Curriculum Vitae

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EDUCATION

Ph.D. (November 2002), **M.A.** (May 2000) in **Electrical Engineering**, **Princeton University**, Princeton, NJ
Major: Information Sciences and Systems Minors: Mathematics; Computer Engineering
Ph.D. Dissertation: *Wireless Cellular Communications with Antenna Arrays*
Advisor: Prof. H. Vincent Poor

M.S. (May 1998) and **B.E.** (July 1996) in **Electrical Engineering**, **Tsinghua University**, Beijing, China

PROFESSIONAL EXPERIENCE

08 / 22 – current	*Rotating Program Director*, Division of Electrical, Communications and Cyber Systems, **National Science Foundation**, Alexandria, VA
08 / 15 – current	*Professor*, Department of Electrical and Computer Engineering, **NC State University**, Raleigh, NC
08 / 09 – 07 / 15	*Associate Professor*, Department of Electrical and Computer Engineering, **NC State University**, Raleigh, NC
01 / 03 – 07 / 09	*Assistant Professor*, Department of Electrical and Computer Engineering, **NC State University**, Raleigh, NC
06 / 99 – 12 / 02	Research Associate/Assistant, Department of Electrical Engineering, **Princeton University,** Princeton, NJ
07 / 01 - 09 / 01	*Intern*, **AT&T Labs-Research**, Middletown, NJ
07 / 00 – 09 / 00	*Intern*, **Bell Labs, Lucent Technologies,** Holmdel, NJ

PUBLICATIONS

Journal Papers:

J1. R. Hu, X. He, and H. Dai, "Revisiting Distributed Source Coding for Expedited Downlink Transmission in Coded Edge Computing," *IEEE Trans. Wireless Communications*, to appear.

J2. T. Li, X. He, and H. Dai, "Coding-Aware Rate Splitting for Efficient Offloading in Coded Edge Computing," *IEEE Trans. Wireless Communications*, to appear.

J3. J. Liu, B. Ma, Y. Zhou, J. Zhou, R. Jin, D. Dou, H. Dai, H. Wang, and P. Valduriez, "Efficient Federated Learning with Heterogeneous Data and Adaptive Dropout," *ACM Transactions on Knowledge Discovery from Data*, to appear.

J4. J. Jia, J. Liu, C. Huo, Y. Shen, Y. Zhou, H. Dai, and D. Dou, "Efficient Federated Learning with Timely Update Dissemination," *Knowledge and Information Systems*, to appear.

J5. Y. He, G. Yu, and H. Dai, "Robustness in Wireless Distributed Learning: An Information-Theoretic Analysis," *IEEE Trans. Communications*, to appear.

J6. J. Tang, J. Liu, X. He, L. Xie, L. Qu, and H. Dai, "Deep Reinforcement Learning for AoI-Aware Trajectory and Phase-shift Design in IRS-Assisted UAV Data Collection," *IEEE Trans. Wireless Communications*, to appear.

J7. J. Zhang, X. He, and H. Dai, "Speeding Up Distributed Learning via Sparse and Flexible Coded Computing," *IEEE Trans. Information Theory*, vol. 71, no. 4, pp. 3167-3180, Apr. 2025.

J8. M. Liwang, Z. Cheng, W. Gong, L. Li, Y. Su, Z. Jiao, S. Hosseinalipour, X. Wang, and H. Dai, "Accelerating the Delivery of Data Services over Uncertain Mobile Crowdsensing Networks," *IEEE Wireless Communications*, vol. 32, no. 2, pp. 196-203, Apr. 2025.

J9. Y. He, T. Li, X. He, R. Jin, and H. Dai, "Partial Replication for Delay-Optimal Distributed Edge Computing," *IEEE Trans. Communications*, vol. 73, no. 4, pp. 2801-2816, April. 2025.

J10. X. Lu, Z. Liu, L. Xiao, and H. Dai, "Reinforcement Learning-Based Personalized Differentially Private Federated Learning," *IEEE Trans. Information Forensics and Security*, vol. 20, pp. 465-477, 2025.

J11. R. Jin, Y. Liu, Y. Huang, X. He, T. Wu, and H. Dai, "Sign-Based Gradient Descent with Heterogeneous Data: Convergence and Byzantine Resilience," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 36, no. 2, pp. 3834-3846, Feb. 2025.

J12. J. Liu, J. Jia, H. Zhang, Y. Yun, L. Wang, Y. Zhou, H. Dai, and D. Dou, "Efficient Federated Learning Using Dynamic Update and Adaptive Pruning with Momentum on Shared Server Data," *ACM Transactions on Intelligent Systems and Technology*, vol. 15, no. 6, pp. 1 – 28, Nov. 2024.

J13. R. Jin, X. He, C. Zhong, Z. Zhang, T. Quek, and H. Dai, "Magnitude Matters: Fixing SIGNSGD Through Magnitude-Aware Sparsification and Error Feedback in the Presence of Data Heterogeneity," *IEEE Trans. Signal Processing*, vol. 72, no. 11, pp. 5140-5155, Nov. 2024.

J14. M. F. Pervej, R. Jin, and H. Dai, "Hierarchical Federated Learning in Wireless Networks: Pruning Tackles Bandwidth Scarcity and System Heterogeneity," *IEEE Trans. Wireless Communications*, vol. 23, no. 9, pp. 11417-11432, Sept. 2024.

J15. Z. Liu, L. Huang, Z. Gao, M. Luo, S. Hosseinalipour, and H. Dai, "GA-DRL: Graph Neural Network-Augmented Deep Reinforcement Learning for DAG Task Scheduling over Dynamic Vehicular Clouds," *IEEE Transactions on Network and Service Management*, vol. 21, no. 4, pp. 4226-4242, Aug. 2024.

J16. T. Li, X. He, R. Jin, and H. Dai, "Task-Decoding Assisted Cooperative Transmission for Coded Edge Computing," *IEEE Trans. Wireless Communications*, vol. 23, no. 8, pp. 9044-9058, Aug. 2024.

J17. J. Liu, F. Yang, X. Wang, L. Qu, M. Jin, and H. Dai, "Joint Optimization of Charging Station Placement and UAV Trajectory for Fresh Data Collection," *IEEE Internet of Things Journal*, vol. 11, no. 14, pp. 25057-25073, Jul. 2024.

J18. K. Yue, R. Jin, C. Wong, and H. Dai, "Federated Learning via Plurality Vote," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 35, no. 6, pp. 8215-8228, Jun. 2024.

J19. D. Geng, T. Li, X. He, R. Jin, and H. Dai, "Dynamic Power Control for Delay-Optimal Coded Edge Computing," *IEEE Trans. Wireless Communications*, vol. 23, no. 4, pp. 3283-3297, Apr. 2024.

J20. Z. Liu, Y. Zhao, S. Hosseinalipour, Z. Gao, L. Huang, and H. Dai, "TDRA: A Truthful Dynamic Reverse Auction for DAG Task Scheduling Over Vehicular Clouds," *IEEE Trans. Vehicular Technology*, vol. 73, no. 3, pp. 4337-4351, Mar. 2024.

J21. M. F. Pervej, R. Jin, S.-C. Lin, and H. Dai, "Efficient Content Delivery in User-Centric and Cache-Enabled Vehicular Edge Networks with Deadline-Constrained Heterogeneous Demands," *IEEE Trans. Vehicular Technology*, vol. 73, no. 1, pp. 1129-1145, Jan. 2024.

J22. M. Lee, G. Yu, and H. Dai, "Privacy-Preserving Decentralized Inference with Graph Neural Networks in Wireless Networks," *IEEE Trans. Wireless Communications*, vol. 23, no. 1, pp. 543-558, Jan. 2024.

J23. Y. He, X. He, R. Jin, and H. Dai, "Location Privacy-Aware and Energy-Efficient Offloading for Distributed Edge Computing," *IEEE Trans. Wireless Communications*, vol. 22, no. 11, pp. 7975-7988, Nov. 2023.

J24. R. Jin, Y. Huang, Z. Zhang, and H. Dai, "On the Privacy Guarantees of Gossip Protocols in General Networks," *IEEE Trans. Network Science and Engineering*, vol. 10, no. 6, pp. 3114-3130, Nov.-Dec. 2023.

J25. M. LiWang, Z. Gao, S. Hosseinalipour, Y. Su, X. Wang, and H. Dai, "Graph-Represented Computation-Intensive Task Scheduling over Air-Ground Integrated Vehicular Networks," *IEEE Trans. Service Computing*, vol. 16, no. 5, pp. 3397-3411, Sept.-Oct. 2023.

J26. Z. Liu, M. LiWang, S. Hosseinalipour, H. Dai, Z. Gao, and L. Huang, "RFID: Towards Low Latency and Reliable DAG Task Scheduling Over Dynamic Vehicular Clouds," *IEEE Trans. Vehicular Technology*, vol. 72, no. 9, pp. 12139-12153, Sept. 2023.

J27. S. J. Maeng, M. Chowdhury, I. Guvenc, A. Bhuyan, and H. Dai, "Base Station Antenna Uptilt Optimization for Cellular-Connected Drone Corridors," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 59, no. 4, pp. 4729-4737, Aug. 2023.

J28. J. Zhang, X. He, and H. Dai, "Blind Post-Decision State Based Reinforcement Learning for Intelligent IoT," *IEEE Internet of Things Journal*, vol. 10, no. 12, pp. 10605-10620, Jun. 2023.

J29. M. F. Pervej, R. Jin, and H. Dai, "Resource Constrained Vehicular Edge Federated Learning with Highly Mobile Connected Vehicles," *IEEE Journal on Selected Areas in Communications*, vol. 41, no. 6, pp. 1825-1844, Jun. 2023.

J30. Z. Tian, Z. Zhang, Z. Yang, R. Jin, and H. Dai, "Distributed Learning over Networks with Graph-Attention-Based Personalization," *IEEE Trans. Signal Processing*, vol. 71, no. 6, pp. 2071-2086, Jun. 2023.

J31. Z. Song, J. An, H. Ding, and H. Dai, "Optimal Relay Probing for UAV Millimeter Wave Communications with Beam Training Overhead," *IEEE Trans. Vehicular Technology*, vol. 72, no. 6, pp. 7351-7363, Jun. 2023.

J32. M. Lee, G. Yu, and H. Dai, "Decentralized Inference with Graph Neural Networks in Wireless Communication Systems," *IEEE Trans. Mobile Computing*, vol. 22, no. 5, pp. 2582-2598, May 2023.

J33. J. Liu, J. Jia, B. Ma, C. Zhou, J. Zhou, Y. Zhou, H. Dai, and D. Dou, "Multi-Job Intelligent Scheduling with Cross-Device Federated Learning," *IEEE Trans. Parallel and Distributed Systems*, vol. 34, no. 2, pp. 535-551, Feb. 2023.

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J37. M. Lee, S. Hosseinalipour, C. Brinton, G. Yu, and H. Dai, "Fast Graph Neural Network-Based Method for Winner Determination in Multi-Unit Combinatorial Auctions," *IEEE Trans. Cloud Computing*, vol. 10, no. 4, pp. 2264-2280, Oct.-Dec. 2022.

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J39. S. Hosseinalipour, S. S. Azam, C. G. Brinton, N. Michelusi, V. Aggarwal, D. J. Love, and H. Dai, "Multi-Stage Hybrid Federated Learning over Large-Scale Wireless Fog Networks,", *IEEE Trans. Networking*, vol. 30, no. 4, pp. 1569-1584, Aug. 2022. **2024 IEEE Communications Society William R. Bennett Prize (Best Paper Award, IEEE/ACM Transactions on Networking)**.

J40. N. Nguyen, K. Lee, and H. Dai, "Hybrid Beamforming and Adaptive RF Chain Activation for Cell-Free Millimeter-Wave Massive MIMO Systems," *IEEE Trans. Vehicular Technology*, vol. 71, no. 8, pp. 8739-8755, Aug. 2022.

J41. R. Jin, X. He, and H. Dai, "Communication Efficient Federated Learning with Energy Awareness over Wireless Networks," *IEEE Trans. Wireless Communications*, vol. 21, no. 7, pp. 5204-5219, Jul. 2022.

J42. K. Yue, R. Jin, C. Wong, and H. Dai, "Communication-Efficient Federated Learning via Predictive Coding," *IEEE J. Selected Topics in Signal Processing*, vol. 16, no. 3, pp. 369-380, Apr. 2022.

J43. A. Rahmati, S. Hosseinalipour, Y. Yapici, X. He, I. Guvenc, H. Dai, and A. Bhuyan, "Dynamic Interference Management for UAV-Assisted Wireless Networks," *IEEE Trans. Wireless Communications*, vol. 21, no. 4, pp. 2637-2653, Apr. 2022.

J44. S. J. Maeng, Y. Yapici, I. Guvenc, A. Bhuyan, and H. Dai, "Precoder Design for Physical-Layer Security and Authentication in Massive MIMO UAV Communications," *IEEE Trans. Vehicular Technology*, vol. 71, no. 3, pp. 2949-2964, Mar. 2022.

J45. X. He, R. Jin, and H. Dai, "Multi-Hop Task Offloading with On-The-Fly Computation for Multi-UAV Remote Edge Computing," *IEEE Trans. Communications*, vol. 70, no. 2, pp. 1332-1344, Feb. 2022.

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J47. S. Chattopadhyay, H. Dai, and D. Y. Eun, "Controlling Metastable Infection Patterns in Multilayer Networks via Interlink Design," *IEEE Trans. Network Science and Engineering*, vol. 8, no. 4, pp. 3242-3256, Oct.-Dec., 2021.

J48. Y. Ding, S. Liu, L. Xiao, Y. Tang, and H. Dai, "UAV Anti-Jamming Video Transmissions with QoE Guarantee against Jamming: A Reinforcement Learning-Based Approach," *IEEE Trans. Communications*, vol. 69, no. 9, pp. 5933-5947, Sept. 2021.

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J50. L. Xiao, X. Lu, T. Xu, W. Zhuang, and H. Dai, "Reinforcement Learning Based Physical-layer Authentication for Controller Area Networks," *IEEE Trans. Information Forensics and Security*, vol. 16, pp. 2535-2547, 2021.

J51. S. Hosseinalipour and H. Dai, "A Two-Stage Auction Mechanism for Cloud Resource Allocation," *IEEE Trans. Cloud Computing*, vol. 9, no. 3, pp. 881-895, July-September, 2021.

J52. S. Hosseinalipour, A. Rahmati, D. Y. Eun, and H. Dai, "Energy-Aware Stochastic UAV-Assisted Surveillance," *IEEE Trans. Wireless Communications*, vol. 20, no. 5, pp. 2820-2837, May 2021.

J53. Y. Yapici, N. Rupasinghe, I. Guvenc, H. Dai, and A. Bhuyan, "Physical Layer Security for NOMA Transmission in mmWave Drone Networks," *IEEE Trans. Vehicular Technology*, vol. 70, no. 4, pp. 3568-3582, Apr. 2021.

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J55. R. Jin, X. He, and H. Dai, "Minimizing the Age of Information in the Presence of Location Privacy-aware Mobile Agents," *IEEE Trans. Communications*, vol. 69, no. 2, pp. 1053-1067, Feb. 2021.

J56. M. Lee, N. Ma, G. Yu, and H. Dai, "Accelerating Generalized Benders Decomposition for Wireless Resource Allocation," *IEEE Trans. Wireless Communications*, vol. 20, no. 2, pp. 1233-1247, Feb. 2021.

J57. S. J. Maeng, M. Deshmukh, I. Guvenc, A. Bhuyan, and H. Dai, "Interference Analysis and Mitigation for Aerial IoT Considering 3D Antenna Patterns," *IEEE Trans. Vehicular Technology*, vol. 70, no. 1, pp. 490-503, Jan. 2021.

J58. Z. Tian, Z. Zhang, J. Wang, X. Chen, W. Wang, and H. Dai, "Distributed ADMM with Synergetic Communication and Computation," *IEEE Trans. Communications*, vol. 69. no. 1, pp. 501-517, Jan. 2021.

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J63. X. Lu, L. Xiao, C. Dai, and H. Dai, "UAV-Aided Cellular Communications with Deep Reinforcement Learning Against Jamming," *IEEE Wireless Communications*, vol. 27, no. 4, pp.48-53, Aug. 2020.

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J67. X. He, R. Jin, and H. Dai, "Physical-Layer Assisted Secure Offloading in Mobile-Edge Computing," *IEEE Trans. Wireless Communications*, vol. 19, no. 6, pp. 4054-4066, Jun. 2020.

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J71. R. Jin, X. He, and H. Dai, "On the Security-Privacy Tradeoff in Collaborative Security: A Quantitative Information Flow Game Perspective," *IEEE Transactions on Information Forensics and Security,* vol. 14, no. 12, pp. 3273 - 3286, Dec. 2019.

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J73. Y. Huang and H. Dai, "Multiplex Conductance and Gossip Based Information Spreading in Multiplex Networks," *IEEE Trans. Network Science and Engineering*, vol. 6, no. 3, pp. 391-401, July-Sept., 2019.

J74. M. LiWang, S. Dai, Z. Gao, X. Du, M. Guizani, and H. Dai, "A Computation Offloading Incentive *Mechanism* with Delay and Cost Constraints under 5G Satellite-ground IoV Architecture," *IEEE Wireless Communications*, vol. 26, no. 4, pp. 124 – 132, Aug. 2019.

J75. Y. Huang, H. Dai, and R. Ke. "Principles of effective and robust innate immune response to viral infections: a multiplex network analysis." *Frontiers in Immunology*, vol. 10 article 1736, July 2019.

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J77. M. LiWang, S. Dai, Z. Gao, Y. Tang, and H. Dai, "A Truthful Reverse-Auction Mechanism for Computation Offloading in Cloud-enabled Vehicular Network," *IEEE Internet of Things Journal*, vol. 6, no. 3, pp. 4214 – 4227, June 2019.

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J79. N. Nguyen, K. Lee, and H. Dai, "QR-decomposition-aided Tabu Search Detection for Large MIMO Systems," *IEEE Trans. Vehicular Technology*, vol. 68, no. 5, pp. 4857-4870, May 2019.

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PROFESSIONAL AND SCHOLARLY ACTIVITIES

- Editor in Chief, IEEE Transactions of Signal and Information Processing over Networks, 2025-2027
- IEEE Communications Society William R. Bennett Prize (Best Paper Award, IEEE/ACM Transactions on Networking). 2024
- Area Editor, IEEE Transactions on Wireless Communications, 2022-now
- Asia-Pacific Artificial Intelligence Association (AAIA) Fellow, since 2021
- Qualcomm Faculty Award, 2019
- University Faculty Scholar, 2018
- IEEE Fellow, since 2017
- Executive Editorial Committee member, IEEE Transactions on Wireless Communications, 2017-2022
- Area Editor for Wireless Communications – I of IEEE Transactions on Communications, 2016-2021
- Associate Editor of IEEE Transactions on Communications, 2012-2015
- Associate Editor of IEEE Transactions on Signal Processing, 2009-2013
- Associate Editor of IEEE Transactions on Wireless Communications, 2007-2009
- Associate Editor of IEEE Signal Processing Magazine e-Newsletter, 2007-2009
- Associate Editor of EURASIP Journal on Advances in Signal Processing, 2006-2010
- Associate Editor of EURASIP Journal on Wireless Communications and Networking, 2005-2009
- Associate Editor of Journal of Communications and Networks, 2005-2009
- Guest Editor of special issue on Distributed Signal Processing Techniques for Wireless Sensor Networks, EURASIP Journal on Advances in Signal Processing, Jan. 2008
- Guest Editor of special issue on Theory and Applications in Multiuser/Multi-terminal Communications, EURASIP Journal on Wireless Communications and Networking, Aug. 2008
- Area TPC Chair of IEEE INFOCOM 2018-2020, 2022-2025
- TPC Co-Chair of the Protocols and Cross-Layer Technologies Track of IEEE MASS 2022
- Distinguished TPC Member Award, IEEE INFOCOM 2016
- Lead Co-Chair of the Wireless Communications Symposium of IEEE Globecom 2014
- Co-Chair of the Communications Theory Symposium of IEEE ICC 2014
- Lead Co-Chair of the Signal Processing for Communications Symposium of IEEE Globecom 2013
- TPC Co-Chair of Modeling and Simulation Track of IEEE VTC 2005 Fall
- Member of Technical Program Committee for IEEE Conference on Computer Communications (INFOCOM), 2012-2017
- Member of Technical Program Committee for IEEE International Workshop on Signal Processing Advances for Wireless Communications (SPAWC), 2010-2012

- Member of Technical Program Committee for IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2011-2013
- Member of Technical Program Committee for IEEE Conference on Communications (ICC), 2006-2009
- Member of Technical Program Committee for IEEE Global Communications Conference (GLOBECOM), 2004, 2006-2007
- Member of Technical Program Committee for IEEE Radio and Wireless Symposium (RWS), 2006-2008
- Member of Technical Program Committee for 2006 IEEE International Electro/Information Technology Conference (EIT)
- Member of Technical Program Committee for 2006 IEEE Information Theory Workshop (ITW)
- Member of Technical Program Committee for 2006 International Wireless Communications and Mobile Computing Conference (IWCMC)
- Member of Technical Program Committee for 2005 Fall IEEE Conference on Vehicular Technology (VTC)
- Member of Technical Program Committee for the Ninth International Symposium on Power Line Communications (ISPLC 2005)
- Member of Technical Program Committee for the Fourth IASTED International Multi-Conference on Wireless and Optical Communications 2004
- Member of Technical Program Committee, organizer and chair of invited sessions for 2004 Fall IEEE Conference on Vehicular Technology (VTC)
- Executive committee member of IEEE East North Carolina Section and local chapter chair of Signal Processing Society, 2013-2016
- Member of IEEE Signal Processing Society Technical Committee on Signal Processing for Communications and Networking (SPCOM), elected, 2010-2012
- National Science Foundation (NSF) panelist and reviewer for Directorate for Computer and Information Science & Engineering (CISE) and Directorate for Engineering (ENG)
- IEEE Senior Member review panelist
- Reviewer for US Army Research Office, Hongkong Research Grants Council

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THESES SUPERVISED

Hongyuan Zhang (Ph.D. 2006, Marvell Semiconductor, Inc., CA):
MIMO Communications Systems: Antenna Selection and Interference Mitigation - **2007 NC State Graduate School Dissertation Award (one per year)**

Vivek Goel (M.S. 2005, Broadcom, Inc., Bangalore, India):
Semi-blind Turbo Detection for Multiple-Input Multiple-Output Wireless Systems

Quan Zhou (Ph.D. 2006, Broadcom, Inc., CA):
Wireless Communications with MIMO Systems: Analysis and Practice

Wenjun Li (Ph.D. 2007, Qualcomm, Inc., NJ):
Distributed and Collaborative Information Processing in Wireless Sensor Networks

Yanbing Zhang (Ph.D. 2009, Broadcom, Inc., NJ):
Cooperative Communication and Information Processing in Distributed Wireless Networks

Nakul Navarange (M.S. 2012, Qualcomm, Inc., CA)
Energy Efficiency and Trade-off with Delay in Jamming-Resistant Collaborative Wireless Broadcast Networks

Chengzhi Li (Ph.D. 2012, Qualcomm, Inc., CA)
Analytical Study on Heterogeneous Systems

Yufan Huang (M.S. 2014, Google, Inc., CA)
Information Spreading in Mobile and Social Networks

Mani Pandian (Ph.D. 2014, Marvell Semiconductor, Inc., CA, jointly supervised with Prof. Mihail Sichitiu):
Optimal Resource Allocation in Cooperative Heterogeneous Networks

Wenbo Shen (Ph.D. 2015, Zhejiang University, China, jointly supervised with Prof. Peng Ning)
Physical Layer Signal Design and Control for Wireless Security

Xiaofan He (Ph.D. 2015, Wuhan University, China)
Surviving the Information Warfare: from Static Competition to Dynamic Game

Anuj Nayak (M.S. 2018, Qualcomm, Inc., CA)
Information Spreading in Dynamic Networks

Yufan Huang (Ph.D. 2019, Google, Inc., CA)
Spreading Processes in Complex Networks: Speed, Competition, and Privacy

Seyyedali Hosseinalipour (Ph.D. 2020, University of Buffalo, NY)
Efficient Network Planning and Design for Cloud, Interdependent, and UAV-assisted Networks - **2021 ECE Distinguished Dissertation Award (one per year)**

Srinjoy Chattopadhyay (Ph.D. 2020, Amazon, Inc., CA)
Optimizing and Controlling Spreading Processes in Multilayer Networks

Richeng Jin (Ph.D. 2020, Zhejiang University, China)
Privacy-Preserving Information Exchange in Collaborative Security, Crowdsensing, and Machine Learning

Ali Ramati (Ph.D. 2021, Qualcomm, Inc., CA)
On Applications of Optimization Techniques in UAV Communication, Resource Allocation, and Adversarial Attacks

Sung-Joon Maeng (Ph.D. 2022, NC State University, NC)
Energy Efficient and Secure Communication in UAV Networks

Ferdous Pervej (Ph.D. 2023, University of South California, CA)
Collaborative Edge and On-Device Learning in Wireless Networks under Resource Constraints

Kai Yue (Ph.D. 2025, jointly supervised with Prof. Chau-Wai Wong)
Toward Robust and Secure Federated Learning: Mitigating Heterogeneity and Adversarial Threats in Collaborative On-Device Optimization

POSTDOC RESEARCHER SUPERVISED

Juan Liu (2012-2014, Ningbo University, China)

Jung Hoon Lee (2014-2015, Hankuk University of Foreign Studies, South Korea)

Xiaofan He (2016, Wuhan University, China)

Yavuz Yapici (2020, Qualcomm, Inc., NJ, USA)

Haichuang Ding (2021, Beijing Institute of Technology, China)

Richeng Jin (2021, Zhejiang University, China)

Ye Hu (2023, University of Miami, FL, USA)