Vishal Misra

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INTERESTS

Machine learning and large language models; Causal inference and synthetic control methods; Network systems and data center networking; Internet economics and policy; Sports analytics.

EDUCATION

University of Massachusetts Amherst — Amherst, MA
Ph.D. in Electrical Engineering — May 2000
Advisor: Wei-Bo Gong

University of Massachusetts Amherst — Amherst, MA
M.S. in Electrical Engineering — May, 1996
Advisor: Lewis E. Franks

Indian Institute of Technology — Mumbai, India
Bachelor of Technology in Electrical Engineering — 1992

EXPERIENCE

Columbia University — New York, NY
Vice Dean, Computing and AI, School of Engineering and Applied Sciences — Spring 2024 - Present
Director, Columbia Dream Sports AI Innovation Center — 2024 - Present
Director, Columbia–IIT Bombay AI for Manufacturing Center — February 2026 - Present
Professor, Dept. of Computer Science — Spring 2016 - Present
Vice Chair, Dept. of Computer Science — July 2009 - June 2012
Associate Professor, Dept. of Computer Science — Spring 2006 - Fall 2015
Assistant Professor, Dept. of Computer Science — Fall 2001 - Fall 2005

Google — New York, NY
Visiting Scientist — July 2017 - July 2020

Infinio Inc. — Cambridge, MA
Founder and CEO — June 2011 - October 2012
Founder and CTO — October 2012 - June 2014
Founder and Chief Scientist — June 2014 - March 2017

University of Massachusetts — Amherst, MA
Post-Doctoral Research Associate, Computer Networks Research Group — 2000-Fall 2001
Research Assistant, Complex Systems Modeling and Control Lab — 1996-2000

Verizon (formerly Nynex Science & Technology) — White Plains , NY
Student Intern — Summer 1994, 1995

CricInfo (`http://espncricinfo.com`), Founding Team London, UK
Played the Role of CTO 1993-1998
Coordinated technology development and systems architecture for the volunteer organization, including live scoring, the historical scorecard database, production servers, operating-system migration, and distributed content delivery.

Indian Institute of Technology Mumbai, India
Research Associate 1992-93

AWARDS

- Distinguished Alumnus Award, IIT Bombay, 2019
- Elected ACM Fellow, 2018
- Elected IEEE Fellow, 2016
- Elected Chair, ACM Sigmetrics, 2015-2017
- Outstanding Young Alumni Award, UMass-Amherst College of Engineering, 2014
- Elected Vice Chair, ACM Sigmetrics, 2011-2015
- Elected to the Board of Directors, ACM Sigmetrics, 2007-2011
- Elected Member, IFIP Working Group 7.3 on Computer Performance Modeling and Analysis, 2005.
- NSF Career Award, 2003
- Google Faculty Award, 2009, 2017
- IBM Faculty Award, 2007, 2002
- DoE Early Career Principal Investigator Award in Applied Mathematics, Computer Science and High Performance Networks, 2002

GRANTS

1. **$100,000,000 (target)** Director, **Columbia–IIT Bombay AI for Manufacturing Center**: 5-year joint Columbia–IIT Bombay center; MoU signed February 12, 2026 at Bharat Mandapam, Delhi (Bharat Bodhan AI Conclave, in the presence of India's Minister of Education); target funding from a consortium of 20 manufacturing industry partners at $1M/year each, spanning semiconductors, robotics, pharmaceuticals, and industrial AI.
2. **$3,202,766** PI, IARPA BENGAL Program: **Mosaic Inference Defender against LLM-Assisted Threats (MIDLLMAT)**, with Matthew Connelly and Siddhartha Dalal, 2026-2027.
3. **$80,000** Microsoft's inaugural AI Economy Institute 2025, *co-PI: Adam Cannon*.
4. **$10,000,000** Columbia Dream Sports AI Innovation Center - 5-year center established 2024, *PI: Vishal Misra*.
5. **$150,000** unrestricted gift from KLA Corporation to support innovative research at the intersection of artificial intelligence, computer vision, and systems modeling, *co-PI: Shree Nayar*.
6. PI **Synthetic data comparison for comparative effectiveness in Multiple Sclerosis**, Novartis industrial research grant $ 185,000. Agreement signed for one year, will be converted to a multi-year engagement.
7. PI, **Game of Skill or Chance? An analysis of fantasy sports**, Dream11 Research Gift, $ 25,000 2019.
8. PI, **Bandwidth allocation strategies for multi data center networks** , Google Faculty Research Award, $ 75,000, 2017.

9. co-PI NSF: CNS **Economic Optimization of Serverless and VM Cloud Services**, with Rubenstein (CS), ($499,997 over 3 years)
10. PI NSF: NeTS: **RDMA over Ethernet: A Control Theoretic Approach** ($499,882 over 3 years)
11. co-PI DARPA XD3: **Democratizing DDoS Defenses using Secure Indirection Networks**, with Dan Rubenstein ($ 989,478.00 over 4 years)
12. co-PI DARPA RADICS: **Machine-Intelligence for Advance Notification of Threats**, with Dan Bienstock, Dan Rubenstein and Gil Zussman ($ 1,066,278.00 over 4 years)
13. co-PI **Creating a Cyber Insurance Marketplace** $75,000, SEAS Interdisciplinary Research Program, with Garud Iyengar, part of joint project with Steve Bellovin, Henning Schulzrinne and Assaf Zeevi
14. PI $50,000 Lightspeed Venture Partners, unrestricted gift, part of joint project with Steve Bellovin, Henning Schulzrinne and Assaf Zeevi
15. PI **Data Transparency Lab**, €50,000 (unrestricted gift from Telefonica R&D)
16. co-PI, **Toward All Videos on Demand,**, NSF with Rubenstein (PI), Coffman, $500,000, September 2010 - August 2013.
17. PI, **Incentivizing Managed Peer to Peer Systems: A Fluid Shapley Value Approach**, Google Faculty Research Award, $ 65,000, 2009.
18. co-PI, **Privacy Preserving Sharing of Network Trace Data**, DHS, with Stolfo (PI), Jebara, Malkin and Rubenstein. $1.9 million, June 2009-May 2012.
19. PI, **SMA/PDOS Collaborative Research: Design, Analysis, and Control of Adaptive Sharing Mechanisms**, NSF, with Coffman (EE), Jelenkovic (EE), Rubenstein (EE), Harchol-Balter (CMU), $750,000, September 2006-August 2009.
20. PI, **CT-ISG: Understanding Control Plane Security: The Method of Strong Detection**, NSF, with Rubenstein (EE), $400,000, September 2006-August 2009.
21. PI, **Wireless Internet Center for Advanced Technology**, NSF I/UCRC Center, $250,000 with Schulzrinne, Maxemchuk (EE) and Rubenstein (EE), August 2004-May 2008.
22. co-PI **Zero Outage Dynamic Intrinsically Assurable Communities (ZODIAC)**, DARPA/STO, $835,357 with Bellovin (PI), Keromytis, Schulzrinne, Dan Rubenstein (EE), Maxemchuck (EE), November 2007 - May 2009
23. co-PI **Funneling Impulses in Sensor Networks**, NSF, $750,000, with Jelenkovic (EE), Maxemchuk (PI, EE) and Rubenstein (EE), August 2004- May 2007.
24. PI, **Expecting the Unexpected: A Study of Network Vulnerabilities** $425K, 8/1/2003-7/31/2008. NSF Career Award

25. co-PI Cisco, **Secure Overlay Services**, with Keromytis (PI) and Rubenstein (EE), $70,000 in July 2002 and $76,000 in July 2003.
26. co-PI Intel, **Secure Overlay Services** with Keromytis, Rubenstein (PI, EE), $120,000 in August 2003, $90,000 in June 2004, $75,000 and 25 Thinkpad T20 laptops in August 2005.
27. PI Microsoft with Rubenstein (also PI, EE), $20,000 and ten mesh boxes, July 2005.
28. co-PI **Secure Overlay Services**, AFRL/DARPA, with Keromytis (PI) and Rubenstein (EE), $615,000, June 2002-May 2004
29. co-PI **Scalable AQM routers supporting heterogeneous traffic**, NSF, with Hollot (PI, UMass) and Chait (UMass), $340,000, June 2002-May 2005
30. PI **A Study of Transport Protocols for Wide Area Scientific Applications**, DOE Career Award, $303,000, September 2002-May 2005
31. IBM Faculty Award, $40,000, 2002
32. IBM Faculty Award, $30,000, 2007
33. co-PI **Distributed Intrusion Detection Feasibility Study**, NSA, with Stolfo (PI), Malkin and Keromytis, $200,000, March 2003-March 2004.

PUBLICATIONS

Journal Publications

1. Dennis Shen, Anish Agarwal, **Vishal Misra**, Bjoern Schelter, Devavrat Shah, Helen Shiells, Claude Wischik, **Obtaining personalized predictions from a randomized controlled trial on Alzheimer's disease**, *Scientific Reports*, 15:1671, 2025.
2. Bowen Song, Marco Paolieri, Harper Stewart, Leana Golubchik, Jill L. McNitt-Gray, **Vishal Misra**, Devavrat Shah, **Estimating Ground Reaction Forces From Inertial Sensors**, *IEEE Transactions on Biomedical Engineering*, 2025.
3. Saeyoung Rho, Rachel Cummings, **Vishal Misra**, **Differentially Private Synthetic Control**, *Journal of Privacy and Confidentiality*, 2024.
4. Niloofar Bayat, Richard T. B. Ma, **Vishal Misra**, Dan Rubenstein, **Big Winners and Small Losers of Zero-rating**, *ACM Transactions on Modeling and Performance Evaluation of Computing Systems*, 2022.
5. Niloofar Bayat, Kunal Mahajan, Sam Denton, **Vishal Misra**, Dan Rubenstein, **Down for failure: Active power status monitoring**, *Future Generation Computer Systems*, 2021.
6. Niloofar Bayat, Cody Morrin, Yuheng Wang, **Vishal Misra**, **Rank estimation for (approximately) low-rank matrices**, *SIGMETRICS Performance Evaluation Review*, 2022.
7. Claudia Shi, Dhanya Sridhar, **Vishal Misra**, David M. Blei, **On the Assumptions of Synthetic Control Methods**, *AISTATS*, 2022.
8. Muhammad J. Amjad, **Vishal Misra**, Devavrat Shah, Dennis Shen, **mRSC: Multi-dimensional Robust Synthetic Control**, *ACM Performance Evaluation*, 2019.

9. Jean-Claude Bermond, Dorian Mazauric, **Vishal Misra** and Philippe Nain, **Distributed link scheduling in wireless network**, *Discrete Mathematics, Algorithms and Applications*, Volume 12, 2020.
10. Kyung-Wook Hwang, Vijay Bopalakrishnan, Rietwik Jana, Seungjoon Lee, **Vishal Misra**, K.K. Ramakrishnan, and Dan Rubenstein, **Joint-Family: Adaptive BitRate Video-on-Demand Streaming over Peer-to-Peer Networks with Realistic Abandonment Patterns**, *Journal of Computer Networks*, September, 2016.
11. **Vishal Misra**, **Routing Money, Not Packets. Revisiting Network Neutrality**, *Communications of the ACM*, Volume 58, Number 6, June, 2015.
12. Richard T. B. Ma, John C. S. Lui and **Vishal Misra** , **Evolution of the Internet Economic Ecosystem**, *IEEE/ACM Transactions on Networking*, 2014.
13. Richard T. B. Ma and **Vishal Misra**, **The Public Option: a Non-regulatory Alternative to Network Neutrality**, *IEEE/ACM Transactions on Networking*, 2013.
14. Richard T. B. Ma and **Vishal Misra**, **Congestion and Its Role in Network Equilibrium**, *IEEE Journal on Selected Areas in Communications*, Volume 30, Number 11, December, 2012.
15. Joshua Reich, Dan Rubenstein, **Vishal Misra** and Gil Zussman, **Connectivity Maintenance in Mobile Wireless Networks via Constrained Mobility**, *JSAC Special Issue Communications Challenges and Dynamics for Unmanned Autonomous Vehicles* , Volume 30, Number 5, pp. 935-950, 2012.
16. Richard T.B. Ma, Dahming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **On Cooperative Settlement Between Content, Transit and Eyeball Internet Service Providers**, *IEEE/ACM Transactions on Networking*, Volume 19, Number 3, June, 2011.
17. Eli Brosh, Salman Abdul Baset, **Vishal Misra**, Dan Rubenstein, and Henning Schulzrinne, **The Delay-Friendliness of TCP for Real-time Traffic**, *IEEE/ACM Transactions on Networking*, Volume 18, Number 5, pp. 1478-1491, 2010.
18. Richard T.B. Ma, Dah Ming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **Internet Economics: The use of Shapley value for ISP settlement**, *IEEE/ACM Transactions on Networking*, Volume 18, Number 3, pp. 775-787, 2010.
19. Patrick P. C. Lee, **Vishal Misra** and Dan Rubenstein, **Toward Optimal Network Fault Correction in Externally Managed Overlay Networks**, *IEEE Transactions on Parallel and Distributed Systems*, Volume 21, Number 3, pp. 354-366, 2010.
20. P. Bahl, R. Chandra, P.P.C. Lee, **Vishal Misra**, J. Padhye, D. Rubenstein and Y. Yu, **Opportunistic Use of Client Repeaters to Improve Performance of WLANs** , *IEEE/ACM Transactions on Networking*, Volume 17, Number 4, pp. 1160-1171, August, 2009.
21. Richard T.B. Ma, **Vishal Misra** and Dan Rubenstein, **An Analysis of Generalized Slotted-Aloha Protocols**, *IEEE/ACM Transactions on Networking*, Volume 17, Number 3, 2009.
22. Patrick P. C. Lee, **Vishal Misra** and Dan Rubenstein, **Distributed Algorithms for Secure Multipath Routing in Attack-Resistant Networks**, *IEEE/ACM Transactions on Networking*, Volume 15, Number 6, pp. 1490-1501, Dec, 2007.
23. Samuli Aalto, Urtzi Ayesta, Sem Borst, **Vishal Misra** and Rudesindo Nunez-Queija, **Beyond Processor Sharing**, *ACM/Sigmetrics Performance Evaluation Review, Special issue on "New Perspectives on Scheduling"*, March, 2007.
24. Angelos Stavrou, Debra L. Cook, William G. Morein, Angelos D. Keromytis, **Vishal Misra** and Dan Rubenstein, **WebSOS: An Overlay-based System For Protecting Web Servers From Denial of Service Attacks**, *Journal of Communication Networks*, Volume 48, Number 5, August, 2005.

25. Wei-Bo Gong, Yong Liu, **Vishal Misra** and Don Towsley, **Self-Similarity and Long Range Dependence on the Internet: A Second Look at the Evidence, Origins and Implications**, *Computer Networks*, Volume 48, pp. 377-399, June, 2005.
26. Daniel R. Figueiredo, Benyuan Liu, Anja Feldmann, **Vishal Misra**, Don Towsley and Walter Willinger, **On TCP and self-similar traffic**, *Performance Evaluation*, Volume 61, pp. 129-141, July, 2005.
27. Yossi Chait, C.V. Hollot, **Vishal Misra**, Don Towsley, H. Zhang and Y. Cui, **Throughput Differentiation Using Coloring at the Network Edge and Preferential Marking at the Core**, *IEEE/ACM Transactions on Networking*, Volume 13, Number 4, August, 2005.
28. Yong Liu, Francesco LoPresti, **Vishal Misra**, Don Towsley and Yu Gu, **Scalable fluid models and simulations for large-scale IP networks**, *ACM Transactions on Modeling and Computer Simulation (TOMACS).*, July, 2004.
29. Angelos Keromytis, **Vishal Misra** and Dan Rubenstein, **SOS: An Architecture for Mitigating DDoS Attacks**, *IEEE Journal on Selected Areas in Communications (JSAC), special issue on Service Overlay Networks*, Volume 22, Number 1, January, 2004.
30. D. R. Figueiredo, B. Liu, **Vishal Misra** and Don Towsley, **On the Autocorrelation Structure of TCP Traffic**, *Journal of Computer Networks, Special Issue on Advances in Modeling and Engineering of Long-Range Dependent Traffic*, 2002.
31. C.V. Hollot, **Vishal Misra**, Don Towsley and Wei-Bo Gong, **Analysis and design of controllers for AQM routers supporting TCP flows**, *IEEE Transactions on Automatic Control*, 2002.
32. J. Arias, A.K. Chhabra, and **Vishal Misra**, **A Practical Application of Graphics Recognition: Helping with the Extraction of Information from Telephone Company Drawings**, *Lecture Notes in Computer Science*, Volume 1389, 1998.
33. A.K. Chhabra, **Vishal Misra** and J. Arias, **Detection of horizontal lines in noisy run length encoded images: The FAST method**, *Lecture Notes in Computer Science*, Volume 1072, 1996.

Preprints (arXiv)

1. Siddhartha Dalal, **Vishal Misra**, Abhay Parekh, **Bayesian Wind Tunnels for Model Selection**, *arXiv preprint*, 2026.
2. Naman Aggarwal, Siddhartha R. Dalal, **Vishal Misra**, **The Bayesian Geometry of Transformer Attention**, *arXiv preprint*, 2025.
3. Naman Aggarwal, Siddhartha R. Dalal, **Vishal Misra**, **Gradient Dynamics of Attention: How Cross-Entropy Sculpts Bayesian Manifolds**, *arXiv preprint*, 2025.
4. Naman Aggarwal, Siddhartha R. Dalal, **Vishal Misra**, **Geometric Scaling of Bayesian Inference in LLMs**, *arXiv preprint*, 2025.
5. Siddhartha Dalal, **Vishal Misra**, **The Matrix: A Bayesian learning model for LLMs**, *arXiv preprint*, 2024.
6. Niloofar Bayat, **Vishal Misra**, Dan Rubenstein, **Bandwidth Allocation Games**, *arXiv preprint*, 2022.
7. Niloofar Bayat, Cody Morrin, Yuheng Wang, **Vishal Misra**, **Synthetic Control, Synthetic Interventions and COVID-19 spread: Exploring the impact of lockdown measures and herd immunity**, *arXiv preprint*, 2020.
8. Yuming Jiang, **Vishal Misra**, **Delay Bounds for Multiclass FIFO**, *arXiv preprint*, 2016.

Refereed Conference Publications

1. Andrew Tang, Nicholas Deas, Kathleen McKeown, **Vishal Misra**, **Retrieval Sensitivity to Identity Signals in Queries**, *EMNLP*, 2026.
2. Cyrus Illick, Michael Roger, **Vishal Misra**, Dan Rubenstein, **Making Congestion Control Algorithms Insensitive to Underlying Propagation Delays**, *NINeS*, 2026.
3. Saeyoung Rho, Cyrus Illick, Samhitha Narasipura, Alberto Abadie, Daniel Hsu, **Vishal Misra**, **Time-Aware Synthetic Control**, *AISTATS*, 2026.
4. Heeyun Kim, Fabian Zuluaga Zuluaga, Collins Evans, Siddhartha R. Dalal, **Vishal Misra**, Dan Rubenstein, **Real-Time Risk Scoring of Ongoing Cyber Attacks**, *IEEE Conference on Communications and Network Security (CNS)*, 2025.
5. Saeyoung Rho, Andrew Tang, Noah Bergam, Rachel Cummings, **Vishal Misra**, **ClusterSC: Advancing Synthetic Control with Donor Selection**, *AISTATS*, 2025.
6. Saeyoung Rho, Rachel Cummings, and **Vishal Misra**, **Differentially Private Synthetic Control**, *AISTATS*, 2023.
7. Claudia Shi, Dhanya Sridhar, **Vishal Misra**, and David M. Blei, **On the Assumptions of Synthetic Control Methods**, *AISTATS*, 2022.
8. Niloofar Bayat, Cody Morrin, Yuheng Wang, **Vishal Misra**, **Rank estimation for (approximately) low-rank matrices**, *SIGMETRICS Performance Evaluation Review*, 2022.
9. Aarti Nandagiri, Mohit P. Tahiliani, **Vishal Misra** and K. K. Ramakrishnan, **BBRvl vs BBRv2: Examining Performance Differences through Experimental Evaluation**, *Proceedings of LANMAN*, 2020.
10. Niloofar Bayat, Richard Ma, **Vishal Misra** and Dan Rubenstein, **Zero-Rating and Network Neutrality: Big Winners and Small Losers**, *Proceedings of IFIP WG 7.3 Performance* , November, 2020.
11. Kunal Mahajan, Saket Mahajan, **Vishal Misra** and Dan Rubenstein, **Exploiting content similarity to address cold start in container deployments**, *The 15th International Conference on emerging Networking EXperiments and Technologies (CoNEXT '19 Companion)*, Orlando, FL, USA, ACM, December, 2019.
12. Mohit P. Tahiliani, **Vishal Misra** and K. K. Ramakrishnan, **A Principled Look at the Utility of Feedback in Congestion Control**, *Proceedings of Workshop on Buffer Sizing*, Stanford University, December, 2019.
13. Kunal Mahajan, Daniel R Figueiredo, **Vishal Misra** and Dan Rubenstein, **Optimal Pricing for Serverless Computing**, *IEEE Global Communications Conference (Globecom 2019)*, Waikoloa, HI, USA, December, 2019.
14. Yudong Yang, Yuming Jiang, **Vishal Misra** and Dan Rubenstein, **Virtual Wires: Rethinking WiFi networks**, *IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN)*, Paris, France, July, 2019, Best Paper Award Winner.
15. Muhummad Jehangir Amjad, **Vishal Misra**, Devavrat Shah and Deninis Shen, **mRSC: Multidimensional Robust Synthetic Control**, *Proceedings of ACM SIGMETRICS / IFIP Performance, Phoenix AZ*, June, 2019.
16. Yudong Yang, **Vishal Misra** and Dan Rubenstein, **A Modeling Approach to Classifying Malicious Cloud Users via Shuffling**, *MAMA 2018 Workshop*, Irvine, CA, June, 2018.
17. **Vishal Misra On Differential Pricing and Net Neutrality**, *55th Annual Allerton Conference on Communication, Control, and Computing*, October, 2017
18. Yibo Zhu, Monia Ghobadi, **Vishal Misra** and Jitendra Padhye, **ECN or Delay: Lessons Learnt from Analysis of DCQCN and TIMELY**, *Proceedings of 2016 ACM Conference on Emerging network experiment and technology (CoNEXT 2016)*, December, 2016.

19. Yudong Yang, **Vishal Misra** and Dan Rubenstein, **On the Optimality of Greedy Garbage Collection for SSDs**, *MAMA 2015 Workshop*, Portland, OR, June, 2015.
20. Zeinab Abbassi, Aditya Bhaskara and **Vishal Misra**, **Optimizing Display Advertising in Online Social Networks**, *24th International World Wide Web Conference (WWW 2015)*, Florence, Italy, 2015.
21. Kyung-Wook Hwang, Vijay Gopalakrishnan, Rittwik Jana, Seungjoon Lee, **Vishal Misra**, K. K. Ramakrishnan and Dan Rubenstein, **Joint-Family: Enabling Adaptive Bitrate Streaming in Peer-to-Peer Video-on-Demand**, *IEEE ICNP 2013*, Göttingen, Germany, October, 2013.
22. Kyung-Wook Hwang, Vijay Gopalakrishnan, Rittwik Jana, Seungjoon Lee, **Vishal Misra** and K. K. Ramakrishnan, **Abandonment and its Impact on P2P VoD Streaming**, *IEEE P2P 2013*, Trento, Italy, IEEE, September, 2013.
23. Richard T. B. Ma, John C. S. Lui and **Vishal Misra**, **On the Evolution of the Internet Economic Ecosystem**, *Proceedings of the 22nd International World Wide Web Conference (WWW 2013)*, Rio de Janeiro, Brazil, May, 2013.
24. Richard T. B. Ma, John C. S. Lui and **Vishal Misra**, **A Preference Model for Deciding the Market Share of Network Service Providers**, *Workshop on Telecom Economics, Engineering and Policy*, Krakow, Poland, September, 2012.
25. Joshua Reich, Oren Laaden, Eli Brosh, Alex Sherman, **Vishal Misra**, Jason Nieh, and Dan Rubenstein, **VMTorrent: Scalable P2P Virtual Machine Streaming**, *Proceedings of 2012 ACM Conference on Emerging network experiment and technology (CoNEXT 2012)*, Nice, France, December, 2012.
26. Richard T. B. Ma, Dah Ming Chiu, John Chi Shing Lui, **Vishal Misra** and Dan Rubenstein, **Price Differentiation in the Kelly Mechanism"**, *W-PIN 2012: The first Workshop on Pricing and Incentives in Networks (extended abstract)*, London, UK, June, 2012.
27. Kyung-Wook Hwang, David Applegate, Aaron Archer, Vijay Gopalakrishnan, Seungjoon Lee, **Vishal Misra**, K. K. Ramakrishnan, and Deborah Swayne, **Leveraging Video Viewing Patterns for Optimal Content Placement**, *Networking*, Prague, Czech, May, 2012.
28. Richard T.B. Ma and **Vishal Misra**, **Congestion Equilibrium for Differentiated Service Classes**, *Allerton Conference on Communication, Control and Computing*, 2011, 2011.
29. Zeinab Abbassi and **Vishal Misra**, **Multi-level Revenue Sharing for Viral Marketing**, *Proceedings of ACM NetEcon 2011*, June, 2011.
30. Richard T.B. Ma and **Vishal Misra**, **The Public Option: A non-regulatory alternative to Network Neutrality**, *Proceedings of 2011 ACM Conference on Emerging network experiment and technology (CoNEXT 2011)*, Tokyo, Japan, December, 2011.
31. Zeinab Abbassi and **Vishal Misra**, **Multi-level Revenue Sharing for Viral Marketing**, *Proceedings of ACM NetEcon 2011*, June, 2011.
32. Joshua Reich, **Vishal Misra**, Dan Rubenstein and Gil Zussman, **Connectivity Maintenance in Mobile Wireless Networks via Constrained Mobility**, *Proceedings of IEEE Infocom*, Shanghai, China, April, 2011.
33. Panayotis Antoniadis, Serge Fdida, Timur Friedman and **Vishal Misra**, **Federation of virtualized infrastructures: sharing the value of diversity**, *Proceedings of 2010 ACM Conference on Emerging network experiment and technology (CoNEXT 2010)*, Philadelphia, PA, USA, 2010.
34. Joshua Reich, Oren Laadan, Eli Brosh, Alex Sherman, **Vishal Misra**, Jason Nieh and Dan Rubenstein, **VMTorrent: Virtual Appliances On-Demand (Extended Abstract)**, *ACM SIGCOMM*, New Delhi, India, August, 2010, SRC: Graduate Finalist.

35. Salman A. Baset, Joshua Reich, Jan Janak, Pavel Kasparek, **Vishal Misra**, Dan Rubenstein and Henning Schulzrinne, **How Green is IP-Telephony?**, *Proceedings of SIGCOMM Green Networking Workshop*, August, 2010.
36. Zeinab Abbassi and **Vishal Misra**, **Incentivized Advertising over Social Networks**, *Allerton Conference on Communication, Control and Computing*, September, 2010.
37. Zeinab Abbassi and **Vishal Misra**, **Sharing the Revenue of Online Ads over Social Networks**, *Second Workshop on Information in Networks*, NYU Stern, September, 2010.
38. **Vishal Misra**, Stratis Ioannidis, Augustin Chaintreau and Laurent Massoulie, **Incentivizing Peer-Assisted Services: A Fluid Shapley Value Approach**, *Proceedings of ACM/Sigmetrics*, New York, June, 2010.
39. Jean-Claude Bermond, Dorian Mazauric, **Vishal Misra** and Philippe Nain, **A Distributed Scheduling Algorithm for Wireless Networks with Constant Overhead and Arbitrary Binary Interference (short paper)**, *Proceedings of ACM/Sigmetrics*, New York, June, 2010.
40. Patrick P.C. Lee, **Vishal Misra** and Dan Rubenstein, **On the Robustness of Wireless Opportunistic Routing Toward Inaccurate Link-Level Measurements**, *COMSNETS*, Bangalore, India, January, 2010.
41. Alix L.H. Chow, Leana Golubchik and **Vishal Misra**, **BitTorrent: An Extensible Heterogeneous Model**, *Annual Joint Conference of the IEEE Computer and Communications Societies (IEEE Infocom)*, Rio de Janeiro, April, 2009.
42. Richard T.B. Ma, Dahming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **The Shapley Value: Its Use and Implications on Internet Economics**, *Allerton Conference on Communication, Control and Computing*, September, 2008.
43. Richard T.B. Ma, Dahming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **On Cooperative Settlement Between Content, Transit and Eyeball Internet Service Providers**, *Proceedings of 2008 ACM Conference on Emerging network experiment and technology (CoNEXT 2008)*, Madrid, Spain, December, 2008.
44. Victor Bahl, Ranveer Chandra, Patrick P. C. Lee, **Vishal Misra**, Jitendra Padhye, Dan Rubenstein and Yan Yu, **Opportunistic Use of Client Repeaters to Improve Performance of WLANs**, *Proceedings of 2008 ACM Conference on Emerging network experiment and technology (CoNEXT 2008)*, Madrid, Spain, December, 2008, Best Paper Award Recipient.
45. Richard T.B. Ma, Dah-ming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **Interconnecting Eyeballs to Content: A Shapley Value Perspective on ISP Peering and Settlement**, *ACM NetEcon*, Seattle, WA, August, 2008.
46. Alix L.H. Chow, Leana Golubchik and **Vishal Misra**, **Improving BitTorrent: A Simple Approach**, *Proceedings of IPTPS*, 2008.
47. Joshua Reich, **Vishal Misra** and Dan Rubenstein, **Roomba MADNeT: a Mobile Ad-hoc Delay Tolerant Network Testbed**, *MC2R: Mobile Computing and Communications Review*, ACM Sigmobile, 2008.
48. Joshua Reich, **Vishal Misra** and Dan Rubenstein, **The Time Correlated Update Problem**, *Performance Evaluation Review*, ACM Sigmetrics, Smirni, Evgenia, ACM Special Interest Group on Measurement and Evaluation, Volume 35, Number 2, pp. 33-35, September, 2007.
49. Joshua Reich, **Vishal Misra** and Dan Rubenstein, **The Time Correlated Update Problem**, *MAMA*, ACM, San Diego, CA, June, 2007.
50. Joshua Reich, **Vishal Misra** and Dan Rubenstein, **MADNeT Testbed**, *Joint Mobicom / Mobihoc Student Demo Competition*, ACM, Montreal, QC, September, 2007, Best Student Demo Award Recipient.

51. Richard T.B. Ma, Dahming Chiu, John C.S. Lui, **Vishal Misra** and Dan Rubenstein, **Internet Economics: The use of Shapley value for ISP settlement**, *Proceedings of 2007 ACM Conference on Emerging network experiment and technology (CoNEXT 2007)*, Columbia University, New York, December, 2007.
52. Abhinav Kamra, **Vishal Misra** and Dan Rubenstein, **CountTorrent: Ubiquitous Access to Query Aggregates in Dynamic and Mobile Sensor Networks**, *ACM SenSys*, Sydney, Australia, November, 2007.
53. Hoon Chang, **Vishal Misra** and Dan Rubenstein, **Fairness and Physical Layer Capture in Random Access Networks**, *Proceedings of IEEE SECON: Fourth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks*, San Diego, CA, U.S.A., June, 2007.
54. Hanhua Feng, **Vishal Misra** and Dan Rubenstein, **PBS: A Unified Priority-Based Scheduler**, *Proceedings of ACM Sigmetrics*, San Diego, CA, June, 2007.
55. Raj Kumar Rajendran, **Vishal Misra** and Dan Rubenstein, **Theoretical Bounds on Control-Plane Self-Monitoring in Routing Protocols**, *Proceedings of ACM Sigmetrics*, San Diego, CA, June, 2007.
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67. Raj Kumar Rajendran, **Vishal Misra** and Dan Rubenstein, **Brief Announcement: Strong Detection of Misconfigurations**, *Principles of Distributed Computing (PODC)*, Las Vegas, NV, July, 2005.
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90. E.G. Coffman Jr., Z. Ge, **Vishal Misra** and Don Towsley, **Network Resilience: Exploring Cascading Failures within BGP**, *Allerton Conference on Communication, Control and Computing*, October, 2002.
91. Angelos Keromytis, **Vishal Misra**, and Dan Rubenstein, **Using Overlays to Improve Network Security**, *SPIE ITCom Conference on Scalability and Traffic Control in IP Networks II*, Boston, MA, July, 2002, Invited Paper.
92. Yossi Chait, C.V. Hollot, **Vishal Misra**, Don Towsley, Honggang Zhang and John Lui, **Providing Throughput Differentiation for TCP Flows Using Adaptive TwoColor Marking and Multi-Level AQM**, *Proceedings of IEEE Infocom*, 2002.
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94. Angelos Keromytis, **Vishal Misra** and Dan Rubenstein, **SOS: Secure Overlay Services**, *Proceedings of ACM Sigcomm*, Pittsburgh, PA, August, 2002.
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101. **Vishal Misra**, Wei-Bo Gong and Don Towsley, **Stochastic Differential Equation Modeling and Analysis of TCP Windowsize Behavior**, *Proceedings of IFIP WG 7.3 Performance*, November, 1999.

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108. A.K. Chhabra and **Vishal Misra**, **Experiments with Statistical Connectionist Methods and Hidden Markov Models for Recognition of Text in Telephone Company Drawings**, *Proceedings of the Second International Workshop on Applications of Neural Networks to Telecommunications (IWANNT'95)*, 1995.
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- **The Wall Between Shannon and Kolmogorov**, March 2026.
- **Shannon Got AI This Far. Kolmogorov Shows Where It Stops**, March 2026.
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- **Something Big Is Happening. Here's What It Actually Is**, February 2026.
- **Attention Is Bayesian Inference**, December 2025.

PATENTS

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  Filed Aug 1, 1996. Awarded Jul 13, 1999.
- US Patent Number: US7085236, "Active queue management for differentiated services", inventors Salomon Oldak, Wei-Bo Gong, Christopher V. Hollot, Don Towsley, Vishal Misra and Yossi Chait
  Filed May 20, 2002. Awarded Aug 1, 2006.
- US Patent Number: US7779463, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Malkin; Tal, Keromytis; Angelos D., Misra; Vishal, Locasto; Michael, Parekh; Janak
  Filed June 9, 2004. Awarded Aug 17, 2010.
- US Patent Number: US7784097, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Keromytis; Angelos D., Misra; Vishal, Locasto; Michael E., Parekh; Janak
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- US Patent Number: US8381295, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Malkin; Tal, Keromytis; Angelos D., Misra; Vishal, Locasto; Michael, Parekh; Janak
  Filed July 9, 2010. Awarded Feb 19, 2013.
- US Patent Number: US8549646, "Methods, media and systems for responding to a denial of service attack", inventors Stavrou; Angelos, Keromytis; Angelos D., Nieh; Jason, Misra; Vishal, Rubenstein; Daniel
  Filed Oct 20, 2006. Awarded Oct 1, 2013.
- US Patent Number: US8655839, "Methods, systems, and media for forming linear combinations of data", inventors Abhinav Kamra, Vishal Misra, Jon Feldman, Daniel Rubenstein
  Filed Mar 5, 2007. Awarded Feb 18, 2014.
- US Patent Number: US9135438, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Malkin; Tal, Keromytis; Angelos D., Misra; Vishal, Locasto; Michael, Parekh; Janak
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- US Patent Number: US10038704, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Malkin; Tal, Keromytis; Angelos D., Misra; Vishal, Locasto; Michael, Parekh; Janak
  Filed Sep 4, 2015. Awarded Jul 31, 2018.
- US Patent Number: US10176102, "Optimized read cache for persistent cache on solid state devices", inventors Harvey; David W., Davis; Scott H., Martin; Martin Charles, Misra; Vishal, Vassef; Hooman
  Filed March 30, 2016. Awarded January 8, 2019.
- US Patent Number: US8667588, "Systems and methods for correlating and distributing intrusion alert information among collaborating computer systems", inventors Stolfo; Salvatore J., Keromytis; Angelos D., Misra; Vishal, Locasto; Michael E., Parekh; Janak
  Filed Jul 15, 2010. Awarded Mar 4, 2014.
- US Patent Application: US20140161206, "Methods, systems, and media for forming linear combinations of data", inventors Kamra; Abhinav, Misra; Vishal, Feldman; Jon, Rubenstein; Daniel
  Filed February 14, 2014. Publication date: June 12, 2014.
- US Patent Number: US9609044, "Methods, systems, and media for stored content distribution and access", inventors Reich; Joshua, Oren Laadan, Vishal Misra, Eliahu Brosh, Jason Nieh, Daniel Stuart Rubenstein, Alexander Sherman
  Filed November 7, 2011. Awarded March 28, 2017.
- US Patent Number: US9667735, "Content centric networking", inventors Rubenstein; Daniel, Misra; Vishal, Feng; Hanhua, Martin; Martin C.
  Filed March 14, 2014. Awarded May 30, 2017.
- US Patent Number: US9699236, "System and method of adaptive bit-rate streaming", inventors Gopalakrishnan; Vijay, Jana; Rittwik, Lee; Seungjoon, Ramakrishnan; Kadangode K., Hwang; Kyung-Wook, Misra; Vishal, Rubenstein; Daniel
  Filed December 17, 2013. Awarded July 4, 2017.
- US Patent Number: US9930105, "Methods, systems, and media for stored content distribution and access", inventors Reich; Joshua, Laadan; Oren, Misra; Vishal, Brosh; Eliahu, Nieh; Jason, Rubenstein; Daniel Stuart, Sherman; Alexander
  Filed February 17, 2017. Awarded March 27, 2018.
- US Patent Number: US10601901, "Methods, systems, and media for stored content distribution and access", inventors Reich; Joshua, Laadan; Oren, Misra; Vishal, Brosh; Eliahu, Nieh; Jason,

Rubenstein; Daniel Stuart, Sherman; Alexander
Filed March 23, 2018. Awarded March 24, 2020.

- US Patent Number: US10687341, "Systems, methods, and media for scheduling traffic of a communication session between an application on a WiFi network and another device", inventors Yang; Yudong, Misra; Vishal, Rubenstein; Daniel Stuart, Jiang; Yuming
  Filed November 13, 2018. Awarded June 16, 2020.
- US Patent Number: US11259352, "Systems, methods, and media for providing multi-homing", inventors Misra; Vishal, Rubenstein; Daniel S.
  Filed June 15, 2020. Awarded February 22, 2022.
- US Patent Number: US11297634, "Systems, methods, and media for scheduling traffic of a communication session between an application on a WiFi network and another device", inventors Yang; Yudong, Misra; Vishal, Rubenstein; Daniel, Jiang; Yuming
  Filed September 26, 2017. Awarded April 5, 2022.
- US Patent Application: US20230359617, "Systems, methods, and media for formulating database queries from natural language text", inventor Misra; Vishal
  Filed October 1, 2021. Publication date: November 9, 2023.
- US Patent Application: US20250037019, "Systems, methods, and media for generating training samples", inventor Misra; Vishal
  Filed December 12, 2022. Publication date: January 30, 2025.
- US Patent Application: US20250069757, "Method of predicting ADAS-COG score", inventors Agarwal; Anish, Misra; Vishal, Schelter; Bjoern, Shah; Devavrat, Shen; Dennis, Shiells; Helen, Wischik; Claude Michel
  Filed December 13, 2022. Publication date: February 27, 2025.
- US Patent Application: US20250070987, "Systems, methods, and media for establishing authenticity of image content", inventors Gupta; Mohit, Jana; Suman, Misra; Vishal
  Filed August 21, 2024. Publication date: February 27, 2025.

INVITED TALKS

- **a16z (Andreessen Horowitz) Podcast**, 2025–2026.
  - *Will LLMs Get Us To AGI?*
  - *Why Scale Will Not Solve AGI*
- **Columbia Data Science Day**, 2025. *The Future of Data Science and AI.*
- **India Global Forum - NXT25**, Mumbai, April 2025.
  - Panel: *In Conversation: Voice, Vernacular, Vision – Unlocking India's AI Potential for All*
  - Chair: *AI Regulations in India – Balancing Innovation, Accountability, and Governance* Panel discussing India's approach to AI regulation, promoting innovation while ensuring accountability and ethical governance for agentic AI and autonomous systems.
- **Mumbai Tech Week**, Mumbai, April 2025.
  - Panel: *Sports & AI*
  - Panel: *Innovating with AI: Lessons from the Valley*
- **AAAI**, invited keynote at Workshop on deployable LLMs, March 2025.
- **IIT Bombay**, August 2024.
- **MIT Invited Lecture**, March 2024.

- **MIT Invited Lecture**, July 2020.
- **Google Company-Wide Invited Lecture**, July 2020.
- **KLA Engineering Conference**, October 2024, Half Moon Bay.
- **Networking Channel (Online)**, September 2024.
- **HP Labs, Palo Alto**, June 2024.
- **MASCOTS Keynote**, September 2023, Stony Brook. *Title: "From Self-Similarity to LLMs: A Journey with Markov Models"*.
- **Tata Institute of Fundamental Research, India**, August 2020.
- Indian Institute of Technology, Hyderabad, August 2019
- National Institute of Public Finance and Policy, August 2019
- Indian Institute of Science, Bengaluru, August 2019
- Public Seminar on Net Neutrality, Bengaluru, August 2019
- Google Networking Summit, March 2019
- Tata Institute of Fundamental Research (TIFR), Institute Colloquium, March 2019
- Tata Institute of Fundamental Research (TIFR), Computer Science Department, March 2019
- IIT Bombay Workshop on Networks and Games, January 2019
- Stanford University, September 2018
- Data Center Scheduling Summer School, TTIC, Chicago, July 2018
- Google PlaNet Seminar, Google, July 2018
- MIT, July 2018
- Data Center Networking Workshop, Wisconsin, Madison, July 2018
- Council for Foreign Research, New York, March 2018
- IIT Mumbai, December 2017
- Workshop on Internet Economics, CAIDA, San Diego, December 2017
- Keynote, ACM Mobihoc, Chennai, July 2017
- IEEE GNY section, NYC, March 2017
- Clean Sky Conference, NTNU, Trondheim, August 2016
- Microsoft Faculty Summit, Seattle, July 2016
- UIUC Department of ECE Colloquium, March 2016
- Stanford University, May 2015
- Stony Brook University, March 2015
- VMware, January 2015
- USC, January 2015
- Princeton, November 2014
- MIT, November 2014
- Telefonica Research, Barcelona, September 2013.
- Universidad Carlos III de Madrid, Madrid, February 2013.
- Federal Communications Commission, Washington DC, October 2012.
- Google Labs, New York, April 2011.

- University of Michigan and Wayne State NSF funded Center for Incentive Centered Design, November 2010.
- Cornell University, Ithaca, October 2010.
- Google Labs, New York, January 2010.
- USC Computer Science Department Colloquium, November 2009.
- Telefonica Labs, Barcelona. August 2009.
- Ecole Normale Superieure, Paris. June 2009.
- Paris Networking Workshop, Paris. June 2009.
- MAESTRO group seminar, INRIA Le Boreon. February 2009.
- Networking Seminar, Sophia Antipolis Networking Seminar Series, April 2009.
- MAESTRO seminar, Le Boreon. February 2009.
- NYU-Poly Computer Science seminar, Brooklyn, January 2009
- Networking Seminar, Sophia Antipolis Networking Seminar Series, April 2009.
- Alcatel-Lucent Bell Labs, Murray Hill NJ, April 2008
- Invited expert to formulate strategic long term research priorities of EU Networked Media Program (FP7): Brussels, March 2007
- IBM Watson Performance Modeling and Analysis Seminar Series, August 2006
- Microsoft Research, Cambridge, July 2006.
- Statslab, Dept. of Mathematics, Cambridge University, July 2006.
- Invited Paper, INFORMS conference, Pittsburgh November 2006.
- USC Computer Science Lecture Series, May 2006
- CMU, Computer Science Lecture Series, May 2005
- Keynote Speaker, Performance Track of SBC (Brazil's Annual Computer Science Conference), July 2005
- Korea Advanced Institute of Science and Technology (KAIST), Daejon, Korea, March 2004.
- Institute for Pure and Applied Mathematics (IPAM), Large-Scale Communication Networks: Topology, Routing, Traffic, and Control Workshop, UCLA, September 2003
- The Congestion Control and Heavy Traffic Modeling Workshop, Statistical and Applied Mathematical Sciences Institute (SAMSI), North Carolina, September 2003
- The COST(EU)-NSF(USA) Workshop on Exchanges & Trends in Networking, Crete, June 2003
- Lecture Series, IBM Research Labs, New Delhi, January 2003
- Hot Topic on Long Range Dependence, Performance 2002 Conference, Rome, October 2002
- Computer Science Colloquium, University of Pittsburgh, April 2002
- Lab Colloquium, HP Labs, Palo Alto, March 2002
- IPAM Communication Networks Workshop, LA, March 2002
- Invited Talk, Nortel Networks, Billerica, October 2001

- Invited Paper, Informs 2001, New York City, July 2001
- Caltech, October 2000
- Computer Science Lecture Series, UCLA, October 2000
- Computer Science Lecture Series, USC/ISI, October 2000
- Invited Talk, 15th annual IEEE Computer Communications Workshop, October 2000
- Invited Talk, TCP Workshop, ENS Paris, September 2000
- Invited Paper, Informs 2000, Boca Raton, March 2000
- Invited Paper, Performance 99, Istanbul, October 1999

PROFESSIONAL SERVICE

- General Chair ISACE 2026 (Third International Conference on Sports Analytics)
- Program Committee ACM/Sigcomm 2026
- Program Committee ACM/Sigmetrics 2026
- Program Committee NSDI 2026
- Program Committee NSDI 2025
- Program Committee ACM/Sigmetrics 2025
- Program Committee ACM/Sigmetrics 2024
- General Chair ACM/Sigcomm 2023
- Program Committee ACM/Sigmetrics 2023
- Program Committee ACM/Sigmetrics 2022
- Program Committee ACM/Sigmetrics 2021
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- Program Committee ACM/Sigmetrics 2019
- Program Committee ACM/Sigmetrics 2018
- Program Committee ACM/Sigmetrics 2017
- Program Co-Chair NetEcon 2016
- Program Committee ACM/Sigcomm 2016
- Program Committee ACM/Sigmetrics 2016
- Program Co-Chair ICNP 2015
- Program Committee ACM/Sigmetrics 2015
- Program Committee 29th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2015)
- Program Committee, ICNP 2014
- Program Co-Chair CoNeXT 2013
- Program Committee IEEE/Infocom 2013
- Program Committee ACM/Sigmetrics 2013
- Program Committee 28th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2013)

- Program Committee, CoNeXT 2012
- Program Committee IEEE/Infocom 2012
- Program Committee, CoNeXT 2011
- Program Committee IEEE/Infocom 2011
- Program Committee 27th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2011)
- Associate Editor, Elsevier Journal on Performance Evaluation, 2009-
- Associate Editor, IEEE/ACM Transactions on Networking, 2008-
- Program Committee IEEE/Infocom 2010
- General Chair ACM/Sigmetrics 2010
- Program Committee 26th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2010)
- Program Committee IEEE/Infocom 2009
- Program Committee ACM/Sigmetrics 2009
- Program Committee NetEcon 2009
- Program Committee, CoNeXT 2008
- TPC Co-Chair, ACM/Sigmetrics 2008
- Area Chair, IEEE/Infocom 2008
- Program Committee 25th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2007)
- Program Committee ACM/Sigmetrics 2007
- Program Committee IEEE/Infocom 2007
- Program Committee ACM/Sigcomm 2006
- Program Committee ACM/Sigmetrics 2006
- Program Committee IEEE/Infocom 2006
- Student Workshop co-chair, IEEE/Infocom 2006
- Program Committee 24th IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2005)
- Guest-editor of Special issue of Journal of Performance Evaluation on Peer-to-Peer computing.
- Tutorials co-chair ACM/Sigmetrics 2005
- Program Committee ACM/Sigmetrics 2005
- Program Committee IEEE/Infocom 2005
- Local Arrangements Chair ACM/Sigmetrics and Performance 2004
- General Co-Chair, OpenSig 2003
- Program Committee IEEE/Infocom 2003
- Program Committee ICC Next Generation Internet Symposium 2003
- Program Committee 22nd IFIP WG 7.3 International Symposium on Computer Performance Modeling, Measurement and Evaluation (Performance 2002)
- Program Committee ACM/Sigmetrics 2002
- Program Committee ICC Next Generation Internet Symposium 2002

TEACHING

- COMS 2702, AI in Context (Fall 2024, Fall 2025)
- COMSE 6998, Data Center Networking (Fall 2016, Fall 2018–Fall 2022)
- CSEE 4119, Computer Networks (Spring 2002–Fall 2007, Spring 2008, Fall 2010, Fall 2013–Fall 2015, Fall 2021, Spring 2022, Spring 2023)
- CSEE 6180, Modeling and Performance Evaluation (Spring 2003, Spring 2005, Spring 2007, Spring 2014–Spring 2017, Spring 2019–Spring 2022, Fall 2023–Fall 2025)
- CSEE 6717, Information Theory (Spring 2004, Spring 2006)
- COMS 6998, Internet Economics (Spring 2010)
- CSEE 3824, Computer Organization (Fall 2001)

PHD STUDENTS

Graduated

- Niloofar Bayat (2022, Google)
- Kunal Mahajan (Spring 2020, Facebook)
- Kevin Yang (Summer 2019, Google)
- Zeinab Abbassi (Spring 2016, Tomorrow Networks)
- Kyung-Wook Hwang (Summer 2013, AT&T; co-advised with Dan Rubenstein)
- Joshua Reich (Summer 2011, AT&T; co-advised with Dan Rubenstein)
- Eli Brosh (Spring 2011, Vidyo; co-advised with Dan Rubenstein)
- Tianbai Ma (Spring 2010, NUS Singapore; co-advised with Dan Rubenstein)
- Patrick Lee (Fall 2008, Chinese University of Hong Kong; co-advised with Dan Rubenstein)
- Abhinav Kamra (Fall 2007, Citicorp; co-advised with Dan Rubenstein)
- Hanhua Feng (Fall 2007, IBM Watson)
- Hoon Chang (Summer 2007, Samsung Electronics)
- Bong-Jun Ko (Fall 2006, IBM; co-advised with Dan Rubenstein)

Current

- Kahlil Dozier
- Cyrus Illick
- Saeyoung Rho
- Loqman Salamatian
- Andrew Tang
- Hadleigh Schwartz
- Justin Beltran
- Samira Hajizadeh
- Jun Da Chan (starting Fall 2026)