on Information Theory, ISIT19, Paris, France, July 2019.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications, Shanghai, China, May 2019.

TPC Member, IEEE Information Theory Workshop, ITW18, Guangzhou, China, November 2018.

TPC Member, IEEE International Symposium on Information Theory, ISIT18, Vail, CO, June 2018.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2017, Singapore, December 2017.

TPC Member, IEEE International Symposium on Information Theory, ISIT17, Aachen, Germany, June 2017.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2018, Kansas City, MO, May 2018.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2017, Paris, France, May 2017.

TPC Member, 15th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt17, Paris, France, May 2017.

TPC Member, ACM MobiHoc, Chennai, India, March 2017.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2016, Washington D.C., December 2016.

TPC Member, IEEE International Symposium on Information Theory, ISIT16, Barcelona July 2016.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2016, Kuala Lumpur, Malaysia, May 2016.

TPC Member, *Communication Theory Symposium*, y Symposium, IEEE Global Telecommunications Conference 2015, San Diego, CA, December 2015.

TPC Member, IEEE International Symposium on Information Theory, ISIT15, Hong Kong June 2015.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2015, London, England, June 2015.

TPC Member, 13th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt15, Mumbai, India, May 2015.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2014, Austin, TX, December 2014.

TPC Member, *Signal Processing for Communications Theory Symposium*, IEEE Global Telecommunications Conference 2014, Austin, TX, December 2014.

TPC Member, *Energy Efficiency and Energy Harvesting Related Signal Processing and Communications*, IEEE Global Conference on Signal and Information Processing, Atlanta, GA, December 2014.

TPC Member, IEEE International Symposium on Information Theory, ISIT14, Honolulu, HI, July 2014.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2014, Sydney, Australia, June 2014.

TPC Member, *Ad Hoc and Sensor Networks Symposium*, IEEE International Conference on Communications 2014, Sydney, Australia, June 2014.

TPC Member, 12th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt14, Hammamet, Tunisia, May 2014.

TPC Member, IEEE Military Communications Conference, Baltimore, MD, November 2013.

TPC Member, IEEE Conference on Communications and Network Security, CNS13, D.C., October 2013.

TPC Member, IEEE International Symposium on Information Theory, ISIT13, Istanbul, July 2013.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2012, Budapest, Hungary, June 2013.

TPC Member, 11th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt13, Tsukuba Science City, Japan, May 2013.

TPC Member, IEEE Military Communications Conference, Orlando, FL, November 2012.

TPC Member, IEEE Information Theory Workshop, ITW12, Lausanne, Switzerland, September 2012.

TPC Member, IEEE Ninth International Symposium on Wireless Communication Systems, ISWCS12, Paris, France, August 2012.

TPC Member, IEEE International Symposium on Information Theory, ISIT12, Boston, MA July 2012.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2012, Ottawa, Canada, June 2012.

TPC Member, *Wireless Communications Symposium*, IEEE International Conference on Communications 2012, Ottawa, Canada, June 2012.

TPC Member, *Ad Hoc and Sensor Networks Symposium*, IEEE International Conference on Communications 2012, Ottawa, Canada, June 2012.

TPC Member, 10th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt12, Paderborn, Germany, May 2012.

TPC Member, IEEE Fourth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP 2011, San Juan, Puerto Rico, December 2011.

TPC Member, *Wireless Communications Symposium*, IEEE Global Telecommunications Conference 2011, Houston, TX, December 2011.

TPC Member, IEEE Eighth International Symposium on Wireless Communication Systems, ISWCS11, Aachen, Germany, November 2011.

TPC Member, *Symposium on Architectures and Models for the Smart Grid*, IEEE Second International Conference on Smart Grid Communications 2011, Brussels, Belgium, October 2011.

TPC Member, 22nd Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC11, Toronto, Canada, September 2011.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2011, Kyoto, Japan, June 2011.

TPC Member, *Wireless Communications Symposium*, IEEE International Conference on Communications 2011, Kyoto, Japan, June 2011.

TPC Member, 9th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt11, Princeton, NJ, May 2011.

TPC Member, *Wireless Communications Symposium*, IEEE Global Telecommunications Conference 2010, Miami, FL, December 2010.

TPC Member, IEEE International Symposium on Information Theory, ISIT10, Austin, TX, June 2010.

TPC Member, *Wireless Communications Symposium*, IEEE International Conference on Communications 2010, Cape Town, South Africa, May 2010.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications 2010, Cape Town, South Africa, May 2010.

TPC Member, *Wireless Communications Symposium*, IEEE Global Telecommunications Conference 2009, Honolulu, HI, December 2009.

TPC Member, *Ad Hoc and Sensor Networks Track*, IEEE Vehicular Technology Conference, VTC09- Fall, Anchorage, AK, September 2009.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2008, New Orleans, LA, November 2008.

TPC Member, Conference on Information Theory and Statistical Learning (ITSL08), Las Vegas, NV, June 2008.

TPC Member, IEEE Information Theory Workshop (ITW), Porto, Portugal, May 2008.

TPC Member, IEEE Wireless Communications and Networking Conference, Las Vegas, NV, March 2008.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2007, Washington D.C., November 2007.

TPC Member, IEEE Vehicular Technology Conference, Baltimore, MD, September 2007.

TPC Member, International Conference on Computer Communications and Networks, Communication and Information Theory Symposium, Honolulu, HI, August 2007.

TPC Member, IEEE Wireless Communications and Networking Conference, Hong Kong, March 2007.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2006, San Francisco, CA, November 2006.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2005, St.Louis, MO, December 2005.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications, Seoul, Korea, May 2005.

TPC Member, ACM SIGCOMM 2005 Asia Workshop, Beijing, China, April 2005.

TPC Member, *General Conference*, IEEE Global Telecommunications Conference 2004, Dallas, TX, November 2004.

TPC Member, IEEE Vehicular Technology Conference, Los Angeles, CA, September 2004.

TPC Member, *Wireless Networking Symposium*, IEEE International Conference on Communications, Paris, France, June 2004.

TPC Member, IEEE Vehicular Technology Conference, Genova, Italy, May 2004.

TPC Member, *Wireless Communications Symposium*, IEEE Global Telecommunications Conference 2003, San Francisco, CA, November 2003.

TPC Member, IEEE Vehicular Technology Conference, Orlando, FL, September 2003.

TPC Member, *Communication Theory Symposium*, IEEE International Conference on Communications, Anchorage, AK, May 2003.

TPC Member, *Advanced Signal Processing for Communications Symposium*, IEEE International Conference on Communications, Anchorage, AK, May 2003.

TPC Member, *Communication Theory Symposium*, IEEE Global Telecommunications Conference 2002, Taipei, Taiwan, November 2002.

TPC Member, IEEE Vehicular Technology Conference, Vancouver, Canada, September 2002.

TPC Member, *Advanced Wireless Communications Systems Symposium*, IEEE International Conference on Communications, New York, NY, April 2002.

Selected Activities as Session or Panel Chair/Organizer

IEEE International Workshop on Signal Processing Advances in Wireless Communications SPAWC22, **Special Session Organizer**: Intelligence and processing at the edge for next generation networks, Oulu, Finland, July 2022.

IEEE Communication Theory Workshop, CTW15, **Session Organizer**: Energy Harvesting Communications, Dana Point, CA, May 2015.

Asilomar Conference on Signals, Systems and Computers, **Invited session organizer**: Green Radio, Pacific Grove, CA, November 2012.

IEEE Fourth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP11, **Special Session Organizer**: Energy Harvesting Wireless Networks, San Juan, Puerto Rico, December 2011.

IEEE Communication Theory Workshop, **Session Organizer**: Security, Sitges, Spain, June 2011.

47th Annual Allerton Conference on Communication, Control and Computing, **Invited session organizer**: Information Security, Monticello, IL, September 2009.

Organizer and Chair, *Panel on Cooperative Communication for Future Wireless Systems*, IEEE Wireless Communications and Networking Conference, WCNC07, Hong Kong, March 2007.

Asilomar Conference on Signals, Systems and Computers, **Invited session organizer**: Network Information Theory, Pacific Grove, CA, November 2007.

Asilomar Conference on Signals, Systems and Computers, **Invited session organizer**: Adaptive Communication Systems, Pacific Grove, CA, November 2003.

Chapter Chair, IEEE Lehigh Valley Signal Processing Society, 2001.

Research Supervision

Current Doctoral Students

- Berk Karabacakoglu(ECE): TBD (Start date: 08/2025)
- Truman Welling (ECE): Security and Quantum (Start date: 08/2022)
- Emrecan Kutay (ECE): Semantic Communications (Start date: 08/2022)
- Xue Zheng (ECE): Private and Robust Decentralized Learning in the Presence of Dynamics [Post-candidacy 2024]
- Jiayu Mao (ECE): Communication Efficient and Sustainable Learning by Wireless Networks [Post-candidacy 2024]

Previous Postdoctoral Researchers

- Remi A. Chou (PhD, Georgia Tech 2015): 9/2015-8/2017 (Assistant Professor, University of Texas, Arlington)
- Shirin Saeedi Bidokthi (PhD, EPFL 2012): 4/2017-9/2017 (Assistant Professor, University of Pennsylvania)
- Ebrahim MolavianJazi (PhD, Notre Dame 2014): 8/2014-8/2016 (Samsung Research)
- Igor Stanojev (PhD, Politechnico di Milano and NJIT 2010): 11/2010-8/2012 (Associate Professor, University of Wisconsin, Plattville)
- Satashu Goel (PhD, Carnegie Mellon 2009): 07/2009-10/2010 (Qualcomm)

Graduated Doctoral Students

- Shiyang Vicky Leng **PhD, 05/2020**: Energy and Data Management in Energy-Sustainable Networks (Samsung)
- Ahmed Zewail **PhD, 08/2019**: Secrecy Guarantees in Emerging Networks (Qualcomm)
- A. Ibrahim **PhD, 08/2019**: Data Storage and Energy Management in Emerging Networks (Qualcomm)
- Mohamed Nafea **PhD, 12/2018**: Information Theoretic Security Guarantees Against More Capable Adversaries (Postdoc, Georgia Tech.) (Assistant Professor, Missouri University of Science and Technology)
- Burak Varan **PhD, 08/2017**: Energy and Signal Cooperation in Competitive Wireless Networks with Energy Harvesting (Amazon, Cupertino, CA)
- Basak Guler **PhD, 08/2017**: Interaction, Communication and Computation in Information and Social Networks (Postdoc, USC) (Assistant Professor UC Riverside)
- Kaya Tutuncuoglu **PhD, 08/2015**: Energy Harvesting Wireless Networks: Transmission Policies and Coding Schemes (Facebook, Menlo Park, CA)
- Ye Tian **PhD, 05/2013**: Interference and Cooperation in Wireless Networks (Apple, Sunny Vale, CA)
- Min (Michael) Li, **PhD, 08/2012**: Information Theoretic Limits of Interactive Multi-user Communication Channels (Assistant Professor at Zheijang University)
- Ertugrul Ciftcioglu, **PhD, 08/2012**: Wireless Relay Networks with Stochastic Arrivals (Qualcomm)
- Xiang He, **PhD, 08/2010**: Cooperation and Information Theoretic Security in Wireless Networks (Microsoft, Seattle, WA)
- Min Chen, **PhD, 09/2009**: Resource Management for Wireless Ad Hoc Networks (Microsoft, Seattle, WA)
- Ender Tekin, **PhD, 08/2008**: Information Theoretic Secrecy for Some Multiuser Wireless Communication Channels (Research Faculty, Waisman Center, University of Wisconsin, Madison, WI)
- Kyounghwan Lee, **PhD, 12/2007**: Cognitive Hybrid Wireless Relay Networks (Sprint, VA) (Ford, MI)
- Changyoon Oh, **PhD, 08/2005**: Resource Allocation Techniques for Improved Performance of Multiuser Systems (Associate Professor, Inha Technical College, Korea)

- Semih Serbetli, **PhD, 08/2005**: Efficient Transmit Strategies for Multiuser Multiple Antenna Systems (Senior Research Scientist, Nexp, Eindhoven, The Netherlands)

Graduated M.S. and B.S. Students

- Enes Arda (Thesis) 05/2025: A Rate-Distortion-Perception Framework for Summarization
- Hemanth Kollipara (Report, CSE) 12/2024: Retinal Micro-vessel Characterization & Quantification for Biomarker Identification using Deep Learning
- Ece Bingol (Report) 05/2023: Peak Age of Information with Receiver Induced Service Interruptions
- Derek Duan (Thesis) 08/2021: Group Key Agreement Schemes for Platooning with a Dynamic Lead (University of Florida)
- Malak Shah, MS (Paper) 05/2020: Age of Information for Networks with Stochastic Arrivals (Hughes Networks)
- Poojitha Kale, MS (Thesis) 05/2019: Study of Transfer Entropy on Epileptic EEG Signals (co-advised)
- Basak Guler, MS (Thesis) 08/2012: Interference Management for Femtocell Networks (PhD student, see graduated PhDs)
- Chien-Jen Huang, MS (Paper), 12/2007: Multiuser Competition in Cognitive Radio
- Lauren Huie, MS (Thesis), 08/2007: Joint Temporal Power Scheduling and Estimator Optimization for Sensor Networks (Air Force Research Lab, Rome, NY)
- Sungmin Bae, MS (Paper), 12/2005: The Listing Protocol for the RFID Reader Collision Problem
- Sandeep Bethanabhotla, MS (Thesis), 12/2005: Transmission Strategies for Lifetime Maximization of Sensor Networks (Broadcom, Irvine, CA)
- Girish Khandelwal, MS (Thesis), 08/2005: Efficient Design of Dense and Time Constrained RFID Systems (Qualcomm, San Diego, CA)
- Atul Divakaran, MS (Paper), 09/2003: An Adaptive Channel Allocation Strategy for Wireless Multimedia QoS (T-Mobile)
- Onder Filiz, MS (Thesis), 07/2003: Rank Constrained Temporal-Spatial Receivers for CDMA Systems (Turkcell, Istanbul, Turkey)
- Battal Ozdemir, MS (Paper), 05/2003: Adaptive Probing Based Medium Access Control for Ad-Hoc Networks (Sabanci University and Tubitak, Istanbul, Turkey)
- Daniel Szoke, BS (CSE) (Honors Thesis), 05/23: Model poisoning in federated learning: collusive and individual attacks (Sentry)
- Michael Wang, BS (Honors Thesis), 05/11: MIMO Ad Hoc Networks (PhD, Princeton)
- Mikhail Lisovich, BS (Thesis), 05/2006: Capacity Scaling Laws in Ad-Hoc Networks (PhD, Cornell)
- Chip McArtor, BS (Honors Thesis), 05/2005: Lifetime Optimization of Sensor Networks: A Network Layer Approach

Previous Long-Term Visiting Professors

- Insoo Koo, Associate Professor, University of Ulsan, South Korea (01/2012-12/2012).
- Tae-Jin Lee, Associate Professor, Sungkyunkwan University Suwon, South Korea (08/2007-08/2008).
- Yeonho Chung, Associate Professor, Pukyong National University, Busan, South Korea (09/2006-08/2007).

Research Evaluation Activities

Panelist, National Sience Foundation (NSF) CCF, NeTS, ECCS, SaTC, CCR, FMF, ITR, 2001-2020.

Panel Chair, European Research Council (ERC) Advanced Grant, 2023-2024.

Evaluator, María de Maeztu Units of Excellence, Spanish State Research Agency, 2025.

Panel Member, Methusalem Program KU Leuven, 2023.

Panelist, European Research Council (ERC) Scientific Assessment of Projects, 2022.

Panelist, European Research Council (ERC) Advanced Grant, 2017, 2019, 2021.

Visitor/Panel Member, for Research Assessment Exercise, KTH Royal Institute of Technology, Sweden, 2021.

Panelist, Swedish Research Council, 2016.

Habilitation Reviewer/Examiner (France), S. Perlaza (2021), M. LeTreust (2022).

Number of promotion evaluations > 45

Reviewer

IEEE Transactions on Information Theory
IEEE Transactions on Communications
IEEE Transactions on Wireless Communications
IEEE Journal on Selected Areas in Communications
IEEE Transactions on Signal Processing
IEEE Transactions on Vehicular Technology
IEEE/ACM Transactions on Networking
IEEE Communications Letters
IEEE Transactions on Circuits and Systems I
EURASIP Journal on Wireless Communications and Networking
ISIT, ITW, ICC, GLOBECOM, WCNC, PIMRC, INFOCOM, Percom, MOBICOM, VTC

PhD Thesis Committee Membership

- Graduate Faculty Representative: R. Ndoci, 2024, Advisor: B. D. Joseph
- Dissertation Committee Member: X. Chen, 2023, UPenn, Advisor: S. Bidhokti
- Dissertation Committee Member: J. Tang, 2022, Ohio State, Advisor: A. Gupta
- Dissertation Committee Member: M. Hussein, 2020, Penn State, Advisor: V. Cadambe
- Dissertation Committee Member: B. Wang, 2019, Penn State, Advisor: J. Yang
- Opponent: Rong Du, KTH Royal Institute of Technology, 2018, Advisor: C. Fischione
- External Committee Member: Amal Hyadi, KAUST, 2017, Advisor: M.S. Alouini
- Dissertation First Opponent: Zhijie Ren, TU Delft, 2016, Advisors: M. Gastpar and J. Weber
- Dissertation Referee: Shashank Vatedka, Indian Institute of Science, 2016, Advisor: N. Kashyap
- Dissertation Committee Member: Michael Lin, 2015, Penn State, Advisor: T. LaPorta
- External examiner: Rajitha Senanayake, University of Melbourne, 2015, Advisor: J. Evans
- Dissertation Committee Member: Sakib Chowhudry, 2014, Penn State, Advisor: M. Kavehrad
- Dissertation Committee Member: Srikar Tati, 2014, Penn State, Advisor: T. LaPorta
- Dissertation Committee Member: Qinghua Li, 2013, Penn State, Advisor: G. Cao
- Dissertation Committee Member: Gang Xiong, 2011, Lehigh University, Advisor: S. Kishore

- Dissertation Committee Member: Raju Kumar, 2010, Advisor: T. LaPorta
- Dissertation Committee Member: Jack Chuang, 2008, Advisor: R. Narayanan
- Dissertation Committee Member: Gyoughwan Kim, 2008, Carnegie Mellon, Advisor: R. Negi
- Dissertation Committee Member: Patrick Traynor, 2008, Advisor: P. McDaniel
- Dissertation Committee Member: Sangwoo Lee, 2007, Advisor: M. Kavehrad
- Dissertation Committee Member: Ozcan Ozturk, 2007, Advisor: M. Kandemir
- Dissertation Committee Member: Jaesheung Shin, 2007, Advisor: T. La Porta
- Dissertation Committee Member: Matthew Pirretti, 2006, Advisor: N. Vijaykrishnan
- Dissertation Committee Member: Hendra Saputra, 2005, Advisor: M. Kandemir
- Dissertation Committee Member: Wensheng Zhang, 2005, Advisor: G. Cao
- Dissertation Committee Member: Liangzhong Yin, 2004, Advisor: G. Cao
- Dissertation Committee Member: Hao Zhu, 2004, Penn State, Advisor: G. Cao
- Dissertation Committee Member: Byungtae Kang, 2004, Penn State, Advisor: J. Irwin
- Dissertation External Committee Member: Rajnish Sinha, Rutgers, 2003, Advisor: R. Yates
- Dissertation Committee Member: Xiang Gao, Lehigh University, 2002, Advisor: T. Boult
- External examiner: L. G. F. Trichard, Univ. of Sydney, 2002, Advisors: J. Evans and I. Collings

Teaching

Ohio State, ECE 6001: Probability and Random Variables

Semesters taught: Autumn 2022, Autumn 2024

Enrollment: 70, 43

Description: Graduate level core covering probability, random variables and processes.

Ohio State, ECE 7001: Detection, Estimation and Stochastic Processes

Semesters taught: Spring 2024

Enrollment: 8

Description: Follow-up to 6001, graduate level detection and estimation theory.

Ohio State, ECE 7003: Wireless Communication Theory

Semesters taught: Autumn 2021, Spring 2026

Enrollment: 9

Description: Graduate level wireless foundations, revised to include 5G and 6G topics by Prof. Yener.

Ohio State, ECE 7005: Information Theory

Semesters taught: : Spring 2021, Spring 2023, Spring 2025

Enrollment: : 17, 9, 11

Description: Graduate level information theory.

Penn State, EE 360: Communication Systems

Semesters taught: Spring 2003, Spring 2008, Fall 2012, Spring 2014, Spring 2019

Enrollment: 32, 23, 43, 35, 46

Description: Junior level communications course emphasizing modulation techniques. Revised by Prof. Yener (2019).

Penn State, EE 497A: Fundamentals of Wireless Communications

Semesters taught: Spring 2004, Spring 2005, Spring 2007. Spring 2010

Enrollment: 35, 17, 13, 11

Description: Senior level wireless communications. Introduced and developed by Prof. Yener.

Penn State, EE 497B: Probability and Random Processes for Electrical and Computer Engineers

Semesters taught: Spring 2016

Enrollment: 22

Description: Junior/senior level statistics elective, in house version.

Penn State, EE 560: Stochastic Processes and Estimation

Semesters taught: Fall 2006, Fall 2010, Fall 2018

Enrollment: 57, 39, 26

Description: Graduate level probability, random variables and random processes. Core course for the PhD candidacy exam for the following sub-areas of the Signals and Systems Area: Communications, Networking, Signal Processing, Image Processing.

Penn State, EE 561: Information Theory

Semesters taught: Fall 2007, Fall 2009, Spring 2011, Spring 2015, Spring 2018

Enrollment: 15, 17, 12, 9, 10

Description: Graduate level information theory.

Penn State, EE 562: Detection and Estimation Theory

Semesters taught: Fall 2002

Enrollment: 10

Description: Graduate level detection and estimation theory.

Penn State, EE 568: Digital Communications-I

Semesters taught: Fall 2003, Fall 2004, Fall 2005

Enrollment: 21, 18, 11

Description: Graduate level digital communications.

Penn State, EE 569: Digital Communications-II

Semesters taught: Spring 2012

Enrollment: 5

Description: Advanced graduate level digital communications.

Penn State, EE 597C: Emerging Topics in Networked Systems

Semesters taught: Fall 2013, Fall 2019

Enrollment: 5, 5

Description: Graduate level (advanced); heavy research component. Developed by Prof. Yener.

Penn State, EE 597E: Multiuser Wireless Communications

Semesters taught: Spring 2006

Enrollment: 17

Description: Graduate level (advanced); heavy research component. Developed by Prof. Yener.

Penn State, EE 597J: Spread Spectrum Communications

Semesters taught: Spring 2002

Enrollment: 25

Description: Graduate level course emphasizing the principles and performance of spread spectrum based communication systems.

Lehigh, ECE 341: Fundamentals of Wireless Communications

Semesters taught: Fall 2000

Enrollment: 16

Description: Senior/First-year graduate course. Developed by Prof. Yener. Course taught as ECE 350 & ECE 450 (Special Topics) in Fall 2000, subsequently named ECE 341 as a permanent course.

Lehigh, ECE 450: Code Division Multiple Access Systems

Semesters taught: Spring 2001

Enrollment: 11

Description: Advanced graduate course emphasizing physical layer techniques for CDMA systems.

University Service

Ohio State

Research Security Governance Board, Member in Leadership, University level (2020-present)

College Awards Committee, member (2025-present)

College Promotion and Tenure Committee, Co-chair, College level (2022-2023)

Strategic Plan Working Group, Pillar 3: Shape our research activities to optimize collaborative discovery at the edges and intersections of disciplines, Member and co-lead, College of Engineering (2022)

College Promotion and Tenure Committee, Member, College of Engineering (2021)

College Research Committee, Member, College of Engineering (2020-2024)

Women Faculty Advisory Board to the Dean, Member, College of Engineering (2021-2022)

Awards Committee, Member, ECE Department (2023-present)

Graduate Admissions Committee, Member, ECE Department (2023-2025)

Advisory Committee, Member, ECE Department (2020-2023)

Personnel Committee, Member, ECE Department (2020-2022)

Graduate Committee, Member, ECE Department (2020-2022)

Penn State

Tenure and Promotion Committee of the School of EECS, Chair (2019)

Tenure and Promotion Committee of the School of EECS, Member (2018-2019)

School of EECS Strategic Planning Committee, Member (2015-2018) (2018-2019)

Advancement of Women in Engineering (AWE) Workshop Organizer, College of Engineering (2018)

EE Department Search Committee in Communications and Networking, Chair (2017-2018) (2018-2019)

College of Engineering Strategic Thrust Research Teams (STaRT), Leader for Cyber Environments (2017)

Graduate Council, Penn State, College of Engineering, Representative (alternate) (2017-2019)

College of Engineering Strategic Thrust Working Group on cyber-environments, Member (2016)

School of EECS Head Search Committee, Member (2015-2016)

EE Department Search Committee, Member (2015-2016)

EE Department Search Committee, Member (2014-2015)

Networked Systems Faculty Position Search Committee, Member (2013-2014)

Cyber-Physical Systems Faculty Position Search Committee, Member (2012-2013)

School of EECS study committee, Member (2011)

EE Department SysAdmin Search Committee, Member (2011)

Administrative Review Committee of Civil Engineering Dept. Head, College of Engineering, Member (2010-2011)

EE Department Head Search Committee, Member (2010-2011)

Sabbatical Review Committee for College of Engineering, Member then Chair (2009-2010)

EE Department AA Search Committee, Member (2009-2010)

Coordinator of PhD Candidacy Exam for Signals and Systems (2009-2011)

Strategic Planning Task Force on Information Technologies and Cyber Infrastructure, College of Engineering, Member (2007-2008)

Organizer of the Signals and Systems Area Seminars, EE Department (2006-2007)

Graduate Council, Member alternate (elected), College of Engineering (2004-2006)

Colloquium Organizing Committee, EE Department , Member (2003-2006)

Undergraduate Curriculum Committee, EE Department, Member (2002-2012)

Last updated, December 16, 2025.