

Sergey Gorinsky

Curriculum Vitae

(as of 2021/11/30)

IMDEA Networks Institute
Avenida del Mar Mediterraneo, 22
Leganes, Madrid, 28918, Spain

Phone: +34 91 481 6973
Email: sergey.gorinsky@imdea.org
Web: gorinsky.networks.imdea.org

RESEARCH INTERESTS

Technology, economics, and security of networked systems: behavior of distributed entities, sharing of network resources, network structure, innovative business models, incentives, cost reduction, revenue maximization

EDUCATION

2003/8	Ph.D. in Computer Science <i>University of Texas at Austin, USA</i> Dissertation: “Robust Congestion Control for IP Multicast” Advisor: Dr. Harrick Vin	4.00 / 4.00 GPA
1999/5	M.S. in Computer Science <i>University of Texas at Austin, USA</i>	4.00 / 4.00 GPA
1994/2	Engineer in Computer Engineering <i>Moscow Institute of Electronic Technology, Russia</i> Thesis: “A Distributed Real-Time System for Knitting-Machine Control” Advisor: Dr. Aleksandr Shishkevich	5.00 / 5.00 GPA

RESEARCH EXPERIENCE

present – 2009/6	Research Associate Professor (tenured) <i>IMDEA Networks Institute, Spain</i> <i>Machine-learning applications; video streaming; content delivery networks; caching; data-plane algorithms; Internet measurements; network economics; Internet interconnections; traffic management; traffic offloading; revenue maximization; cost reduction; Internet-ecosystem structure and evolution; socially aware network design; Internet science</i>
2009/5 – 2003/9	Assistant Professor (tenure track) <i>Washington University in St. Louis, Department of Computer Science and Engineering, USA</i> <i>Internet architecture; incentive-oriented network design; delay-sensitive applications; fair efficient scheduling; transport protocols; network congestion control; link buffer sizing; router algorithms; robust protocols for untrustworthy network environments; virtual networks; virtual networking laboratories</i>
2003/8 – 1998/9	Research Assistant <i>University of Texas at Austin, Department of Computer Sciences, USA</i> Supervisor: Dr. Harrick Vin <i>Network congestion control; fair network sharing in the presence of misbehaving parties; utility of feedback in multicast; multicast protocols robust to receiver misbehavior</i>
1999/8 – 1999/5	Summer Manager <i>AT&T Research Labs, Networking and Distributed Systems Research Center, USA</i> Mentors: Dr. K.K. Ramakrishnan, Dr. Matthias Grossglauser, and Dr. Nick Duffield <i>Scalable, efficient, and fair layered multicast congestion control in heterogeneous networks</i>

RESEARCH EXPERIENCE (continued)

- 1998/8 – 1998/5 **Engineer**
Lucent Bell Labs, Network and Service Management Research Department, USA
Mentors: Dr. Binay Sugla, Dr. Ajita John, and Keith Vanderveen
Network management with run-time specification of Management Information Bases
- 1998/5 – 1997/6 **Research Assistant**
University of Texas at Austin, Department of Computer Sciences, USA
Supervisor: Dr. Aloysius Mok
Algorithms and admission control for real-time scheduling of multimedia applications
- 1997/5 – 1994/9 **Faculty Assistant**
New Jersey Institute of Technology, Department of Computer and Information Science, USA
Supervisors: Dr. Alex Stoyenko and Dr. Sanjoy Baruah
Efficient traffic characterization, traffic reshaping, and admission control for guaranteed-services networks
- 1994/2 – 1990/9 **Undergraduate Research Assistant**
Moscow Institute of Electronic Technology, Department of Computer Engineering, Russia
Supervisor: Dr. Aleksandr Shishkevich
Distributed real-time control for a knitting-machine; hardware components; local-area network protocols

JOURNAL PUBLICATIONS*

- [13] V. Demianiuk, **S. Gorinsky**, S. Nikolenko, and K. Kogan, “**Robust Distributed Monitoring of Traffic Flows**”, *IEEE/ACM Transactions on Networking*, 29(1), pp. 275-288, February 2021 (citation count: 7)
- [12] V. Kirilin, A. Sundarajan, **S. Gorinsky**, and R. K. Sitaraman, “**RL-Cache: Learning-Based Cache Admission for Content Delivery**”, *IEEE Journal on Selected Areas in Communications*, 38(10), pp. 2372-2385, October 2020 (citation count: 24)
- [11] I. Komnios, F. Tsapeli, and **S. Gorinsky**, “**Cost-Effective Multi-Mode Offloading with Peer-Assisted Communications**”, *Ad Hoc Networks*, 25(B), pp. 370-382, February 2015 (citation count: 21)
- [10] I. Castro, R. Stanojevic, and **S. Gorinsky**, “**Using Tuangou to Reduce IP Transit Costs**”, *IEEE/ACM Transactions on Networking*, 22(5), pp. 1415-1428, October 2014 (citation count: 36)
- [9] M. Podlesny and **S. Gorinsky**, “**Leveraging the Rate-Delay Trade-off for Service Differentiation in Multi-Provider Networks**”, *IEEE Journal on Selected Areas in Communications*, 29(5), pp. 997-1008, May 2011 (citation count: 16)
- [8] M. Georg and **S. Gorinsky**, “**Congestion Control with a Misbehaving Receiver: Robust TFRC and Other Protocols**”, *Journal of Internet Engineering*, 3(1), pp. 210-218, December 2009
- [7] **S. Gorinsky**, E.J. Friedman, S. Henderson, and C. Jechlitschek, “**Efficient Fair Algorithms for Message Communication**”, *Simulation Modelling Practice and Theory*, 17(3), pp. 513-527, March 2009 (citation count: 4)
- [6] **S. Gorinsky**, M. Georg, M. Podlesny, and C. Jechlitschek, “**A Theory of Load Adjustments and its Implications for Congestion Control**”, *Journal of Internet Engineering*, 1(2), pp. 82-93, October 2007 (citation count: 9)
- [5] **S. Gorinsky**, A. Kantawala, and J. Turner, “**Simulation Perspectives on Link Buffer Sizing**”, *Simulation: Transactions of the Society for Modeling and Simulation International* (special issue on New Challenges in Large-Scale Computer Systems and Network Modeling and Simulation), 83(3), pp. 245-257, March 2007 (citation count: 17)

*The citation counts are according to a Google Scholar search on 2021/11/30.

JOURNAL PUBLICATIONS (continued)

- [4] D.K. Blandford, S.A. Goldman, **S. Gorinsky**, Y. Zhou, and D.R. Dooly, “**Smartacking: Improving TCP Performance from the Receiving End**”, *Journal of Internet Engineering*, 1(1), pp. 6-21, January 2007 (citation count: 8)
- [3] **S. Gorinsky**, S. Jain, H. Vin, and Y. Zhang, “**Design of Multicast Protocols Robust against Inflated Subscription**”, *IEEE/ACM Transactions on Networking*, 14(2), pp. 249-262, April 2006 (citation count: 20)
- [2] S. Baruah, D. Chen, **S. Gorinsky**, and A. Mok, “**Generalized Multiframe Tasks**”, *Journal of Real-Time Systems*, 17(1), pp. 5-22, July 1999 (citation count: 342)
- [1] P. Sinha, **S. Gorinsky**, P. Laplante, A. Stoyenko, and T. Marlowe, “**Classification and Overview of Research in Real-Time Imaging**”, *Journal of Electronic Imaging*, 5(4), pp. 466-478, October 1996 (citation count: 8)

CONFERENCE AND WORKSHOP PUBLICATIONS

- [43] P. Chuprikov, V. Demianiuk, and **S. Gorinsky**, “**PREDICAT: Efficient Packet Classification via Prefix Disjointness**”, *Proceedings of ICCCN 2021*, pp. 1-11, July 2021
- [42] V. Demianiuk, **S. Gorinsky**, and K. Kogan, “**TeleNoise: A Network-Noise Module for In-Band Real-Time Telemetry**”, *Proceedings of IFIP Networking 2021*, pp. 1-9, June 2021
- [41] V. Demianiuk, **S. Gorinsky**, S. Nikolenko, and K. Kogan, “**Robust Distributed Monitoring of Traffic Flows**”, *Proceedings of IEEE ICNP 2019*, pp. 1-11, October 2019 (citation count: see journal version [13] above)
- [40] V. Kirilin, A. Sundarrajan, **S. Gorinsky**, and R. K. Sitaraman, “**RL-Cache: Learning-Based Cache Admission for Content Delivery**”, *Proceedings of ACM NetAI 2019*, pp. 57-63, August 2019 (citation count: see journal version [12] above)
- [39] V. Demianiuk, **S. Gorinsky**, S. Nikolenko, and K. Kogan, “**Distributed Counting along Lossy Paths without Feedback**”, *Proceedings of SIROCCO 2018*, pp. 1-4, June 2018 (citation count: 2)
- [38] V. Kirilin and **S. Gorinsky**, “**A Protocol-Ignorance Perspective on Incremental Deployability of Routing Protocols**”, *Proceedings of IFIP Networking 2018*, pp. 559-567, May 2018 (citation count: 1)
- [37] P. Bangera, S. Hasan, and **S. Gorinsky**, “**An Advertising Revenue Model for Access ISPs**”, *Proceedings of IEEE Symposium on Computers and Communications (ISCC 2017)*, pp. 582-589, July 2017 (citation count: 5)
- [36] P. Bangera and **S. Gorinsky**, “**Ads versus Regular Contents: Dissecting the Web Hosting Ecosystem**”, *Proceedings of IFIP Networking 2017*, pp. 1-9, June 2017 (citation count: 7)
- [35] I. Castro and **S. Gorinsky**, “**Estimating the Real with the Virtual: How does the Accuracy Relate to the Internet Penetration?**”, *Proceedings of COMSNETS 2016*, pp. 1-8, January 2016
- [34] I. Castro, A. Panda, B. Raghavan, S. Shenker, and **S. Gorinsky**, “**Route Bazaar: Automatic Interdomain Contract Negotiation**”, *Proceedings of USENIX HotOS XV*, pp. 1-7, May 2015 (citation count: 42)
- [33] I. Castro, J. C. Cardona, **S. Gorinsky**, and P. Francois, “**Remote Peering: More Peering without Internet Flattening**”, *Proceedings of ACM CoNEXT 2014*, pp. 185-197, December 2014 (citation count: 78)
- [32] P. Bangera and **S. Gorinsky**, “**Economics of Traffic Attraction by Transit Providers**”, *Proceedings of IFIP Networking 2014*, pp.1-9, June 2014 (citation count: 6)
- [31] S. Hasan, **S. Gorinsky**, C. Dovrolis, and R. K. Sitaraman, “**Trade-offs in Optimizing the Cache Deployments of CDNs**”, *Proceedings of IEEE INFOCOM 2014*, pp. 460-468, April 2014 (citation count: 94)
- [30] P. Bangera and **S. Gorinsky**, “**An Economic Perspective on Traffic Attraction by Internet Transit Providers**”, *Proceedings of IEEE ICNP 2013*, pp. 1-2, October 2013 (citation count: 3)
- [29] M. Podlesny, **S. Gorinsky**, and B. Rengarajan, “**AIST: Insights into Queuing and Loss on Highly Multiplexed Links**”, *Proceedings of IEEE/ACM IWQoS 2012*, pp.1-9, June 2012

- [28] S. Hasan and **S. Gorinsky**, “**Obscure Giants: Detecting the Provider-Free ASes**”, *Proceedings of IFIP Networking 2012*, pp. 149-160, May 2012 (citation count: 19)
- [27] I. Castro and **S. Gorinsky**, “**T4P: Hybrid Interconnection for Cost Reduction**”, *Proceedings of NetEcon 2012*, pp. 178-183, March 2012 (citation count: 23)
- [26] R. Stanojevic, I. Castro, and **S. Gorinsky**, “**CIPT: Using Tuangou to Reduce IP Transit Costs**”, *Proceedings of ACM CoNEXT 2011*, pp.1-12, December 2011 (citation count: 43)
- [25] P. Bangera and **S. Gorinsky**, “**Impact of Prefix Hijacking on Payments of Providers**”, *Proceedings of COMSNETS 2011*, pp. 1-10, January 2011 (citation count: 23)
- [24] M. Podlesny and **S. Gorinsky**, “**Stateless RD Network Services**”, *Proceedings of IFIP Networking 2010*, pp. 135-147, May 2010 (citation count: 3)
- [23] M. Podlesny and **S. Gorinsky**, “**RD Network Services: Differentiation through Performance Incentives**”, *Proceedings of ACM SIGCOMM 2008*, pp. 255-266, August 2008 (citation count: 40)
- [22] **S. Gorinsky**, K.K. Ramakrishnan, and H. Vin, “**Addressing Heterogeneity, Scalability, and Privacy in Layered Multicast Congestion Control**”, *Proceedings of the International Conference on Computer Communications and Networks (ICCCN 2008)*, pp. 1-8, August 2008 (citation count: 30)
- [21] **S. Gorinsky** and H. Vin, “**Effairness: Dealing with Time in Congestion Control Evaluation**”, *Proceedings of the International Conference on Networking and Services (ICNS 2008)*, pp. 40-45, March 2008 (citation count: 2)
- [20] C. Wiseman, K. Wong, T. Wolf, and **S. Gorinsky**, “**Operational Experience with a Virtual Networking Laboratory**”, *Proceedings of ACM SIGCSE 2008*, pp. 427-431, March 2008 (citation count: 18)
- [19] M. Podlesny and **S. Gorinsky**, “**Price of Asynchrony: Queuing under Ideally Smooth Congestion Control**”, *Proceedings of IEEE International Conference on Network Protocols (ICNP 2007)*, pp. 332-333, October 2007 (citation count: 2)
- [18] **S. Gorinsky** and C. Jechlitschek, “**Fair Efficiency, or Low Average Delay without Starvation**”, *Proceedings of the International Conference on Computer Communications and Networks (ICCCN 2007)*, pp. 424-429, August 2007 (citation count: 19)
- [17] M. Podlesny and **S. Gorinsky**, “**MCP: Few Bits for Fairing and Small Queues in the Stable State**”, *Proceedings of IEEE Symposium on Computers and Communications (ISCC 2007)*, pp. 1079-1084, July 2007 (citation count: 7)
- [16] M. Georg, C. Jechlitschek, and **S. Gorinsky**, “**Improving Individual Flow Performance with Multiple Queue Fair Queuing**”, *Proceedings of IEEE International Workshop on Quality of Service (IWQoS 2007)*, pp. 141-144, June 2007 (citation count: 9)
- [15] **S. Gorinsky**, C. Jechlitschek, and N.S.V. Rao, “**A Network Architecture for Large-Scale Science**”, *Proceedings of IEEE High-Speed Networks (HSN 2007)*, pp. 1-5, May 2007
- [14] M. Podlesny and **S. Gorinsky**, “**Multimodal Congestion Control for Low Stable-State Queuing**”, *Proceedings of IEEE INFOCOM 2007*, pp. 2466-2470, May 2007 (citation count: 12)
- [13] K. Wong, T. Wolf, **S. Gorinsky**, and J. Turner, “**Teaching Experiences with a Virtual Network Laboratory**”, *Proceedings of ACM SIGCSE 2007*, pp. 481-485, March 2007 (citation count: 38)
- [12] **S. Gorinsky** and N.S.V. Rao, “**Dedicated Channels as an Optimal Network Support for Effective Transfer of Massive Data**”, *Proceedings of IEEE INFOCOM 2006*, pp. 1-5, April 2006 (citation count: 31)
- [11] M. Georg and **S. Gorinsky**, “**Protecting TFRC from a Selfish Receiver**”, *Proceedings of the Joint International Conference on Autonomic and Autonomous Systems and International Conference on Networking and Services (ICAS/ICNS 2005)*, pp. 57-62, October 2005 (citation count: 9)

CONFERENCE AND WORKSHOP PUBLICATIONS (continued)

- [10] **S. Gorinsky**, A. Kantawala, and J. Turner, “**Link Buffer Sizing: A New Look at the Old Problem**”, *Proceedings of IEEE Symposium on Computers and Communications (ISCC 2005)*, pp. 507-514, June 2005 (citation count: 64)
- [9] **S. Gorinsky**, “**Feedback Modeling in Internet Congestion Control**”, *Proceedings of Next Generation Teletraffic and Wired/Wireless Advanced Networking (NEW2AN 2004)*, pp. 231-234, February 2004 (citation count: 17)
- [8] **S. Gorinsky**, S. Jain, H. Vin, and Y. Zhang, “**Robustness to Inflated Subscription in Multicast Congestion Control**”, *Proceedings of ACM SIGCOMM 2003*, pp. 87-98, August 2003 (citation count: 35)
- [7] **S. Gorinsky**, S. Jain, H. Vin, and Y. Zhang, “**Robustness of Multicast Congestion Control to Inflated Subscription**”, *Proceedings of ACM SIGMETRICS 2003*, pp. 312-313, June 2003 (citation count: 1)
- [6] **S. Gorinsky**, S. Jain, and H. Vin, “**Multicast Congestion Control with Distrusted Receivers**”, *Proceedings of Networked Group Communication (NGC 2002)*, pp. 19-26, October 2002 (citation count: 20)
- [5] **S. Gorinsky** and H. Vin, “**The Utility of Feedback in Layered Multicast Congestion Control**”, *Proceedings of Network and Operating Systems Support for Digital Audio and Video (NOSSDAV 2001)*, pp. 93-102, June 2001 (citation count: 47)
- [4] S. Baruah, G. Buttazzo, **S. Gorinsky**, and G. Lipari, “**Scheduling Periodic Task Systems to Minimize Output Jitter**”, *Proceedings of Real-Time Computing Systems and Applications (RTCSA 1999)*, pp. 62-69, December 1999 (citation count: 136)
- [3] **S. Gorinsky**, S. Baruah, and A. Stoyen, “**Boosting the Network Performance via Traffic Reshaping**”, *Proceedings of the International Conference on Computer Communications and Networks (ICCCN 1997)*, pp. 285-290, September 1997 (citation count: 4)
- [2] **S. Gorinsky**, S. Baruah, T. Marlowe, and A. Stoyenko, “**Exact and Efficient Analysis of Schedulability in Fixed-Packet Networks: A Generic Approach**”, *Proceedings of IEEE INFOCOM 1997*, pp. 584-591, April 1997 (citation count: 18)
- [1] **S. Gorinsky**, S. Baruah, and A. Stoyenko, “**Traffic Reshaping in Packet-Switched Virtual-Circuit Fixed-Packet Network**”, *Proceedings of Resource Allocation Problems in Multimedia Systems (RAPMS 1996)*, pp. 1-5, December 1996 (citation count: 4)

SELECTED TECHNICAL REPORTS

- [2] **S. Gorinsky** and H. Vin, “**Extended Analysis of Binary Adjustment Algorithms**”, *Technical Report TR2002-39, Department of Computer Sciences, University of Texas at Austin*, August 2002 (citation count: 32)
- [1] **S. Gorinsky** and H. Vin, “**Additive Increase Appears Inferior**”, *Technical Report TR2000-18, Department of Computer Sciences, University of Texas at Austin*, May 2000 (citation count: 33)

EDITORIALS

- [8] **S. Gorinsky**, “**Welcome Message from the ICNP 2020 General Chair**”, *Proceedings of IEEE ICNP 2020*, p. i, October 2020
- [7] R. Holz, M. Mellia, O. Bonaventure, H. Haddadi, M. Caesar, **S. Gorinsky**, G. Antichi, J. Camp, K. Klaffy, B. Raman, A. Sperotto, A. Viana, and S. Uhlig, “**Update on ACM SIGCOMM CCR Reviewing Process: Towards a More Open Review Process**”, *ACM SIGCOMM Computer Communication Review*, 50(3), pp. 55-56, July 2020
- [6] **S. Gorinsky** and J. Tapolcai, “**Message from the General Chairs**”, *Proceedings of ACM SIGCOMM 2018*, p. i, August 2018

EDITORIALS (continued)

- [5] **S. Gorinsky** and J. Liebeherr, “**Message from the ICNP 2017 Program Committee Chairs**”, *Proceedings of IEEE ICNP 2017*, pp. 3-4, October 2017
- [4] N. Ganguly, **S. Gorinsky**, and A. Sabharwal, “**Message From the COMSNETS 2017 General Chairs**”, *Proceedings of COMSNETS 2017*, pp. iv-v, January 2017
- [3] **S. Gorinsky**, “**Welcome Message from the WoWMoM 2013 General Chair**”, *Proceedings of IEEE WoWMoM 2013*, pp. 1-2, June 2013
- [2] S. Bhashyam, **S. Gorinsky**, and P. Shenoy, “**Message from TPC Co-Chairs**”, *Proceedings of COMSNETS 2013*, p. 1, January 2013
- [1] **S. Gorinsky** and S. Kalyanaraman, “**Message from E6 2012 Workshop Chairs**”, *Proceedings of COMSNETS 2012*, p. 1, January 2012

HONORS

- 2021 **Distinguished Member** of the Technical Program Committee, *INFOCOM 2021*
- 2020 **Madrid Ambassador** (in recognition of organizing ICNP 2020)
Madrid Convention Bureau, Spain
- 2018 **Distinguished Member** of the Technical Program Committee, *INFOCOM 2018*
- 2017 **Distinguished Member** of the Technical Program Committee, *INFOCOM 2017*
- 2016 **Distinguished Member** of the Technical Program Committee, *INFOCOM 2016*
- 2015 **Distinguished Member** of the Technical Program Committee, *INFOCOM 2015*
- 2013 **I3 Certification** (Promotion, Incorporation and Intensification of Research Activities)
Ministry of Economy and Competitiveness, Spain
- 2008 **Best Paper Award** for “Effairness: Dealing with Time in Congestion Control Evaluation”
International Conference on Networking and Services (ICNS 2008)
- 2007 **Best Paper Award Nomination** for “Fair Efficiency, or Low Average Delay without Starvation”
International Conference on Computer Communications and Networks (ICCCN 2007)
- 1996/5 – 1994/9 **REAP Fellowship** (merit scholarship for graduate students from Russia and Eastern Europe)
Association of International Educators, NAFSA, USIA, USA
- 1994 **Diploma with Honors** (graduation with the highest honors)
Moscow Institute of Electronic Technology, Russia
- 1993/5 – 1992/1 **Moscow Mayor’s Fellowship** (merit scholarship for undergraduate students)
City of Moscow, Russia

RESEARCH FUNDING

- 2023/5 – 2020/6 “**ECID: Edge Computing for Intelligent Driving**”, project member
Spanish Ministry of Science and Innovation, State Program for Research, Development, and Innovation Aimed at Society’s Challenges, grant PID2019-109805RB-I00
101,882 Euros (single institution)
- 2022/12 – 2020/1 “**COMODIN-CM: COVID-19 Monitoring via Data-Intensive Analysis**”, project member
Regional Government of Madrid, Department of Education, Universities, Science, and Office of Spokesperson, approved for funding
86,250 Euros (personal allocation in the total of 1,196,000 Euros, single institution)

RESEARCH FUNDING (continued)

- 2022/12 – 2019/1 **“EdgeData-CM: An Infrastructure for Highly Decentralized Hybrid Systems”**, project member
Regional Government of Madrid, Department of Education and Research, grant P2018/TCS-4499
 703,800 Euros (4 partners)
- 2018/9 – 2014/10 **“Cloud4BigData: Efficient Cloud and BigData Infrastructure”**, project member
Regional Government of Madrid, Department of Education, Youth, and Sports, grant S2013/ICE-2894
 500,020 Euros (4 partners)
- 2016/12 – 2015/1 **“HyperAdapt: Modeling and Online Performance Optimization of Adaptive Networks”**, project member
Spanish Ministry of Science and Innovation, State Program for Research, Development, and Innovation Aimed at Society’s Challenges, grant TEC2014-55713-R
 175,450 Euros (single institution)
- 2015/5 – 2011/12 **“EINS: Network of Excellence in Internet Science”**, PI
European Commission, FP7-ICT grant 288021
 4,997,000 Euros (33 partner institutions)
- 2014/12 – 2010/1 **“Secure Networked Systems”**, sole PI
Spanish Ministry of Science and Innovation, Ramon y Cajal grant RYC-2009-04660
 192,480 Euros
- 2013/12 – 2010/1 **“MEDIANET: Integration of Next Generation Multimedia Services in the Internet of the Future”**, project member
Regional Government of Madrid, Department of Education grant S2009/TIC-1468
 858,840 Euros (4 partners)
- 2013/6 – 2010/7 **“MEDIEVAL: MultimEDIA transport for mobiIE Video AppLications”**, key personnel
European Commission, FP7-ICT grant 258053
 3,470,885 Euros (9 partner institutions)
- 2013/6 – 2010/7 **“FLAVIA: FLexible Architecture for Virtualizable wireless future Internet Access”**, key personnel
European Commission, FP7-ICT grant 257263
 3,653,886 Euros (10 partner institutions)
- 2013/2 – 2010/10 **“AMAROUT: Network Service Differentiation via Built-in Performance Incentives”**, PI
European Commission, FP7-PEOPLE grant 229599
 75,596 Euros (out of the total 3,830,000 Euros)
- 2009/8 – 2006/9 **“An Architecture for a Diversified Internet”**, Co-PI
U.S. National Science Foundation, NSF grant CNS-0626661, \$1,098,834
- 2009/8 – 2006/9 **“Technologies for Improving Laboratory Experiences in Advanced Technical Education”**, Co-PI
U.S. National Science Foundation, NSF grant REC-0632580, \$439,620
- 2007/12 – 2004/1 **“Technologies for Dynamically Extensible Networks”**, project member
U.S. National Science Foundation, NSF grant ANI-0325298, \$2,100,000
- 2005/8 – 2004/9 **“Virtual Networking – Enabling Network Service Innovation”**, Co-PI
U.S. National Science Foundation, NSF grant CNS-0435173, \$250,000
- 2003/8 – 2000/9 **“Multicast Congestion Control Protocols”**, project member
U.S. National Science Foundation, NSF grant ANI-0082294, \$600,000

PROFESSIONAL SERVICE

present – 2004

Advising of Doctoral Students

Leonardo Peroni, Carlos III University of Madrid, Spain, from 2020

Dr. Pradeep Bangera, "*Alternative Revenue Sources for Internet Service Providers*", Carlos III University of Madrid, Spain, 2016/11 (Ph.D. in Telematics Engineering; defended on 2016/11/14; last known position: PriceFlier, India)

Dr. Syed Hasan, "*The Role of Topology and Contracts in Internet Content Delivery*", Carlos III University of Madrid, Spain, 2016/6 (Ph.D. in Telematics Engineering; defended on 2016/6/20; last known position: PriceFlier, India)

Dr. Ignacio Castro, "*Economics of Internet Interdomain Interconnections*", Open University of Catalonia, Spain, 2015/7 (Ph.D. in Information and Knowledge Society; defended on 2015/7/20; last known position: Lecturer at Queen Mary University of London, United Kingdom)

Dr. Maxim Podlesny, "*Networking Mechanisms for Delay-Sensitive Applications*", Washington University in St. Louis, USA, 2009/8 (Ph.D. in Computer Science; defended on 2009/7/28; last known position: Senior Associate at PwC Canada)

present – 2003

Doctoral Dissertation Committees

Dr. Pavel Chuprikov, "*Theoretical and Empirical Analysis of Fundamental Bottlenecks in Networking and Distributed Computing*", Higher School of Economics, Russia, 2019/11 (Doctor of Philosophy in Computer Science; defended on 2019/11/14, evaluation committee: Dr. Valery Kalyagin, Dr. Sergey Gorinsky, Dr. Alexander Kulikov, Dr. Vladimir Podolskii, and Dr. Arseny Shur; supervisors: Dr. Kirill Kogan and Dr. Sergey Nikolenko)

Dr. Ilya Nikolaevskiy, "*Scalability and Resiliency of Static Routing*", Aalto University, Finland, 2016/12 (Doctor of Science in Computer Science; defended on 2016/12/20, pre-examiners: Dr. Alon Efrat and Dr. Sergey Gorinsky; opponent: Dr. Yevgeni Koucheryavy; instructors: Dr. Andrei Gurtov and Dr. Andrey Lukyanenko; supervisor: Dr. Antti Ylä-Jääski)

Dr. Marco Chiesa, "*The Role of Routing Policies in the Internet: Stability, Security, and Load-Balancing*", Roma Tre University, Italy, 2014/6 (Ph.D. in Computer Science and Engineering; defended on 2014/6/9, reviewers: Dr. Sergey Gorinsky and Dr. Gordon Wilfong; supervisor: Dr. Giuseppe Di Battista)

Dr. Tatiana Polishchuk, "*Enabling Multipath and Multicast Data Transmission in Legacy and Future Internet*", University of Helsinki, Finland, 2013/9 (Ph.D. in Computer Science; defended on 2013/9/9, pre-examiners: Dr. Sergey Gorinsky and Dr. Guillaume Urvoy-Keller; opponent: Dr. Bob Briscoe; instructor: Dr. Andrei Gurtov; supervisor: Dr. Jussi Kangasharju)

Dr. Arun Vishwanath, "*Routers and Networks with Near-Zero Buffers*", University of New South Wales, Australia, 2011/3 (Ph.D. in Electrical Engineering and Telecommunications; supervisor: Dr. Vijay Sivaraman)

Dr. Ruibiao Qiu, "*Design Issues for Reserved Delivery Subnetworks*", Washington University in St. Louis, USA, 2006/5 (D.Sc. in Computer Science; defended on 2006/1/6; supervisor: Dr. Jonathan Turner)

Dr. Edward Spitznagel, "*High Performance Packet Classification*", Washington University in St. Louis, USA, 2005/12 (D.Sc. in Computer Science; defended on 2005/6/21; supervisor: Dr. Jonathan Turner)

Dr. Anshul Kantawala, "*Improving the Performance of Internet Data Transport*", Washington University in St. Louis, USA, 2005/5 (D.Sc. in Computer Science; defended on 2005/2/16; supervisor: Dr. Jonathan Turner)

Dr. Prashanth Pappu, "*Scheduling Algorithms for CIOQ Switches*", Washington University in St. Louis, USA, 2004/8 (Ph.D. in Computer Engineering; defended on 2004/7/27; supervisor: Dr. Jonathan Turner)

PROFESSIONAL SERVICE (continued)

- present – 2006 **Journal Editorial Boards**
ACM SIGCOMM Computer Communication Review
Journal of Communications
Journal of Internet Engineering
- present – 2014 **Conference Steering Committees**
COMSNETS Association, the steering committee of COMSNETS conferences
- present – 2013 **General Chairing of Conferences**
ICNP 2020 Chair
SIGCOMM 2018 Chair, with Dr. Janos Tapolcai
COMSNETS 2017 Chair, with Dr. Niloy Ganguly and Dr. Ashutosh Sabharwal
WoWMoM 2013 Chair
- present – 2008 **Chairing of Program Committees**
ERC Networking 2018 (SIGCOMM 2018 Symposium on European Research in Computer Networking) Chair, with Dr. Telma Carvalho, Dr. Xiaoming Fu, Dr. Andrzej Jajszczyk, Dr. Michael Schapira, and Dr. Janos Tapolcai
ICNP 2017 Chair, with Dr. Jörg Liebeherr
CAAME 2017 (ICCCN 2017 Track on Communication Architecture, Algorithms, Modeling, and Evaluation) Chair, with Dr. Baochun Li
NetSciCom 2014 (INFOCOM 2014 Workshop on Network Science for Communication Networks) Chair, with Dr. Nishanth Sastry and Dr. Thrasyvoulos Spyropoulos
COMSNETS 2013 Chair, with Dr. Prashant Shenoy and Dr. Srikrishna Bhashyam
E6 2012 (COMSNETS 2012 Workshop on Energy in Communication, Information, and Cyber-physical Systems) Chair, with Dr. Shivkumar Kalyanaraman
IMDEA Networks Workshop 2011 (on Internet Science) Chair
ICCCN 2009 Vice-Chair, with Dr. Lavy Libman, Dr. Yang Yang, and Dr. Xiaobo Zhou
HSN 2008 (INFOCOM 2008 Workshop on High-Speed Networks) Chair, with Dr. Ashwin Gumaste
FIAP 2008 (ICCCN 2008 Track on Future Internet Architectures and Protocols) Chair, with Dr. Tilman Wolf
- present – 1996 **Organizing Committees**
SIGCOMM 2022 Treasurer
INFOCOM 2019 Best Paper Award Committee Member
CoNEXT 2017 Best Paper Award Committee Member
SIGCOMM 2017 Publication Chair
SIGCOMM 2016 Student Research Competition Judge
SIGCOMM 2016 Student Mentor
COMSNETS 2016 Innovator Committee Member
CoNEXT 2015 Best Paper Award Committee Member
ICNP 2015 Best Paper Award Committee Member
SustainIT 2015 Ph.D. Forum Judge
ICNP 2014 Best Paper Award Committee Member

PROFESSIONAL SERVICE (continued)

- INFOCOM 2012 *Publicity Chair*, with Dr. Lavy Libman and Dr. Yu Cheng
LANMAN 2011 *Publicity Chair*, with Dr. Asis Nasipuri and Dr. Arata Koike
SIGCOMM 2010 *Publication Chair*
INFOCOM 2008 *Publication Chair*, with Dr. Aleksandar Kuzmanovic
SIGCOMM 2004 *Poster Committee Member*
ICECCS 1996 *Organizing Committee Assistant*
- present – 2005 **Program Committees**
SIGCOMM 2022, 2016, 2012
INFOCOM 2022, 2021, 2019–2006 (Area Chair: 2019)
CoNEXT 2021, 2019, 2017–2015
ICNP 2021–2019, 2017–2010, 2008 (Chair: 2017; Area Chair: 2021–2019, 2016, 2013)
NetSoft 2022
HotNets 2020
Mobihoc 2020
ERC Networking 2018 (Chair)
ICCCN 2017, 2009–2007 (Vice-Chair: 2009; Track Chair: 2017, 2008)
PAM 2017, 2014
IC2E 2017
Networking 2016, 2012, 2011
ITC 2016
AINTEC 2016
NetEcon 2015, 2011
NetSciCom 2014 (Chair)
W-PIN+NetEcon 2014
COMSNETS 2013–2009 (Chair: 2013)
ICDCS 2013, 2012
E6 2012 (Chair)
Global Internet 2012–2010
LANMAN 2011, 2008
IMDEA Networks Workshop 2011 (Chair)
ANTS 2011
HSN 2008, 2007 (Chair: 2008)
NEW2AN 2008–2006
ICT 2008
LCN 2005
- present – 2013 **Panel Discussions**
ERC Networking 2018 *"Experiences with Conceiving, Obtaining, and Executing an ERC Grant"*; panelists: Dr. Anat Bremler-Barr, Dr. Angel Lozano, Dr. Costin Raiciu, Dr. Georgios Smaragdakis, Dr. Klaus Wehrle, and Dr. Joerg Widmer; moderator: Dr. Sergey Gorinsky
COMSNETS 2016 *"Net Neutrality: Is it Good, Bad, or Confusing for the Telecom Industry?"*; panelists: Dr. Sergey Gorinsky, Dr. Henning Schulzrinne, Dr. V. Sridhar, Dr. D. Manjunath, Sean Blagsvedt, and Anand Agarwal; moderator: Vijay Mann
ICNP 2013 *"The Future of Information-Centric Networking"*; panelists: Dr. Sergey Gorinsky, Dr. K. K. Ramakrishnan, Dr. Dan Rubenstein, and Dr. Lixia Zhang; moderator: Dr. Ken Calvert

PROFESSIONAL SERVICE (continued)

- NetSciCom 2013 "*Is Network Science Really a Science or Just a Buzzword?*"; panelists: Dr. Sergey Gorinsky, Dr. Nishanth Sastry, and Dr. Thrasyvoulos Spyropoulos; moderator: Dr. Ram Ramanathan
- present – 2005 **Session Chairing**
- INFOCOM 2021, 2019, 2014, 2012–2010, 2008–2006
- SIGCOMM 2020, 2019, 2016, 2012
- HotNets 2020
- ICCCN 2021, 2008, 2007
- ERC Networking 2018
- Networking 2018–2016, 2012
- ISCC 2017, 2005
- ICNP 2016
- CloudCom 2016
- CoNEXT 2015, 2014
- SustainIT 2015
- NetSciCom 2014, 2011
- e-Energy 2012
- COMSNETS 2012, 2011
- NetEcon 2012
- IWQoS 2012
- E6 2012
- RAIT 2012
- HSN 2008, 2007
- present – 2006 **Proposal Evaluation**
- European Research Council (ERC) *Starting Grants*, Europe
- European Commission (EC) *Horizon 2020, FP7*, Europe
- COST Association, Europe
- National Science Foundation (NSF), USA
- Global Environment for Network Innovations (GENI) Project Office, USA
- Swiss National Science Foundation (SNSF), Switzerland
- Israel Science Foundation (ISF), Israel
- National Research, Development, and Innovation Office of Hungary (NKFIH), Hungary
- EDGE MSCA COFUND *Postdoctoral Fellowships*, Ireland
- Research Foundation Flanders (FWO), Belgium
- KAUST Office of Sponsored Research (OSR), Saudi Arabia
- ETH Zurich Research Commission, Switzerland
- present – 2016 **Project Evaluation**
- European Commission (EC) *Horizon 2020*, Europe
- Science and Technology Foundation (FCT) *CMU Portugal Program*, Portugal
- Information Technology Research Academy (ITRA) *ITRA-Mobile*, India

PROFESSIONAL SERVICE (continued)

- present – 2006 **Book Review**
Addison Wesley
John Wiley & Sons
Prentice Hall
- present – 1996 **Journal Review**
IEEE Journal on Selected Areas in Communications
IEEE/ACM Transactions on Networking
Communications of the ACM
ACM SIGCOMM Computer Communication Review
ACM Transactions on Internet Technology
ACM Transactions on Modeling and Performance Evaluation of Computing Systems
ACM Transactions on the Web
ACM Computing Surveys
IEEE Transactions on Circuits and Systems for Video Technology
IEEE Transactions on Communications
IEEE Transactions on Computers
IEEE Transactions on Emerging Topics in Computational Intelligence
IEEE Transactions on Mobile Computing
IEEE Transactions on Multimedia
IEEE Transactions on Network and Service Management
IEEE Transactions on Parallel and Distributed Systems
IEEE Transactions on Services Computing
IEEE Communications Letters
IEEE Network
Computer Networks
Performance Evaluation
Simulation Modelling Practice and Theory
Theoretical Computer Science
Wireless Networks
International Journal of Parallel Programming
Journal of Computer and System Sciences
Journal of Internet Engineering
Journal of Scheduling
- present – 1996 **Conference and Workshop Review**
*SIGCOMM, CoNEXT, INFOCOM, ICNP, SIGMETRICS, HotNets, Mobihoc, ICDCS, Multime-
dia, COMSNETS, Networking, IC2E, ITC, AINTEC, NetEcon, W-PIN+NetEcon, PAM, NOSS-
DAV, IWQoS, Global Internet, DSN, ICC, HSN, ICCCN, GLOBECOM, NEW2AN, ANTS, ICT,
LANMAN, RTAS, LCN, WIAPP, MMCN, ICECCS*
- present – 1997 **Professional Societies**
ACM SIGCOMM
IEEE Communications Society

PROFESSIONAL SERVICE (continued)

- present – 2008 **Professional Society Committees**
ACM/IEEE Computing Curricula Task Force *Networking and Communication Subcommittee Member*
IEEE Communications Society (ComSoc) Technical Committee on High-Speed Networking *Vice-Chair*
- present – 2004 **Institutional Service**
IMDEA Networks Institute *IMDEA-UC3M Research Seminar Series Coordinator*, with Dr. Antonio de la Oliva (present – 2021), Dr. Marcelo Bagnulo (2021 – 2018), and Dr. Jaime Garcia (2018–2010), Spain
Washington University in St. Louis *Undergraduate Council Study Group on Emerging Technologies and Teaching and Learning, Committee Member* (2009–2006), USA
Washington University in St. Louis, *Graduate Student Research Symposium Judge* (2004), USA
- present – 1995 **Conference and Workshop Participation**
SIGCOMM 2021–2018, 2016, 2015, 2013–2011, 2009–1999
INFOCOM 2021, 2019, 2014–2010, 2008–2005, 2002, 2001, 1997
ICNP 2021, 2020, 2016, 2013, 2007, 1998
HotNets 2021, 2020, 2002 (*HotNets-I*)
Networking 2021, 2018–2016, 2014, 2012, 2010
ICCCN 2021, 2008, 2007, 1997, 1996
TMA 2020
NetAI 2019
IMDEA Networks Workshop 2019 (*on Networking Research: Present, Future and Beyond*), 2018, 2017 (*on Networking, Privacy, and Security*), 2016, 2015 (*on Big Data and Cloud Computing*), 2013 (*on Reliable Networked Systems*), 2012 (*on Data*), 2011 (*on Internet Science*), 2010 (*on Energy Efficiency and Networking*)
SCION Day 2019
DE-CIX Madrid Summit 2019, 2018
Neutral Interconnect Days / Neutral Peering Days 2019, 2016
ERC Networking 2018
COMSNETS 2017, 2016, 2013–2011
ISCC 2017, 2005, 1998
CloudCom 2016
RIPE 73 (2016)
CoNEXT 2015, 2014
HotOS XV (2015)
EPF 10 (2015)
MTA-BME Future Internet Research 2015
SustainIT 2015
NetSciCom 2014, 2013, 2011, 2010
CCSES 2014
CNTCV 2014
CoNEXT Student Workshop 2014
Space Internetworking 2014
WoWMoM 2013

PROFESSIONAL SERVICE (continued)

NPSec 2013
Internet Science Conference 1 (2013)
DEV 2013
iGov2 2013
CSWS 2013
e-Energy 2012
E6 2012
NetEcon 2012
IWQoS 2012, 2007
RAIT 2012
WISARD 2012
WIE 2011
W-MUST 2011
EaGL-SysNet 2011
Networking Summit 2011 (on 2021), 2010 (on 2020)
R2S 2010
HSN 2008–2006
ICNS / ICAS 2008, 2005
CCW 2007
SIGMETRICS 2005
GLOBECOM 2005
ICSE 2005
PERCOM 2005
NEW2AN 2004
PINS 2004
RTSS 2002, 1996
NGC 2002
NOSSDAV 2001, 2000
RAPMS 1996
ICECCS 1996, 1995
RSP 1995

SELECTED TALKS

- | | |
|------------|---|
| 2021/11/12 | “RL-Cache: Learning-Based Cache Admission for Content Delivery” (<i>invited talk</i>)
<i>TEWI-Kolloquium</i> , University of Klagenfurt, Austria |
| 2021/7/27 | “On Telemetry and Classifiers” (<i>invited talk</i>)
<i>Kirill Kogan Memorial Workshop</i> , Ariel University, Israel (online presentation) |
| 2021/7/21 | “PREDICAT: Efficient Packet Classification via Prefix Disjointness”
<i>ICCCN 2021</i> , virtual conference |
| 2021/6/22 | “TeleNoise: A Network-Noise Module for In-Band Real-Time Telemetry”
<i>Networking 2021</i> , virtual conference |
| 2019/9/5 | “RL-Cache: Learning-Based Cache Admission for Content Delivery” (<i>invited talk</i>)
<i>Knowledge and Information Sharing Seminar (KISS)</i> , Ericsson, Budapest, Hungary |

SELECTED TALKS (continued)

- 2019/8/23 **“RL-Cache: Learning-Based Cache Admission for Content Delivery”**
NetAI 2019, Beijing, China
- 2019/8/14 **“Paths and Interconnectivity: An Internet Trend and an Architectural Proposal”** (*invited talk*)
ETH Zurich, Switzerland
- 2019/3/13 **“Highlights of SIGCOMM 2018”** (*invited talk*)
IMDEA-UC3M Research Seminar Series, IMDEA Networks Institute, Leganes, Madrid, Spain
- 2019/3/5 **“Highlights of SIGCOMM 2018”** (*invited talk*)
National Research University of Electronic Technology (MIET), Moscow, Russia
- 2019/3/1 **“Highlights of SIGCOMM 2018”** (*invited talk*)
Moscow State University (MSU), Moscow, Russia
- 2018/6/6 **“A Protocol-Ignorance Perspective on Incremental Deployability of Routing Protocols”** (*invited talk*)
IMDEA Networks Workshop 2018, IMDEA Networks Institute, Leganes, Madrid, Spain
- 2017/7/4 **“An Advertising Revenue Model for Access ISPs”**
ISCC 2017, Heraklion, Crete, Greece
- 2017/6/14 **“Ads versus Regular Contents: Dissecting the Web Hosting Ecosystem”**
Networking 2017, Stockholm, Sweden
- 2016/7/26 **“Transit, CDN, IXP, and Other Beasts of the Internet Ecosystem”** (*invited talk*)
Applied Research Center for Computer Networks (ARCCN), Moscow, Russia
- 2016/6/9 **“Route Bazaar”** (*invited talk*)
IMDEA Networks Workshop 2016, IMDEA Networks Institute, Leganes, Madrid, Spain
- 2016/1/8 **“Estimating the Real with the Virtual: How does the Accuracy Relate to the Internet Penetration?”**
COMSNETS 2016, Bangalore, India
- 2015/9/22 **“Remote Peering: Findings and Questions”** (*with Dr. Ignacio Castro*)
European Peering Forum (EPF10), Madrid, Spain
- 2015/9/2 **“Routes and Interconnectivity: An Internet Trend and an Architectural Proposal”** (*invited talk*)
Ericsson Hungary Research, Budapest, Hungary
- 2015/8/13 **“Routes and Interconnectivity: An Internet Trend and an Architectural Proposal”** (*invited talk*)
University of Cambridge, Cambridge, United Kingdom
- 2015/1/5 **“Remote Peering: More Peering without Internet Flattening”** (*invited talk*)
Budapest University of Technology and Economics (BME), Budapest, Hungary
- 2014/12/1 **“Remote Peering: More Peering without Internet Flattening”** (*invited talk*)
NICTA, Sydney, Australia
- 2014/6/10 **“Service Differentiation in the Internet for All”** (*invited talk*)
Space Internetworking 2014, Xanthi, Greece
- 2014/6/3 **“Economics of Traffic Attraction by Transit Providers”**
Networking 2014, Trondheim, Norway
- 2014/5/5 **“Innovations in Internet Interconnections”** (*invited talk*)
University of Toronto, Toronto, Canada

SELECTED TALKS (continued)

- 2014/4/29 **“Trade-offs in Optimizing the Cache Deployments of CDNs”**
INFOCOM 2014, Toronto, Canada
- 2014/2/28 **“The Internet as a Science, in Europe”** (*invited talk*)
National Research University of Electronic Technology (MIET), Moscow, Russia
- 2013/10/7 **“Internet Traffic Management: Security vs. Economics”** (*keynote address*)
NPSec 2013, Göttingen, Germany
- 2013/8/29 **“Innovations in Internet Interconnections”** (*invited talk*)
University of Oslo (UiO), Oslo, Norway
- 2013/8/27 **“Innovations in Internet Interconnections”** (*invited talk*)
Simula Research Laboratory, Fornebu, Norway
- 2012/9/7 **“T4P and CIPT: New Economic Models for Network Interconnection”** (*invited talk*)
Budapest University of Technology and Economics (BME), Budapest, Hungary
- 2012/9/6 **“T4P and CIPT: New Economic Models for Network Interconnection”** (*invited talk*)
Eotvos Lorand University (ELTE), Budapest, Hungary
- 2012/6/4 **“AIST: Insights into Queuing and Loss on Highly Multiplexed Links”**
IWQoS 2012, Coimbra, Portugal
- 2012/5/24 **“Obscure Giants: Detecting the Provider-Free ASes”**
Networking 2012, Prague, Czech Republic
- 2012/3/15 **“On the Real Side of the Internet”** (*keynote address*)
RAIT 2012, Dhanbad, Jharkhand, India
- 2012/3/15 **“Technologies and Economics of Internet Content Dissemination”** (*tutorial*)
RAIT 2012, Dhanbad, Jharkhand, India
- 2011/12/2 **“CIPT: Using Tuangou to Reduce IP Transit Costs”** (*invited talk*)
WIE 2011, La Jolla, California, USA
- 2011/9/9 **“Traffic Attraction through Prefix Deaggregation: An Economic Perspective”** (*invited talk*)
Basque Center for Applied Mathematics (BCAM), Bilbao, Spain
- 2011/9/6 **“Traffic Attraction through Prefix Deaggregation: An Economic Perspective”** (*invited talk*)
Eotvos Lorand University (ELTE), Budapest, Hungary
- 2011/1/19 **“Networking and Meaning of Life”** (*invited talk*)
2nd Workshop on Far-Out Research Ideas, Institute IMDEA Networks, Leganes, Madrid, Spain
- 2010/11/19 **“Institute IMDEA Networks and its Research (Assistants)”** (*invited talk*)
Madrid Science Week, Carlos III University of Madrid, Leganes, Madrid, Spain
- 2010/11/10 **“Technico-Economic Design of Network Protocols and Algorithms”** (*invited talk*)
IMDEA-AETIC-UC3M Technology Transfer Symposium, Leganes, Madrid, Spain
- 2009/11/11 **“Research at IMDEA Networks: Activities and Opportunities”** (*invited talk*)
Madrid Science Week, Carlos III University of Madrid, Leganes, Madrid, Spain
- 2009/3/19 **“Innovating the Multi-Provider Internet: RD Network Services and their Incremental Deployment Incentives”** (*interview talk*)
Pompeu Fabra University, Barcelona, Spain
- 2009/3/17 **“Innovating the Multi-Provider Internet: RD Network Services and their Incremental Deployment Incentives”** (*interview talk*)
Institute IMDEA Networks, Leganes, Madrid, Spain

SELECTED TALKS (continued)

- 2009/3/16 **“Innovating the Multi-Provider Internet: RD Network Services and their Incremental Deployment Incentives”** (*interview talk*)
Telefonica Research, Barcelona, Spain
- 2008/12/18 **“Innovating the Multi-Provider Internet”** (*invited talk*)
University of Konstanz, Konstanz, Germany
- 2008/11/21 **“Innovating the Multi-Provider Internet”** (*interview talk*)
Katholieke Universiteit Leuven (K.U.Leuven), Heverlee, Leuven, Belgium
- 2008/11/13 **“Innovating the Multi-Provider Internet: RD Network Services and their Incremental Deployment Incentives”** (*invited talk*)
Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts, USA
- 2008/10/16 **“RD Network Services: Differentiation through Performance Incentives”** (*invited talk*)
Intel Research Berkeley, Berkeley, California, USA
- 2008/10/10 **“RD Network Services: Differentiation through Performance Incentives”** (*invited talk*)
University of Texas at Austin, Austin, Texas, USA
- 2008/8/4 **“Addressing Heterogeneity, Scalability, and Privacy in Layered Multicast Congestion Control”**
ICCCN 2008, St. Thomas, Virgin Islands, USA
- 2008/3/17 **“Effairness: Dealing with Time in Congestion Control Evaluation”**
ICNS 2008, Gosier, Guadeloupe, France
- 2007/8/14 **“Fair Efficiency, or Low Average Delay without Starvation”**
ICCCN 2007, Kahuku, Hawaii, USA
- 2007/5/11 **“A Network Architecture for Large-Scale Science”**
HSN 2007, Anchorage, Alaska, USA
- 2007/2/5 **“Fair Efficiency, or Low Average Delay without Starvation”** (*invited talk*)
CCW 2007, Pittsburgh, Pennsylvania, USA
- 2006/11/8 **“Bulk-Data Metanet: Virtualization by Example”** (*invited talk*)
NSF FIND kickoff meeting of Principal Investigators, Chantilly, Virginia, USA
- 2006/4/24 **“Dedicated Channels as an Optimal Network Support for Effective Transfer of Massive Data”**
INFOCOM 2006, Barcelona, Spain
- 2005/7/30 **“Washington University in St. Louis: Graduate Studies and Beyond”** (*invited talk*)
U.S. Education Advising Center, Moscow, Russia
- 2005/6/29 **“Link Buffer Sizing: A New Look at the Old Problem”**
ISCC 2005, La Manga del Mar Menor, Spain
- 2004/2/20 **“Robust Congestion Control for IP Multicast”** (*invited talk*)
University of North Carolina, Chapel Hill, North Carolina, USA
- 2004/2/6 **“Feedback Modeling in Internet Congestion Control”**
NEW2AN 2004, St. Petersburg, Russia
- 2003/8/26 **“Robustness to Inflated Subscription in Multicast Congestion Control”**
SIGCOMM 2003, Karlsruhe, Germany
- 2003/8/6 **“Robust Congestion Control for IP Multicast”** (*Ph.D. defense*)
University of Texas at Austin, Austin, Texas, USA

SELECTED TALKS (continued)

- 2003/4 – 2003/2 **“Robust Congestion Control for Multicast Communications”** (*interview talk*)
Eleven universities in the USA and Canada
- 2002/10/24 **“Multicast Congestion Control with Distrusted Receivers”**
NGC 2002, Boston, Massachusetts, USA
- 2001/11/8 **“Effairness: A Metric for Congestion Control Evaluation in Dynamic Networks”** (*invited talk*)
Stanford University, Stanford, California, USA
- 2001/6/25 **“The Utility of Feedback in Layered Multicast Congestion Control”**
NOSSDAV 2001, Port Jefferson, New York, USA
- 2000/11/20 **“Efficient and Scalable Multicast Congestion Control”** (*Ph.D. proposal*)
University of Texas at Austin, Austin, Texas, USA
- 1997/9/23 **“Boosting the Network Performance via Traffic Reshaping”**
ICCCN 1997, Las Vegas, Nevada, USA
- 1997/4/10 **“Exact and Efficient Analysis of Schedulability in Fixed-Packet Networks”**
INFOCOM 1997, Kobe, Japan
- 1996/12/3 **“Traffic Reshaping in Packet-Switched Virtual-Circuit Fixed-Packet Network”**
RAPMS 1996, Washington, DC, USA
- 1995/6/8 **“Development of a Real-Time Motion Image Encoder Using Codesign Methodology”**
RSP 1995, Chapel Hill, North Carolina, USA

TEACHING EXPERIENCE

- 2009/5 – 2009/1 **“Protocols for Computer Networks”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in the Open Network Laboratory (ONL); 4 (1 undergraduate and 3 graduate) students
- 2008/12 – 2008/9 **“Introduction to Computer Networks”**, Washington University in St. Louis
Undergraduate senior-level networking course; broad coverage of Internet designs; experimental assignments in the Open Network Laboratory (ONL); 15 (11 undergraduate and 4 graduate) students; 1 teaching assistant
- 2008/5 – 2008/1 **“Protocols for Computer Networks”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in ONL; 12 (6 undergraduate and 6 graduate) students
- 2007/12 – 2007/9 **“Introduction to Computer Networks”**, Washington University in St. Louis
Undergraduate senior-level networking course; broad coverage of Internet designs; assignments in ONL; 16 (11 undergraduate and 5 graduate) students; 1 teaching assistant
- 2007/12 – 2004/9 **“Research Seminar on Networking”**, Washington University in St. Louis
Discussion of networking research publications
- 2007/5 – 2007/1 **“Protocols for Computer Networks”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in ONL; 21 (3 undergraduate and 18 graduate) students; 2 teaching assistants
- 2006/12 – 2006/9 **“Introduction to Computer Networks”**, Washington University in St. Louis
Undergraduate senior-level networking course; broad coverage of Internet designs; assignments in ONL; 18 (7 undergraduate and 11 graduate) students; 2 teaching assistants

TEACHING EXPERIENCE (continued)

- 2006/5 – 2006/1 **“Protocols for Computer Networks”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in ONL; 19 (3 undergraduate and 16 graduate) students; 1 teaching assistant
- 2005/5 – 2005/1 **“Protocols for Computer Networks”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in PlanetLab; 20 (3 undergraduate and 17 graduate) students; 1 teaching assistant
- 2004/12 – 2004/9 **“Introduction to Computer Networks”**, Washington University in St. Louis
Undergraduate senior-level networking course; broad coverage of Internet designs; 51 (32 undergraduate and 19 graduate) students; 4 teaching assistants
- 2004/5 – 2004/1 **“Advanced Topics in Networking”**, Washington University in St. Louis
Graduate networking course; experimental evaluation in ns-2; 12 (6 undergraduate and 6 graduate) students
- 2003/12 – 2003/9 **“Introduction to Computer Networks”**, Washington University in St. Louis
Undergraduate senior-level networking course; broad coverage of Internet designs; 52 (37 undergraduate and 15 graduate) students; 4 teaching assistants
- 2002/5 – 2002/1 **“Current Topics in Computer Science”**, University of Texas at Austin
Supervisors: Dr. Lorenzo Alvisi, Dr. Michael Dahlin, and Dr. Bruce Porter
Graduate course in support of faculty hiring
- 1998/5 – 1997/6 **“Introduction to Computer Science”**, University of Texas at Austin
Supervisors: Dr. Bruce Porter and Dr. Roger Priebe
Undergraduate classroom and lab sessions covering new material
- 1997/5 – 1995/9 **“Data Communications”** and **“Introduction to Computability and Complexity”**, NJIT
Supervisors: Dr. Boris Verkhovsky and Dr. Alex Stoyenko
Undergraduate and graduate course material preparation and serving as a lecturer on call