# Shana Moothedath

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## Research Interests

Learning, control, and security of cyber-physical systems; Decentralized and federated multi-task learning; Bandit and reinforcement learning; Learning and control of wireless systems; Game theory; Data-driven control

## Experience

**Harpole-Pentair Assistant Professor** — July 2024 - Present
Assistant Professor — July 2021 - July 2024
*Electrical and Computer Engineering* — *Iowa State University, USA*

**Postdoctoral Research Scholar** — May 2018 - July 2021
*Department of Electrical and Computer Engineering* — *University of Washington, Seattle, USA*

**Research Intern** — September 2013 - July 2014
*Vikram Sarabhai Space Centre (VSSC-ISRO)* — *Indian Space Research Organization, India*

## Education

**Postdoctoral Research Scholar** — May 2018 - July 2021
*Department of Electrical and Computer Engineering* — *University of Washington, Seattle, USA*
**Ph.D.** — July 2014 - August 2018
*Electrical Engineering* — *Indian Institute of Technology Bombay, Mumbai, India*

## Grants

My research has been funded by NSF, AFRL, and DHS. Total: 2.14 million. My share 1.25 million.

- **NSF CAREER**: $515,000, CAREER: A Principled Framework for Multi-Task Representation Learning for Scalable, Decentralized, and Safe Sequential Decision-Making, 2025-2030. **Role: Sole PI.**
- AFRL: $99,972, Safety-Aware Decentralized Reinforcement Learning Framework for Mission-Critical Applications, 2025-2026. **Role: Sole PI.**
- Internal Grant: Digital and Precision Agriculture proposal: $50,000, Developing a Nitrogen Recommendation and Learning Tool for Corn, 2024-2025. **Role: Sole PI.**
- NSF-MeitY: NeTS: $909, 583 (NSF-$372,447, MeitY (India)-$537,136), Towards Learning Enabled Sustainable Service Handling in 6G, 2024-2027. **Role: Sole US PI.**
- Internal Grant: Community Vitality RIR proposal: $70,000, On Impact of Grade School Math Tutoring by MI-STEM Graduate Students and Faculty, 2024. **Role: Co-PI.**
- Department of Homeland Security (DHS): $150,000, Federated Intrusion Response Network for Grids (FIRNet-G), 2023-2024. **Role: Co-PI.**
- Internal Grant: Presidential Interdisciplinary Research Initiative (PIRI): $150,000, Cybersecurity for Smart Agriculture, 2023. **Role: Senior Personnel.**
- ISU Seed Funding: $15,000, Secure Decision Making for Farming Recommender Systems, 2023. **Role: PI.**
- ISU Seed Funding: $14,500, Creating a testbed for sensor-based smart irrigation in vegetable production systems and its implications on cybersecurity, 2023. **Role: Co-PI.**
- NSF: EPCN: $316,000, Fully Decentralized (Attack-)Resilient Dynamic Low-Rank Matrix Learning, 2022-2025. **Role: PI.**

## Honors and Awards

- **NSF CAREER Award**, 2025.
- Harpole-Pentair Developing Assistant Professor, Iowa State University, 2024, 2025.
- Rising Star in Electrical Engineering and Computer Science, MIT-EECS, 2019.
- Excellence in Ph.D. Research Thesis Award at Indian Institute of Technology Bombay, 2017-2019.
- Excellence in Teaching Assistantship at Indian Institute of Technology Bombay, 2017.
- First Rank in University of Kerala for M. Tech, 2014.

## Patents

**Patents (1 filed; 1 under preparation)**

1. India Patent Application Number: 202521052098, *Methods and Systems for Provisioning Energy-Aware Adaptive Security at Flow-Level in Wireless Communication Networks*, Rashmi Kamran, Pranav Kumar Jha, **Shana Moothedath**, Prasanna Chaporkar, and Abhay Karandikar (Filed; May 2025).
2. US Patent, Methods and Systems for Provisioning Energy-Aware Adaptive Security at Flow-Level in Wireless Communication Networks, with (Under Preparation).

## Publications

**Journal Papers (18 journals accepted and published; 3 are under review)**

1. Jiabin Lin and **Shana Moothedath**, Multi-Task Representation Learning in Constrained Linear Bandits, Submitted to *IEEE Transactions on Automatic Control* on July 23, 2025.
2. Jiabin Lin and **Shana Moothedath**, Provable Multi-Task OFUL for Low-Rank Linear Bandits, Submitted to *Systems & Control Letters* on September 19, 2025.
3. Rashmi Kamran, Mahesh Ganesh Bhat, Pranav Jha, **Shana Moothedath**, Manjesh Hanawal, and Prasanna Chaporkar, Energy-Aware 6G Network Design: A Survey, Submitted to *IEEE Access* on October 11, 2025.
4. Jiabin Lin and **Shana Moothedath**, Provable Active Multi-Task Representation Learning, To Appear in *IEEE Transactions on Signal Processing*, 2025.
5. Jiabin Lin, **Shana Moothedath**. Distributed Multi-Task Learning for Stochastic Bandits with Context Distribution and Stage-wise Constraints, *IEEE Transactions on Signal and Information Processing over Networks*, vol. 11, pp: 577 - 591, 2025.
6. **Shana Moothedath** and Namrata Vaswani. Provable Decentralized and Federated Low Rank Compressive Sensing. To appear in *IEEE Transactions on Control of Network Systems*, 2025.
7. Jiabin Lin, **Shana Moothedath**. Fast and Sample Efficient Relevance-Based Multi-Task Representation Learning, *IEEE Control Systems Letters*, vol. 8, pp: 1397 - 1402, 2024.
8. Sharu Jose and **Shana Moothedath**, Thompson Sampling for Stochastic Bandits with Noisy Contexts: An Information-Theoretic Regret Analysis, *Entropy*, vol. 26, issue. 7, 2024.
9. Dinuka Sahabandu, **Shana Moothedath**, Joey Allen, Linda Bushnell, Wenke Lee, and Radha Poovendran. RL-ARNE: A Reinforcement Learning Algorithm for Computing Average Reward Nash Equilibrium of Nonzero-Sum Stochastic Games. *IEEE Transactions on Automatic Control*, vol 69, issue. 11, pp: 7824-7831, 2024.
10. **Shana Moothedath**, Dinuka Sahabandu, Joey Allen, Linda Bushnell, Wenke Lee, and Radha Poovendran. Stochastic Dynamic Information Flow Tracking Game using Supervised Learning for Detecting Advanced Persistent Threats. *Automatica*, vol. 159, 2024.
11. **Shana Moothedath,** Dinuka Sahabandu, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, and Radha Poovendran. Dynamic Information Flow Tracking for Detection of Advanced Persistent Threats: A Stochastic Game Approach. *IEEE Transactions on Automatic Control*, vol 69, issue. 10, pp: 6684-6699, 2024.
12. RaviTeja Gundeti, **Shana Moothedath**, and Prasanna Chaporkar. Feedback Robustness in Structured Closed-loop System. *European Journal of Control*, vol 57, pp: 95-108, 2021.

13. **Shana Moothedath**, Dinuka Sahabandu, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, and Radha Poovendran. A Game Theoretic Approach for Dynamic Information Flow Tracking to Detect Multi-Stage Advanced Persistent Threats. *IEEE Transactions on Automatic Control*, vol 65, issue. 12, pp: 5248-5263, 2020.
14. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. Optimal Network Topology Design in Composite Systems for Structural Controllability. *IEEE Transactions on Control of Network Systems*, vol 7, issue. 3, pp: 1164-1175, 2020.
15. Aishwary Joshi, **Shana Moothedath**, and Prasanna Chaporkar. Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. *IEEE Transactions on Automatic Control*, vol 65, issue. 12, pp: 5517-5524, 2020.
16. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. Approximating Constrained Minimum Cost Input-Output Selection for Generic Arbitrary Pole Placement in Structured Systems. *Automatica*, vol. 107, pp: 200-210, 2019.
17. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. Optimal Selection of Essential Interconnections for Structural Controllability in Heterogeneous Subsystems. *Automatica*, vol. 103, pp: 424-434, 2019.
18. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. Sparsest Feedback Selection for Structurally Cyclic Systems with Dedicated Actuators and Sensors in Polynomial Time. *IEEE Transactions on Automatic Control*, vol. 64, no. 9, pp: 3956-3963, 2019.
19. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. Minimum Cost Feedback Selection for Arbitrary Pole Placement in Structured Systems. *IEEE Transactions on Automatic Control*, vol. 63, no. 11, pp: 3881-3888, 2018.
20. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. A Flow-Network Based Polynomial-Time Approximation Algorithm for the Minimum Constrained Input Structural Controllability Problem. *IEEE Transactions on Automatic Control*, vol. 63, no. 9, pp: 3151-3158, 2018.
21. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. A Maximum Likelihood Based Offline Estimation of Student Capabilities and Question Difficulties. *Perspectives in Education*, vol. 34, no. 4, pp: 99-115, 2016.

**Conference Papers (29 conference papers are accepted and published; 4 are under review)**

22. Mahesh Ganesh Bhat, **Shana Moothedath**, and Prasanna Chaporkar, Post-Decision State-Based Online Learning for Delay-Energy-Aware Flow Allocation in Wireless Systems, *IEEE International Conference on Communications (ICC)*, Glasgow, Scotland, UK, 2026.
23. Tuan Le and **Shana Moothedath**, Byzantine Resilient Federated Multi-Task Representation Learning, Submitted to *IEEE International Conference on Communications (ICC)*, Glasgow, Scotland, UK, 2026.
24. Donghwa Kang and **Shana Moothedath**, Diffusion-based Decentralized Federated Multi-Task Representation Learning, Submitted to *American Control Conference (ACC)*, 2025.
25. Jiabin Lin and **Shana Moothedath**, Provably Efficient Multi-Task Meta Bandit Learning via Shared Representations, In *Conference on Neural Information Processing Systems (Neurips)*, 2025 (**acceptance rate: 5290/21575=24.52%**).
26. Mohammadali Moghimi, Sharu Theresa Jose, and **Shana Moothedath**, Neural Contextual Bandits Under Delayed Feedback Constraints, In *Conference on Decision and Control (CDC)*, Rio De Janeiro, Brazil, 2025.
27. Sugam Mishra, Rashmi Kamran, Karthikye Prasad, **Shana Moothedath**, Pranav Jha, Prasanna Chaporkar, and Manjesh Hanawal, EASe: Service-aware Adaptive SEcurity Framework for Sustainable 6G, Submitted to *IEEE International Conference on Communications (ICC)*, 2025.
28. Geethu Joseph, **Shana Moothedath**, and Jiabin Lin. Minimal Input Structural Modifications for Strongly Structural Controllability, In *Conference on Decision and Control (CDC)*, Milan, Italy, 2024.
29. Jiabin Lin, **Shana Moothedath,** and Namrata Vaswani, Fast and Sample Efficient Multi-Task Representation Learning in Stochastic Contextual Bandits, In *International Conference on Machine Learning (ICML)*, Austria, Vienna, July, 2024 (**acceptance rate 2609/9473=27.5%**).
30. Jiabin Lin and **Shana Moothedath**, Federated Learning for Heterogeneous Bandits with Unobserved Contexts, In *IEEE International Symposium on Information Theory (ISIT)*, Athens, Greece, June, 2024.

31. **Shana Moothedath** and Namrata Vaswani, Decentralized Low Rank Matrix Recovery From Column-wise Projections by Alternating GD and Minimization, In *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Seoul, Korea, April, 2024.
32. Jiabin Lin, Karuna Anna Sajeevan, Bibek Acharya, Shana Moothedath, Ratul Chowdhury, Distributed Stochastic Contextual Bandits for Protein Drug Interaction, In *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Seoul, Korea, April, 2024.
33. Ahmed Ali Abbasi, **Shana Moothedath** and Namrata Vaswani, Fast Federated Low Rank Matrix Completion. In *Fifty-Ninth Annual Allerton Conference on Communication, Control, and Computing*, 2023.
34. **Shana Moothedath** and Namrata Vaswani, Comparing Decentralized Gradient Descent Approaches and Guarantees. In *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Rhodes Island, Greece, June, 2023.
35. Jiabin Lin and **Shana Moothedath**, Distributed Stochastic Bandits with Hidden Context. In *European Control Conference (ECC)*, Bucharest, Romania, June, 2023.
36. Jiabin Lin and **Shana Moothedath**, Distributed Stochastic Bandit Learning with Delayed Context Observation. In *European Control Conference (ECC)*, Bucharest, Romania, June, 2023.
37. Jiabin Lin and **Shana Moothedath**, Feature Selection in Distributed Stochastic Linear Bandits. In *American Control Conference (ACC)*, San Diego, USA, May, 2023.
38. **Shana Moothedath**, Namrata Vaswani, Dec-AltProjGD: Fully-Decentralized Alternating Projected Gradient Descent for Low Rank Column-wise Compressive Sensing. In *Conference on Decision and Control (CDC)*, Mexico, December, 2022.
39. Jiabin Lin, Xian Yeow Lee, Talukder Jubery, **Shana Moothedath**, Soumik Sarkar, and Baskar Ganapathysubramanian, Stochastic Conservative Contextual Linear Bandits. In *Conference on Decision and Control (CDC)*, Mexico, December, 2022.
40. **Shana Moothedath**, Namrata Vaswani, Fully Decentralized and Federated Low Rank Compressive Sensing. In *American Control Conference (ACC)*, Atlanta, USA, June, 2022.
41. **Shana Moothedath**, Xian Yeow Lee, Talukder Jubery, Baskar Ganapathysubramanian, Soumik Sarkar, A Conservative Stochastic Contextual Bandit Based Framework for Farming Recommender Systems. In *AAAI Workshop on AI for Agriculture and Food Systems (AIAFS)*, Virtual Conference, February, 2022.
42. Dinuka Sahabandu, **Shana Moothedath**, Joey Allen, Linda Bushnell, Wenke Lee, and Radha Poovendran, Quickest Detection of Advanced Persistent Threats: A Semi-Markov Game Approach. In *International Conference on Cyber-Physical Systems (ICCPS)*, Sydney, Australia, April, 2020.
43. Dinuka Sahabandu, **Shana Moothedath**, Joey Allen, Linda Bushnell, Wenke Lee, and Radha Poovendran, Stochastic Dynamic Information Flow Tracking Game with Reinforcement Learning. In *Conference on Decision and Game Theory for Security (GameSec)*, Stockholm, Sweden, October, 2019.
44. Dinuka Shabandu, **Shana Moothedath**, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, and Radha Poovendran. Dynamic Information Flow Tracking Games for Simultaneous Detection of Multiple Attackers. In *IEEE Conference on Decision and Control (CDC)*, Nice, France, December, 2019.
45. Shruti Misra, **Shana Moothedath**, Hossein Hosseini, Joey Allen, Linda Bushnell, Wenke Lee, and Radha Poovendran. Learning Equilibria in Stochastic Information Flow Tracking Games with Partial Knowledge. In *IEEE Conference on Decision and Control (CDC)*, Nice, France, December, 2019.
46. Dinuka Shabandu, **Shana Moothedath**, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, and Radha Poovendran. A Game Theoretic Approach for Dynamic Information Flow Tracking with Conditional Branching. In *American Control Conference (ACC)*, pp: 2289-2296, Philadelphia, USA, July, 2019.
47. **Shana Moothedath**, Prasanna Chaporkar, and Aishwary Joshi. Optimal Network Topology Design in Composite Systems with Constrained Neighbours for Structural Controllability. In *American Control Conference (ACC)*, pp: 2078-2083, Philadelphia, USA, July, 2019.

48. Kumar Yashashwi, **Shana Moothedath**, and Prasanna Chaporkar. Minimizing Inputs for Strong Structural Controllability. In *American Control Conference (ACC)*, pp: 2048-2053, Philadelphia, USA, July, 2019.
49. **Shana Moothedath**, Kumar Yashashwi, and Prasanna Chaporkar. Target Controllability for Structured Systems. In *European Control Conference (ECC)*, pp: 3484-3489, Naples, Italy, June, 2019.
50. **Shana Moothedath**, Dinuka Shabandu, Andrew Clark, Sangho Lee, Wenke Lee, and Radha Poovendran. Multi-stage Dynamic Information Flow Tracking Game. In *Conference on Decision and Game Theory for Security (GameSec)*, pp: 80-101, Seattle, USA, 2018.
51. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. A Randomized Algorithm for the Minimum Cost Constrained Input Selection for State Space Structural Controllability. In *European Control Conference (ECC)*, pp: 483-488, Limassol, Cyprus, 2018.
52. Saurabh Kumar, **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. An MCMC based Course to Teaching Assistant Allocation. In *International Conference on Network, Communication and Computing (ICNCC)*, pp: 131-134, Kyoto, Japan, 2016.
53. **Shana Moothedath**, Prasanna Chaporkar, and Madhu N. Belur. A Maximum Likelihood Based Offline Estimation of Student Capabilities and Question Difficulties. In *International Association for Educational Assessment Conference (IAEA)*, Cape Town, South Africa, 2016.
54. **Shana Moothedath**, Renju Gangadharan and R. Letha Kumari. On board trajectory Optimization of a Launch Vehicle with Splash Down Constraint. In *IEEE International Conference on Magnetics, Machines & Drives*, pp:1-6, Kerala, India, 2014.

**Posters**

1. **Shana Moothedath**, Xian Yeow Lee, Jiabin Lin, Talukder Jubery, Baskar Ganapathysubramanian, Soumik Sarkar, A Conservative Stochastic Contextual Bandit Based Framework for Farming Recommender Systems. In *AAAI Workshop on AI for Agriculture and Food Systems (AIAFS)*, Virtual Conference, February, 2022.
2. **Shana Moothedath**, Dinuka Sahabandu, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, Radha Poovendran. Multi-Stage Dynamic Information Flow Tracking Game for Advanced Persistent Threats. **Invited Poster** in Workshop on Analysis and Control of Complex Networks: State of the Art and Research Directions, *American Control Conference*, Philadelphia, USA, July 2019 and *ONR-MURI Mid-Review Meeting*, Washington DC, USA, April 2019.
3. Dinuka Sahabandu, **Shana Moothedath**, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, Radha Poovendran. A Game Theoretic Approach for Resource Efficient Dynamic Information Flow Tracking. In Poster Session, *ONR-MURI Mid-Review Meeting*, Washington DC, USA, April 2019.
4. Shruti Misra, **Shana Moothedath**, Hossein Hosseini, Joey Allen, Linda Bushnell, Wenke Lee, Radha Poovendran. Learning Equilibria in Stochastic Information Flow Tracking Games with Partial Knowledge. In Poster Session, *ONR-MURI Mid-Review Meeting*, Washington DC, USA, April 2019.
5. **Shana Moothedath**, Dinuka Sahabandu, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, Radha Poovendran. Multi-Stage Dynamic Information Flow Tracking Game for Advanced Persistent Threats. In iREDEFINE Workshop, *ECEDHA Conference*, Arizona, USA, March 2019.
6. **Shana Moothedath**, Dinuka Sahabandu, Joey Allen, Andrew Clark, Linda Bushnell, Wenke Lee, Radha Poovendran. Multi-Stage Dynamic Information Flow Tracking Game. In Meet the Faculty Candidate Poster Session, *IEEE Conference on Decision and Control*, Florida, USA, December 2018 and in Poster Session, *Western USA ECE Departments Heads Association (WECEDHA)*, Seattle, USA, November, 2018.
7. **Shana Moothedath**, Saurabh Kumar, Prasanna Chaporkar, and Madhu N. Belur. Solving Allocation Problems using Markov Chain Monte Carlo Technique. In Poster Session, *Indian Control Conference*, Hyderabad, India, January 2016.

## Selected Talks & Tutorials

1. **Invited talk** at INFORMS Applied Probability Society Conference, Session on Algorithms for Learning and Control, Georgia Tech, July 2025.
2. **Invited talk** at Indian Institute of Bombay (IITB), Symposium on Trends in Control and Computing, April 2025.
3. **Distinguished speaker** at Michigan State University, Department of Electrical and Computer Engineering Seminar, November 2024.
4. Talk on ' Fast and Sample Efficient Relevance-Based Multi-Task Representation Learning' at *Conference on Decision and Control (CDC)*, Milan, Italy, 2024.
5. **Seminar** at Purdue University, Department of Electrical and Computer Engineering, February 2024.
6. **Invited talk** at Indian Institute of Technology Bombay, Department of Electrical and Computer Engineering, August 2024.
7. **Invited talk** at Indian Institute of Technology, Kharagpur, organized by IEEE Kharagpur section, Women in Engineering (WIE), and Control System Society, August 2023.
8. **Invited talk** at INFORMS 2022, Predictive Analytics for Game Theory session, October 2022.
9. **Invited talk** at *TrAC AI Seminar Series* at the Iowa State University, February, 2022.
10. **Invited talk** on 'ADAPT: Analytical Framework for Actionable Defense against Advanced Persistent Threats' during the *Workshop on Secure and Resilient Control Systems* at the IEEE Conference on Decision and Control, Florida, December 2018 (co-presented with Prof. Radha Poovendran).
11. Talk on 'Dynamic Information Flow Tracking Games to Detect Advanced Persistent Threats' during the *ONR-MURI Mid-Review Meeting*, Washington DC, April, 2019 (co-presented with Prof. Radha Poovendran).
12. Talk on 'Optimal Network Topology Design in Composite Systems with Constrained Neighbours for Structural Controllability' during the *American Control Conference*, Philadelphia, July, 2019.
13. Talk on 'Minimizing Inputs for Strong Structural Controllability' during the *American Control Conference*, Philadelphia, July, 2019.
14. Talk on 'Multi-stage Dynamic Information Flow Tracking Game' at *Conference on Decision and Game Theory for Security*, Seattle, USA, October, 2018.

## Activities

### Outreach Activities

- **CyMath:** Math tutoring for school kids
  Roles served: Volunteer (Spring 2023), Tutor (Fall 2023), Event lead (2024)
  Details here: https://cymath.iastate.edu/
- **CyPy** : Python boot camp for undergrads
  Roles: Organizer and Instructor
  Details here: https://shanazuhara.wixsite.com/mysite/cypy
- **GrOW** : Graduate Organization in Dept. of ECpE
  Roles: Faculty Coordinator and Mentor

### Funding Panels

- NSF-ECCS-2025, NSF-CNS-2025, NSF-ENG-2024, NSF-CISE-2024, NSF-CISE-2022, NSF-NIH-2022

### Editorial Services

- Session Co-Chair: Conference on Decision and Control (CDC), 2024.
- Associate Editor: Indian Control Conference (ICC), 2023, 2024.
- Session Co-Chair: American Control Conference (ACC), 2023.
- Technical Program Committee Member: Conference on Decision and Game Theory for Security, 2019- 2023, 2025.
- Technical Program Committee Member: Symposium on Control, Communication and Embedded System for Robotics, India, 2020.

### Reviewing

- **Journal reviewer**

  EEE Transactions on Signal and Information Processing over Networks; IEEE Transactions on Automatic Control (IEEE-TAC); Automatica; IEEE Transactions on Control of Network Systems (IEEE-TCNS); IEEE Transactions on Information Forensics and Security (IEEE-TIFS); IEEE Transactions on Circuits and Systems (IEEE-TCAS); IEEE Control Systems Letters (L-CSS); IEEE Transactions on Dependable and Secure Computing, ACM Transactions on Cyber-Physical Systems; International Journal of Robust and Nonlinear Control; Systems & Control Letters; IET Control Theory & Applications, IEEE Open Journal of Control Systems (IEEE-OJCYS)

- **Conference Reviewer**

  Conference on Neural Information Processing Systems (NeurIPS), International Conference on Learning Representations (ICLR); IEEE Conference on Decision and Control (CDC); IEEE International Symposium on Information Theory (ISIT); ACM International Conference on Cyber- Physical Systems (ICCPS); American Control Conference (ACC); European Control Conference (ECC); IEEE International Symposium on Information Theory (ISIT); Conference on Decision and Game Theory for Security (GameSec); International Symposium on Circuits and Systems (ISCAS); Indian Control Conference (ICC); National Conference on Technological Trends

### University Services

- ECE Seminar Committee (August 2025 - Present)
- ECE Student Professional Development (SPD) Committee (August 2024 - Present)
- ECE Promotion and Tenure Review Committee (PTRC) (August 2024 - Present)
- ECE Student Professional Development (SPD) Committee (August 2023 - August 2024)
- ECE Seminar Committee (August 2022 - August 2023)
- ECE Faculty Search Committee (August 2021 - August 2022)

## Mentoring

- **Iowa State University**
  *Role: Major professor*
  *PhD students: 5, Masters: 1, Undergraduate research students: 11, Senior design students: 6*
  *Jiabin Lin (PhD, Expected to graduate in 2025)*
  *Mahesh Bhat (PhD, Started in 2025)*
  *Donghwa Kang (PhD, Started in 2025)*
  *Tariq Umar (PhD, Started in 2025)*
  *Yaoze Guo (PhD, Started in 2025)*
  *Tuan Le (MS, Expected to graduate in 2025)*
  *Vikram Iyer (REU, 2025-Ongoing) and Garrett Thompson (Boeing Fellow-Ongoing)*
  **Past Students:**
  *Asray Gopa (REU, 2025), Nhat Le (REU, 2024), David Ntako & Annie Hyunh (REU, 2023)*
  *Logan Varcoe (Freshmen Honors Mentoring Program (FHMP), 2025), Caden Klopfenstein, Kendra Barbarick, Aparneesh Patil, Nhat Le (FHMP, 2023), Aditi Nachnani (FHMP, 2022)*
  *Michael Gradle, Gabriel Owen, Ricky Smith, Kristen Hawken, Rose Druce-Hoffman, Joanna Besselievre (Senior Design, 2023)*
- **University of Washington, Seattle**
  *Role: PostDoc mentor*
  *PhD students: 2*
  *Dinuka Sahanbandu (Assistant Teaching Professor, University of Washington, Seattle)*
  *Shruti Misra (Associate Data Scientist, Aimpoint Digital)*
- **Indian Institute of Technology Bombay**
  *Role: PhD mentor*
  *Dual degree students: 3, Undergraduate research students: 1*
  *RaviTeja Gundeti (Software Engineer, Microsoft), Aishwary Joshi (Polytechnic University of Madrid, Spain)*
  *Kumar Yashashwi (McKinsey & Company), Saurabh Kumar (Samsung Research)*

## Teaching

**Courses:** EE 475 Automatic Control System (4.85/5), EE 425 Machine Learning: A Signal Processing Perspective (4.58/5), EE 324 Signals and Systems II (4.37/5), EE 590 Introduction to Game Theory and Reinforcement Learning (4.44/5)