

Parimal Parag

CONTACT INFORMATION	Indian Institute of Science ECE main building, Room 2.17 Bangalore, KA 560012, India	+91 (80) 2293-2279 parimal@iisc.ac.in https://parimal.ece.iisc.ac.in
RESEARCH INTERESTS	Modeling, analysis, and control of large-scale distributed networked systems	
EDUCATION	Ph.D., Texas A&M University, College Station Department of Electrical and Computer Engineering ◇ Dissertation: <i>"Delay-sensitive communications: code-rates, strategies, and distributed control"</i> ◇ Advisors: Jean-François Chamberland & Srinivas Shakkottai	07/2004-12/2011
	M. Tech., Indian Institute of Technology Madras Electrical Engineering, Communication Systems ◇ Dissertation: <i>"Subcarrier allocation for multi-user OFDMA systems"</i> ◇ Advisors: R. Aravind & Srikrishna Bhashyam	07/1999-07/2004
	B. Tech., Indian Institute of Technology Madras Electrical Engineering	07/1999-07/2004
ACADEMIC EXPERIENCE	Associate Professor, Indian Institute of Science Department of Electrical Communication Engineering	12/2020 - present
	Assistant Professor, Indian Institute of Science Department of Electrical Communication Engineering	12/2014 - 11/2020
	Visiting Student Researcher, Stanford University Management Science & Engineering	09/2010 - 12/2010
	Summer Intern, Los Alamos National Lab Computer, Computational and Statistical Sciences	05/2007 - 08/2007
	Research Assistant, Texas A&M University Department of Electrical and Computer Engineering	01/2005-07/2011
ADMINISTRATIVE EXPERIENCE	Convenor, Centre for networked intelligence Funding from Cisco CSR Organization of weekly seminar series, monthly newsletter, annual hackathon, multiple annual workshops, summer schools Supporting operation and research at the centre	05/2021-present
INDUSTRIAL EXPERIENCE	Senior Systems Engineer, ASSIA Inc. Expresse Research and Development Conducted research on anomaly detection in broadband networks	09/2011-11/2014

FUNDED PROJECTS

- ◇ RAISE: robust and resilient AI through self-duplication for learning in decentralized networked systems, Scheme for Promotion of Academic and Research Collaboration (SPARC), Ministry of Education, 2026-2028.
- ◇ Collective communications offload for AI/ML inference, Intel, 2025-2026.
- ◇ Edge inference inside an aircraft, Aerospace Network Research Consortium (ANRC), 2025-2026.
- ◇ Evaluating a distributed edge network for in-flight data processing and transfer evaluating a distributed edge, Aerospace Network Research Consortium (ANRC), 2025-2026.
- ◇ Design and implementation of an efficient distributed machine learning system for heterogeneous compute environments with commodity network interconnect, Intel, 2024-2025.
- ◇ Sustainable cloud computing, IISc-IBM hybrid cloud, 2024-2026.
- ◇ Large-scale distributed learning for democratizing future AI, Indian Institute of Science-Penn State University Collaborative program, 2024-2025.
- ◇ Decentralized learning and decision-making, Scheme for Promotion of Academic and Research Collaboration (SPARC), Ministry of Education, 2024-2026.
- ◇ Design and analysis of data center network transport protocols for low latency, Science and engineering research board (SERB) core research grant, 2024-2027.
- ◇ Heterogeneous core scheduling for latency-sensitive workloads in edge computing, Qualcomm 6G University Relations, 2023-2026.
- ◇ Vehicle to infrastructure communications over 5G testbed, Department of Telecommunications (DoT), 2018-2021.
- ◇ Design and analysis of distributed storage networks, Science and engineering research board (SERB) early career research award, 2017-2020.
- ◇ Control and management of highly mobile tactical ad hoc networks, Defence research and development organization (DRDO), 2014-2017.

HONORS & AWARDS

- ◇ Received Intel India University Research grant, 2026.
- ◇ Awarded core research grant by Anusandhan National Research Foundation (ANRF), Department of Science and Technology, India, 2024.
- ◇ Presented tutorial at IEEE Information Theory Workshop (ITW), 2021.
- ◇ Co-author of student best paper award at IEEE International Symposium on Information Theory (ISIT), 2018.
- ◇ Early career research award, Science and engineering research board (SERB), Department of Science and Technology, India, 2017.

- ◇ Graduate fellowship, Texas A&M University, 2004.
- ◇ Silver medal, Electrical Engineering department, IIT Madras, 2003.
- ◇ All India rank 7 in ECE stream in Graduate Aptitude Test in Engineering (GATE), 2002.
- ◇ All India rank 556 in Joint Entrance Examination (JEE), 1999.
- ◇ Final-round participant in Indian National Mathematical Olympiad, 1996.
- ◇ Indian National Talent Search scholarship, 1996.

PUBLICATIONS

Book Chapters and Theses

- [B1] P. Parag. *Delay-sensitive communications: code-Rates, strategies, and distributed control*. PhD thesis, Texas A&M University, College Station, TX, USA, July 2011.

Peer-Reviewed Journal Papers

Published/Accepted

- [J26] D. Narasimha, S. Nomula, S. Shakkottai, and P. Parag. The power of two in large service-marketplaces. *IEEE Transactions on Networking*, 34(6): 6170–6181, Jun 2026.
- [J25] T. Sun, T. He, B. Ji, and P. Parag. Optimizing resource allocation for geographically-distributed inference by large language models. *ACM SIGMETRICS Performance Evaluation Review*, 53(4): 12–13, Mar 2026.
- [J24] T. Sun, T. He, B. Ji, and P. Parag. Optimizing resource allocation for geographically-distributed inference by large language models. *Performance Evaluation*, 170: 102527, Nov 2025.
- [J23] M. Mohanty, G. Gautam, V. Aggarwal, and P. Parag. Analysis of fork-join scheduling on heterogeneous parallel servers. *IEEE/ACM Transactions on Networking*, 32(6): 4798–4809, Dec 2024.
- [J22] A. Krishnan K. S., C. K. Singh, S. T. Maguluri, and P. Parag. Optimal pricing in a single server system. *ACM Transactions on Modeling and Performance Evaluation of Computing Systems*, 8(4): 1–32, Dec 2023.
- [J21] R. Jinan, A. Badita, T. P. Bodas, and P. Parag. Load balancing policies without feedback using timed replicas. *Performance Evaluation*, 162: 102381, Nov 2023.
- [J20] R. Jinan, G. Gautam, P. Parag, and V. Aggarwal. Asymptotic analysis of probabilistic scheduling for erasure-coded heterogeneous systems. *ACM SIGMETRICS Performance Evaluation Review*, 50(4): 8–10, Mar 2023.

- [J19] R. Jinan, A. Badita, P. K. Sarvepalli, and P. Parag. Latency optimal storage and scheduling of replicated fragments for memory constrained servers. *IEEE Transactions on Information Theory*, 68(6): 4135–4155, Jun 2022.
- [J18] A. Krishnan K. S., C. K. Singh, S. T. Maguluri, and P. Parag. Optimal pricing in multi server systems. *Performance Evaluation*, 154:102282, Apr 2022.
- [J17] V. Reddyvari, S. C. Bobbili, P. Parag, and S. Shakkottai. Mode-suppression: A simple, stable and scalable chunk-sharing algorithm for P2P networks. *IEEE/ACM Transactions on Networking*, 29(6):2548–2559, Dec 2021.
- [J16] A. Badita, P. Parag, and V. Aggarwal. Single-forking of coded subtasks for straggler mitigation. *IEEE/ACM Transactions on Networking*, 29(6):2413–2424, Dec 2021.
- [J15] S. C. Bobbili, S. Bhambay, and P. Parag. Variable length differential encoding for real-time status updates. *IEEE Communication Letters*, 25(4):1129–1133, Apr 2021.
- [J14] R. Jinan, P. Parag, and H. Tyagi. Tracking an auto-regressive process with limited communication per unit time. *MDPI Entropy*, 23(3):347, Mar 2021.
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- [J13] S. C. Bobbili, P. Parag, and J.-F. Chamberland. Real-time status updates with perfect feedback over erasure channels. *IEEE Transactions on Communications*, 68(9):5363–5374, Sep 2020.
- [J12] R. Bitar, P. Parag, and S. El Rouayheb. Minimizing latency for secure coded computing using secret sharing via staircase codes. *IEEE Transactions on Communications*, 68(8):4609–4619, Aug 2020.
- [J11] P. Mayekar, P. Parag, and H. Tyagi. Optimal lossless source codes for timely updates. *IEEE Transactions on Information Theory*, 66(6):3714–3731, Jun 2020.
- [J10] A. Badita, P. Parag, and V. Aggarwal. Optimal server selection for straggler mitigation. *IEEE/ACM Transactions on Networking*, 28(2):709–721, Apr 2020.
- [J09] S. Poojary, S. Bhambay, and P. Parag. Real-time status updates for Markov source. *IEEE Transactions on Information Theory*, 65(9):5737–5749, Sep 2019.
- [J08] A. Badita, P. Parag, and J.-F. Chamberland. Latency analysis for distributed coded storage systems. *IEEE Transactions on Information Theory*, 65(8):4683–4698, Aug 2019.
- [J07] A. Heidarzadeh, J.-F. Chamberland, R. D. Wesel, and P. Parag. A systematic approach to incremental redundancy with application to erasure channels. *IEEE Transactions on Communications*, 67(4):2620–2631, Apr 2019.

- [J06] S. Bhambay, S. Poojary, and P. Parag. Fixed length differential encoding for real-time status updates. *IEEE Transactions on Communications*, 67(3):2381–2392, Mar 2019.
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- [J05] P. Parag, J.-F. Chamberland, H. D. Pfister, and K. R. Narayanan. Code rate, queueing behavior and the correlated erasure channel. *IEEE Transactions on Information Theory*, 59(1):397–407, Jan 2013.
- [J04] P. Parag, S. Sah, S. Shakkottai, and J.-F. Chamberland. Value-aware resource allocation for service guarantees in networks. *IEEE Journal on Selected Areas in Communications*, 29(5):960–968, May 2011.
- [J03] P. Parag and J.-F. Chamberland. Queueing analysis of a butterfly network for comparing network coding to classical routing. *IEEE Transactions on Information Theory*, 56(4):1890–1908, Apr 2010.
- [J02] L. Liu, P. Parag, and J.-F. Chamberland. Quality of service analysis for user cooperation in wireless communication systems using fluid models. *IEEE Transactions on Information Theory*, 53(10):3833–3842, Oct 2007.
- [J01] L. Liu, P. Parag, J. Tang, W.-Y. Chen, and J.-F. Chamberland. Resource allocation and quality of service evaluation for wireless communication systems using fluid models. *IEEE Transactions on Information Theory*, 53(5):1767–1777, May 2007.

Peer-Reviewed Conference Papers

Published/Accepted

- [C40] X. Chen, R. Bhagat, P. Parag, and S. E. Rouayheb. Create, duplicate, or be eaten: random-walk learning vs. the Pac-Man attack. *Asilomar Conference on Signals, Systems, and Computers*, 60(1): 1–5, Pacific Grove, USA, Oct 25-28, 2026.
- [C39] A. Letsiou, J. P. Champati, A. J. Ganesh, J. R. Gross, and P. Parag. Hierarchical inference with a finite offload queue. *European Workshop on Reinforcement Learning (EWRL)*, 19(1): 1–10, Lille, France, Oct 05-07, 2026.
- [C38] I. Papageorgiou, S. Nomula, A. J. Ganesh, S. Jaggi, and P. Parag. Distributed 20 questions for classification. *Allerton Conference on Communication, Control, and Computing*, 62(1): 1–8, Urbana, IL, USA, Sep 15-19, 2026.
- [C37] P. Charreaux, P. Parag, A. Reiffers-Masson, and F. Sailhan. Securing services — age-based redeployment using weakly coupled Markov decision processes. *IFAC World Congress*, 23(1): 1–6, Busan, Korea, Aug 23-28, 2026.
- [C36] X. Chen, P. Parag, R. Bhagat, Z. Liu, and S. E. Rouayheb. Random walk learning and the Pac-Man attack. *IEEE International Symposium on Information Theory (ISIT)*, 52(1): 1–6, Guangzhou, China, Jun 28-Jul 03, 2026.

- [C35] F. Ye, Z. Liu, P. Parag, and S. E. Rouayheb.. Perfect privacy and strong stationary times for Markovian sources. *IEEE International Symposium on Information Theory (ISIT)*, 52(1): 1–6, Guangzhou, China, Jun 28-Jul 03, 2026.
- [C34] S. Nomula, P. Parag, A. J. Ganesh, and J. P. Champati. Hierarchical inference with an offload queue. *IEEE International Conference on Computer Communications (INFOCOM)*, 45(1): 1–10, Tokyo, Japan, May 18-21, 2026.
- [C33] T. Sun, T. He, B. Ji, and P. Parag. Optimizing resource allocation for geographically-distributed inference by large language models. *International Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP WG 7.3 Performance)*, 43(1): 1–2, Amsterdam, Netherlands, Nov 11-13, 2025.
- [C32] M. Mohanty, G. Bolar, P. Patil, U. Devi, F. George, P. Moogi, and P. Parag. Deferred prefill for throughput maximization in LLM inference. *Workshop on Machine Learning and Systems (EuroMLSys)*, 5(1): 100–106, Rotterdam, Netherlands, Mar 31, 2025.
- [C31] D. Narasimha, S. Nomula, S. Shakkottai, and P. Parag. The power of two in large service-marketplaces. *IEEE International Conference on Computer Communications (INFOCOM)*, 44(1): 1–10, London, UK, May 19-22, 2025.
- [C30] A. Priya, R. Choudhury, S. Patni, H. Sharma, M. Mohanty, K. Narayanam, U. Devi, P. Moogi, P. Patil, and P. Parag. Energy-minimizing workload splitting and frequency selection for guaranteed performance over heterogeneous cores. *ACM International Conference on Future and Sustainable Energy Systems (e-Energy)*, 15(1): 308–322, Singapore, Jun 04-07, 2024.
- [C29] G. Gautam, S. Rathee, P. Patil, and P. Parag. A scalable container-based virtualized data center emulation framework. *International Conference on Communication Systems and Networks (COMSNETS)*, 14(1): 452–454, Bengaluru, India, Jan 03-09, 2022.
- [C28] S. Ramanathan, G. Gautam, V. Srinivasan, and P. Parag. Latency-redundancy tradeoff in distributed read-write systems. *International Conference on Communication Systems and Networks (COMSNETS)*, 14(1): 172–180, Bengaluru, India, Jan 03-09, 2022.
- [C27] R. Jinan, A. Badita, P. Sarvepalli, and P. Parag. Low latency replication coded storage over memory-constrained servers. *IEEE International Symposium on Information Theory (ISIT)*, 47(1): 2340–2345, Melbourne, Australia, Jul 11-16, 2021.
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- [C26] P. Parag, P. Patil, S. Shriram, R. Sundaresan, H. Tyagi, N. K. Vaidhiyan. “Antidote” for CoVID-19 pandemic induced surge in online learning. *ACM SIGCOMM Education Workshop*, Washington DC, USA, Jul 17, 2020.

- [C25] R. Jinan, P. Parag, and H. Tyagi. Tracking an auto-regressive process with limited communication. *IEEE International Symposium on Information Theory (ISIT)*, 46(1): 2462–2467, Los Angeles, CA, USA, Jun 21-26, 2020.
- [C24] A. K. S. Krishnan, C. K. Singh, S. T. Maguluri, and P. Parag. Optimal pricing in finite server systems. *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, 18(1): 1–8, Volos, Greece, Jun 15-19, 2020.
- [C23] S. K. Hanna, R. Bitar, P. Parag, V. Dasari, and S. E. Rouayheb. Adaptive distributed stochastic gradient descent for minimizing delay in the presence of stragglers. *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 45(1): 4262–4266, Barcelona, Spain, May 04-08, 2020.
- [C22] A. Badita, P. Parag, and V. Aggarwal. Sequential addition of coded tasks for straggler mitigation. *IEEE International Conference on Computer Communications (INFOCOM)*, 39(1): 746–755, Beijing, China, Jul 06-09, 2020.
- [C21] P. Sharma, D. Awasare, B. Jaiswal, S. Mohan, N. Abhinaya, I. S. Darwhekar, S. V. R. Anand, B. Amrutur, A. Gopalan, P. Parag, and H. Tyagi. On the latency in vehicular control using video streaming over Wi-Fi. *National Conference on Communications (NCC)*, 26(1): 1–6, IIT Kharagpur, India, Feb 21-23, 2020.
- [C20] S. Acharya, B. Amrutur, Y. Simmhan, A. Gopalan, P. Parag, and H. Tyagi. CORNET: A co-simulation middleware for robot networks. *International Conference on Communication Systems & Networks (COMSNETS)*, 12(1): 245–251, Bengaluru, KA, India, Jan 07-11, 2020.
- [C19] A. Heidarzadeh, J.-F. Chamberland, P. Parag, and R. D. Wesel. A systematic approach to incremental redundancy over erasure channels. *IEEE International Symposium on Information Theory (ISIT)*, 44(1): 1176–1180, Vail, CO, USA, Jun 17-22, 2018.
- [C18] P. Mayekar, P. Parag, and H. Tyagi. Optimal lossless source codes for timely updates. *IEEE International Symposium on Information Theory (ISIT)*, 44(1): 1246–1250, Vail, CO, USA, Jun 17-22, 2018.
- [C17] V. R. Raja, P. Parag, and S. Shakkottai. Mode-Suppression: A simple and provably stable chunk-sharing algorithm for P2P networks. *IEEE Conference on Computer Communications (INFOCOM)*, 37(1): 2573–2581, Honolulu, HI, USA, Apr 15-19, 2018.
- [C16] P. Parag and J.-F. Chamberland. Novel latency bounds for distributed coded storage. *Information Theory and Applications Workshop (ITA)*, 13(1): 1–9, San Diego, CA, USA, Feb 11-16, 2018.
- [C15] S. Poojary, S. Bhambay, and P. Parag. Real-Time Status Updates for Correlated Source. *IEEE Information Theory Workshop (ITW)*, 62(1): 274–278, Kaohsiung, Taiwan, Nov 6-10, 2017.

- [C14] R. Bitar, P. Parag, and S. El Rouayheb. Minimizing latency for secure distributed computing. *IEEE International Symposium on Information Theory (ISIT)*, 43(1): 2900–2904, Aachen, Germany, Jun 25-30, 2017.
- [C13] P. Parag, A. Bura, and J.-F. Chamberland. Latency analysis for distributed storage. *IEEE Conference on Computer Communications (INFOCOM)*, 36(1): 1–9, Atlanta, GA, USA, May 1-4, 2017.
- [C12] S. Bhambay, S. Poojary, and P. Parag. Differential encoding for real-time status updates. *IEEE Wireless Communications and Networking Conference (WCNC)*, 18(1): 1–6, San Francisco, CA, USA, Mar 19-22, 2017.
- [C11] P. Parag, A. Taghavi, and J.-F. Chamberland. On real-time status updates over symbol erasure channels. *IEEE Wireless Communications and Networking Conference (WCNC)*, 18(1): 1–6, San Francisco, CA, USA, Mar 19-22, 2017.
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- [C10] P. Parag and J.-F. Chamberland. Waiting on distributed content. *IEEE Information Theory and Applications (ITA)*, San Diego, CA, USA, Feb 10-15, 2013.
- [C09] P. Parag and J.-F. Chamberland. Exploiting an interplay between norms to analyze scalar quantization schemes. *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 36(1): 4224–4227, Prague, Czech Republic, May 22-25, 2011.
- [C08] P. Parag, S. Shakkottai, and I. Menache. Request routing in multi-ISP P2P content distribution: local or remote? *International ICST Conference on Game Theory for Networks*, 2(1): 353–368, Shanghai, China, Apr 16-18, 2011.
- [C07] M. Amble, P. Parag, S. Shakkottai, and L. Ying. Content-aware caching and traffic management in content distribution networks. *IEEE Conference on Computer Communications (INFOCOM)*, 30(1): 2858–2866, Shanghai, China, Apr 10-15, 2011.
- [C06] P. Parag, J.-F. Chamberland, H. D. Pfister, and K. R. Narayanan. On the queueing behavior of random codes over a Gilbert-Elliott erasure channel. *IEEE International Symposium on Information Theory*, 36(1): 1798 – 1802, Austin, TX, USA, Jun 13-18, 2010.
- [C05] P. Parag, S. Shakkottai, and J.-F. Chamberland. Value-aware resource allocation for service guarantees in networks. *IEEE International Conference on Computer Communications (INFOCOM)*, 29(1): 1–9, San Diego, CA, USA, Mar 15-19, 2010.
- [C04] P. Parag, J.-F. Chamberland, H. D. Pfister, and K. R. Narayanan. Code rate, queueing behavior and the correlated erasure channel. *Invited Paper, IEEE Information Theory Workshop*, 55(1): 1–5, Cairo, Egypt, Jan 06-08, 2010.

- [C03] P. Parag and J.-F. Chamberland. Queueing analysis of a butterfly network. In *IEEE International Symposium on Information Theory*, 34(1): 672–676, Toronto, Canada, Jul 06-11, 2008.
- [C02] L. Liu, P. Parag, J. Tang, W.-Y. Chen, and J.-F. Chamberland. Resource allocation and quality of service evaluation for wireless communication systems using fluid models. *Allerton Conference on Communication, Control, and Computing*, 44(1):1187–1193, Monticello, IL, USA, Sep 27-29, 2006.
- [C01] P. Parag, S. Bhashyam, and R. Aravind. A subcarrier allocation algorithm for OFDMA using buffer and channel state information. *IEEE Vehicular Technology Conference*, 62(1): 622–625, Dallas, TX, USA, Sep 25-28, 2005.

INVITED TALKS

- “Bipartite matching with communication constraints,”
CLIP seminar, EE department, IIT Bombay, Aug 2026.
Stochastic processes on networks, IEOR department, IIT Bombay, Aug 2026.
Google networking research summit, Jan 2026.
- “Inference optimization for LLM serving systems,”
MVJ college of engineering, Mar 2026.
National conference on communication, IIT Hyderabad, Feb 2026.
IISc-Qualcomm workshop on AI, Feb 2026.
Technical University of Munich, Nov 2025.
IBM Research Global, Sep 2025.
IIIT Hyderabad, Nov 2025.
- “Monte Carlo methods”
IIIT Hyderabad, Nov 2025.
- “Energy aware compute scheduling in heterogeneous networks”
SPARC UKIERI Workshop, Jul 2025.
IISc Qualcomm workshop on networking, Apr 2025.
- “The power of two in large service-marketplaces,”
University of Warwick, May 2025.
Durham University, May 2025.
SIP seminar series, Rutgers University, Mar 2025.
Penn State University, Feb 2025.
- “Decentralized learning”
UKIERI workshop, Bristol University, Jan 2025.
- “Load-balancing on heterogeneous parallel servers,”
Department of EE, IIT Hyderabad, Nov 2025.
Faculty colloquium, Department of ECE, IISc Bengaluru, Nov 2024.
Department of computer science, NIT Karnataka, Surathkal, Feb 2024.

“Low latency replication over memory constrained servers,”
Department of Informatics, IMT Atlantique Brest, Jun 2022.
Munich workshop on Coding and Cryptography, Jun 2022.
IE seminar series, Purdue University, Sep 2021.

“Coded parallel server systems,”
Dayanand Sagar College of Engineering, Mar 2022.
Vellore Institute of Technology, Nov 2021.
Centre for Networked Intelligence summer school, IISc Bangalore, Aug 2021.

“Markov chains: theory and applications,”
DRDO CAIR, Nov 2021.

“Modeling and optimization of erasure coded systems,”
Tutorial, IEEE Information Theory Workshop, Oct 2021.

“Data centre networks,”
Centre for Networked Intelligence, IISc Bangalore, Dec 2020.

“Tracking auto-regressive process with limited communication,”
Bombay Information Theory Seminar, Jan 2020.

“Real-time status updates for Markov sources,”
Bombay Information Theory Seminar, Jan 2018.
IIT Delhi, Jan 2017.

“Job completion times in coded parallel systems,”
Alliance University at Bangalore, Sep 2018.
Faculty colloquium at IISc Bangalore, Jan 2018.
MVJ College of Engineering at Bangalore, Aug 2017.
Georgia Institute of Technology at Atlanta, May 2017.
Lectures in Probabilities Seminar XI at ISI Delhi, Nov 2016.

“Latency analysis for distributed storage,”
JTG summer school at IIT Bombay, May 2017.
Texas A&M University at College Station, May 2017.
University of Illinois at Chicago, Apr 2017.
University of California at Berkeley, Mar 2017.
National Conference on Communication at IIT Madras, Mar 2017.
IBM Research, Feb 2017.

TEACHING EXPERIENCE

Indian Institute of Science

Lecturer

- ◇ E2 204: Stochastic processes and queueing theory Spring 2015-2026
- ◇ E2 237: Statistical learning theory Fall 2024-2026

- ◇ E2 221: Communication networks Fall 2024-2026
- ◇ E2 338: Mean-field asymptotics and applications Spring 2024-2025
- ◇ E2 202: Random processes Fall 2017-2022
- ◇ E2 236: Foundations of machine learning Spring 2019-2022
- ◇ E2 334: Topics in computation over networks Spring 2018-2022
- ◇ E1 244: Estimation and detection theory Spring 2016-2017
- ◇ E0 201: Proofs and measures Fall 2015

Texas A&M University

Guest Lecturer

- ◇ ECEN 303 – Random Signals and Systems Spring 2010
- ◇ ECEN 601 – Linear Network Analysis Fall 2009
- ◇ ECEN 662 – Estimation and Detection Theory Spring 2009
- ◇ ECEN 683 – Wireless Communications Fall 2008

Texas A&M University

Teaching Assistant

- ◇ ECEN 214 – Electric Circuit Theory Spring 2008
- ◇ ECEN 314 – Signals and Systems Fall 2007

Indian Institute of Technology Madras

Teaching Assistant

- ◇ EE 611 – Digital Coding & Modulation Spring 2004
- ◇ EE 320 – Principles of Communication Fall 2003

PROFESSIONAL SERVICE

Program Chair

- ◇ ACM SIGMETRICS: Posters and student activities 2022
- ◇ International Conference on Signal Processing and Communications (SP-COM): Publications 2026, Technical Program Committee 2024, Finance 2022, Invited sessions 2020, Publications 2018, Web 2016
- ◇ The ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc) : Posters and Demonstrations 2018, Workshops 2017
- ◇ International Conference on Communication Systems and Networks (COM-SNETS): Technical Program Committee 2026, Intelligent Transportation Systems Workshop 2018
- ◇ IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS): Technical Program Committee 2016

Technical Program Committee

- ◇ Co-chair: COMSNETS 2026, SPCOM 2024, ANTS 2016
- ◇ Member: ITW (2027, 2022), ICC-WC(2022-2024), IEEE ISIT(2021), WiOpt (2020), SPCOM (2016-2022), ACM MobiHoc (2016-2019), ValueTools (2022), NCC (2024, 2022, 2017, 2016, 2015), COMSNETS (2022-2024, 2015-2017), COMSNETS ITS workshop 2016, Globecomm LTE - Advanced and Beyond 4G workshop (2013, 2012)

Organizing Committee

- ◇ General co-chair: IT Society/JTG Summer School on Information Theory (JTG 2023).
- ◇ National Conference on Communication (NCC) 2017, 2016, International Conference on Signal Processing and Communications (SPCOM) 2022, 2020, 2018, 2016, IT Society/JTG Summer School on Information Theory (JTG 2016, JTG 2015), IISc-DRDO Workshop on Mobile Ad-Hoc Networks (2015)

Reviewer

- ◇ IEEE Transactions on Information Theory, IEEE/ACM Transactions on Networking, IEEE Transactions on Parallel and Distributed Systems, IEEE Journal On Selected Areas In Communications, IEEE Transactions on Communications, IEEE Transactions on Wireless Communications
- ◇ IEEE Conference on Computer Communications (INFOCOM), International Symposium on Information Theory (ISIT), The ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt), National Conference on Communications (NCC)

MEMBERSHIPS	IEEE, Information Theory Society, Communications Society, Signal Processing Society, ACM
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