Curriculum Vitae
Dr.-Ing. Michael Zink

PROFESSOR
ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT
UNIVERSITY OF MASSACHUSETTS AMHERST
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IEEE SENIOR MEMBER, ACM SENIOR MEMBER

RESEARCH INTERESTS

Next Generation Internet	Measurement architectures and tools, Cloud computing for scientific applications, Virtual Lab for Computer Networks Education, Information Centric Networking
Multimedia Distribution	Architectures for content distribution, Scalable adaptive streaming, Streaming in wireless networks, AR/VR
Sensor Networks	Virtual private sensor networks, Sense-and-respond architectures, Sensor network design and implementation, wireless sensor networks, disaster resiliance
Systems Engineering	Design and implementation of a closed-loop, radar sensor network, Technical project management in interdisciplinary environment

EDUCATION

11/1998 – 09/2003 ***Darmstadt University of Technology*** ***Darmstadt, Germany***
Ph.D. in Electrical Engineering and Information Technology (with distinction)
Ph.D. thesis "Scalable Internet Video-on-Demand Systems"

10/1991 – 07/1997 ***Darmstadt University of Technology*** ***Darmstadt, Germany***
Diploma (equivalent to M.Sc.) in Electrical Engineering and Information Technology, specializing in Communications Technology
- Diploma thesis "Integration of ATM and Internet Quality of Service Architectures: Overview and Evaluation of RSVP over ATM approaches"
- Student thesis "Formal Description of the IPv6 Protocol for OSI Conformance Testing"

PROFESSIONAL APPOINTMENTS

09/2020 – present ***University of Massachusetts*** ***Amherst, USA***
- Professor in the Electrical and Computer Engineering Department
- Co-Director, NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere
- Adjunct Associate Professor in the College of Information and Computer Sciences

09/2015 – 08/2020 ***University of Massachusetts*** ***Amherst, USA***
- Associate Professor in the Electrical and Computer Engineering Department
- Co-Director, NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere
- Adjunct Associate Professor in the College of Information and Computer Sciences

09/2015 – present ***TU Darmstadt*** ***Darmstadt, Germany***
- Adjunct Professor in the Multimedia Communications Lab, Dept. of Electrical Engineering and Information Technology

09/2009 – 08/2015 ***University of Massachusetts*** ***Amherst, USA***
- Assistant Professor in the Electrical and Computer Engineering Department
- Deputy Director for Technical Integration in the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere
- Adjunct Assistant Professor in the College of Information and Computer Sciences

09/2008 – 08/2009 ***University of Massachusetts*** ***Amherst, USA***
- Research Assistant Professor in the Computer Science Dep.
- Deputy Director for Technical Integration in the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere

08/2005 –08/2008 ***University of Massachusetts*** ***Amherst, USA***
- Senior Research Scientist in the Computer Science Department
- Technical Integration Thrust Leader for the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere

04/2004 – 07/2005 ***University of Massachusetts*** ***Amherst, USA***
- Postdoctoral Fellow in the Computer Networks Research Group in the Computer Science Department
- Systems Engineer for the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere

10/2003 – 03/2004 ***Darmstadt University of Technology*** ***Darmstadt, Germany***

- Head of the Multimedia Distribution and Networking group at the Multimedia Communications Lab (KOM)

11/1998 – 09/2003 ***Darmstadt University of Technology*** ***Darmstadt, Germany***

- Research Assistant at the Multimedia Communications Lab (KOM). Involved in several teaching and research projects as described below

10/1997 – 09/1998 ***National Institute of Standards and Technology*** ***Gaithersburg, MD, USA***

- Guest Researcher at the Information Technologies Lab. Designed and implemented an MPLS capable router

02/1997 – 04/1997 ***Darmstadt University of Technology*** ***Darmstadt, Germany***
08/1997 – 09/1997

- Student Assistant at the Multimedia Communications Lab (KOM). Participation in research projects and conference paper preparation

01/1992 – 12/1996 ***ID GmbH*** ***Wiesbaden, Germany***

- Technical staff and trainer
- Novell Certified Network Engineer
- Novell Certified Network Instructor (Held more than 40 courses)

RESEARCH GRANTS & PROJECTS

G-31	04/2022 to date	PI: **Michael Zink**, CC* Compute: COllaborative Next-generation Technology In the Northeast: the UMassUnity Machine (CONTINUUM), National Science Foundation, Total Funding: $399,67
G-30	10/2021 to date	PI: Klara Nahrstedt, Co-PIs: **Michael Zink,** Ramesh Sitaraman, Jacob Chakareski, Collaborative Research: CNS Core: Medium: miVirtualSeat: Semantics-aware Content Distribution for Immersive Meeting Environments, National Science Foundation, Total Funding: $1,200,000, My share: $300,000
G-29	10/2021 to date	PI: Miriam Leeser, Co-PI: **Michael Zink**, EAGER: Collaborative Research: CNS: PRATE: P4 Research enabled by Accelerators in national TestbEds, National Science Foundation, Total Funding: $300,000, My share: $149,842
G-28	10/2020 to date	PI: **Michael Zink**, Co-PIs: Ewa Deelman, Anirban Mandal, Prasad Calyam, CC* Integration-Large: An 'On-the-fly' Deeply Programmable End-to-end Network-Centric Platform for Edge-to-Core Workflows, National Science Foundation, Total funding: $757,198, My share: $251,198
G-27	10/2019 to date	PI: **Michael Zink**, Co-PIs: Orran Krieger, Peter Desnoyers, Miriam Leeser, Martin Herbordt, CCRI: Grand: Developing a Testbed for the Research Community Exploring Next-Generation Cloud Platforms, National Science Foundation, Total funding: $5,000,000, My share: $1,319,834
G-26	10/2019 to date	PI: **Michael Zink** (33.4%), Co-PIs: Klara Nahrstedt (33.3%), Ramesh Sitaraman (33.3%), CNS Core: Medium: Collaborative Research: Scalable Dissemination and Navigation of Video 360° Content for Personalized Viewing, National Science Foundation, Total funding: $1,200,000, My share: $400,000
G-25	06/2019 – 12/2019	PI: **Michael Zink,** AIR-TT: Proof of Concept Multifunction Micro-drone and Weather Surveillance System: Supplement for two REU students, National Science Foundation, Total funding: $16,000
G-24	07/2018 – 07/2021	PI: Anirban Mandal, Co-PIs: Ewa Deelman, **Michael Zink**, Ivan Rodero, Cong Wang, CC* Integration: Delivering a Dynamic Network-Centric Platform for Data-Driven Science (DyNamo), National Science

		Foundation, Total funding: $1,000,000, My share: $116,473
G-23	10/2017 to date	PI: Rob Ricci, Co-PIs: **Michael Zink,** Brig 'Chip' Elliot, Srinivasa Akella, Kuang-Ching Wang, CloudLab Phase II: Community Infrastructure to Expand the Frontiers of Cloud Computing Research, National Science Foundation, Total funding: $8,392,095, My share: $303,388
G-22	07/2017 - 12/2019	PI: **Michael Zink,** AIR-TT: Proof of Concept Multifunction Micro-drone and Weather Surveillance System, National Science Foundation, Total funding: $215,930
G-21	01/2016 – 08/2018	PI: **Michael Zink**, GENI Going Forward: Virtual Computer Networks Lab II, National Science Foundation, Total funding: $ 117,885
G-20	09/2015 – 10/2019	PI: **Michael Zink**, CC*DNI: High-bandwidth Network Connectivity for Remote Sensing Research, National Science Foundation, Total funding: $163,028
G-19	04/2015 – 07/2017	PI: **Michael Zink**, Exchange of Actionable Information at the Tactical Edge (EAITE)/DISCO, Office of Naval Research, Total funding: $218,003
G-18	03/2015 – 12/2015	PI: **Michael Zink**, NSF I-Coprs: Commercialization of a City-Scale Weather Radar, National Science Foundation, Total funding: $50,000
G-17	09/2014 – 09/2019	PI: Dong-Jun Seo, Co-PIs: **Michael Zink**, Xinbao Yu, Zheng Fang, Jean Gao, CyberSEES: Type 2: Integrative Sensing and Prediction of Urban Water for Sustainable, National Science Foundation, Total funding: $1,196,295, My share: $297,549
G-16	09/2014 – 08/2018	PI: Rob Ricci, Co-PIs: **Michael Zink,** Brig 'Chip' Elliot, Srinivasa Akella, Kuang-Ching Wang (UMass portion: Michael Zink 60%, David Irwin 40%), CloudLab: Flexible Scientific Infrastructure to Support Fundamental Advances in Cloud Architectures and Applications National Science Foundation, Total funding: $10,000,000, UMass funding: $390,582, My share: $234,349
G-15	03/2014 – 02/2020	PI: **Michael Zink**, CAREER: Sensing as a Service: Architectures for Closed-loop Sensor Network, National Science Foundation, Total funding: $406,620
G-14	06/2014 – 04/2019	PI: Arun Venkataramani, Senior Personnel: **Michael Zink,** FIA-NP**:** Collaborative Research: MobilityFirst,

		National Science Foundation, Total funding: $1,350,000, My share: ~$130,000
G-13	10/2013 – 08/2016	PI: **Michael Zink,** Co-PIs: Jim Kurose, Jeanne Albrecht, Max Ott**,** Virtual Computer Networks Lab**,** National Science Foundation, Total funding: $299,397, My share: $207,758
G-12	09/2013 – 12/2019	PI: Brenda Philips (60%), Co-PI: **Michael Zink** (40%), HazardSEES Type 2: Next Generation, Resilient Warning Systems for Tornadoes and Flash Floods National Science Foundation, Total funding: $2,481,020, My share: $992,408
G-11	05/2013 – 12/2013	PI: **Michael Zink** (80%), Co-PI: Eric Adams (20%), CASA Radar Integration with NWS Forecaster, National Weather Service, Total funding: $75,370, My share: $60,296
G-10	12/2012 – 12/2014	PI: John Dubach (50%), Co-PI: **Michael Zink** (50%), CC-NIE Integration: Multi-Wave - A Dedicated Data Transport Ring to Support 21st Century Computational Research, National Science Foundation, Total funding: $867,040, My share: $438,020
G-9	04/2012 – 04/2014	PI: **Michael Zink** (60%), Co-PI: Brenda Philips (40%), EAGER: Ultra high-speed bandwidth for performance improvements in radar networks for weather and aircraft surveillance, National Science Foundation, Total funding: $289,029, My share: $173,455
G-8	10/2011 – 09/2015	PI: **Michael Zink** (33.4%) , Co-PIs: Max Ott (33.3%), Ilya Baldine (33.3%), GIMI: Large-scale GENI Instrumentation and Measurement Infrastructure, National Science Foundation, Total funding: $1,448,523, My share: $513,949
G-7	07/2010 to date	Investigator: **Michael Zink**, Jerome M. Paros Fund for Measurement and Environmental Sciences Research, Total funding: ~1,000,000 (~$120,000 per year)
G-6	10/2009 – 09/2012	PI: **Michael Zink** (33.4%), Co-PIs: Prashant Shenoy (33.3%), Jim Kurose (33.3%), Data Intensive Cloud for GENI National Science Foundation, Total funding: $535,227, My share: $178,409
G-5	10/2009 – 02/2013	PI: Ted Djaferis (50%), Co-PI: **Michael Zink** (50%), Engaging Industry Personnel in the CASA Enterprise, National Science Foundation, Total funding: $748,965, My share: $374,482

G-4	09/2008 – 08/2011	PI: Prashant Shenoy (25%), Co-PIs: Jim Kurose (25%), Deepak Ganesan (25%), **Michael Zink** (25%), Sensor Virtualization and Slivering in an Outdoor Wide-Area Wireless GENI Sensor/Actuator Network Testbed, National Science Foundation, Total funding: $490,000, My share: $122,500
G-3	04/2005 – 08/2015	PI: David McLaughlin, Co-PIs: V. Chandrasekar, Ming Xue, **Michael Zink**, Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere, National Science Foundation, Total funding: $31,199,009
G-2	03/2002 – 03/2004	Multimedia distribution: feedback and adaptation in wireless networks (Technical Project Leader) Panasonic European Laboratories GmbH
G-1	11/1998 – 02/2002	MediaNode: support for multimedia enhanced teaching Ministry for Science and Art, State of Hesse, Germany

TEACHING, ADVISING, MANAGEMENT

Spring 2022	***University of Massachusetts***	***Amherst, USA***
	ECE 671 – Lecture for graduate students on "Computer Networks" (30 Students)	
Fall 2021	***University of Massachusetts***	***Amherst, USA***
	ECE 241 – Lecture for undergraduates "Advanced Programming I" (85 Students)	
Spring 2021	***University of Massachusetts***	***Amherst, USA***
	ECE 671 – Lecture for graduate students on "Computer Networks" (10 Students)	
Fall 2020	***University of Massachusetts***	***Amherst, USA***
	ECE 241 – Lecture for undergraduates "Advanced Programming I" (81 Students)	
Spring 2019	***University of Massachusetts***	***Amherst, USA***
	ECE 671 – Lecture for graduate students on "Computer Networks" (16 Students)	
Fall 2018/ Spring 2019	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2018	***University of Massachusetts***	***Amherst, USA***
	ECE 241 – Lecture for undergraduates "Advanced Programming I" (newly developed course for the revised ECE curriculum) (80 Students)	
Spring 2018	***University of Massachusetts***	***Amherst, USA***
	ECE 671 – Lecture for graduate students on "Computer Networks" (14 Students)	
Fall 2017/ Spring 2018	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2017	***University of Massachusetts***	***Amherst, USA***
	ECE 597SI/697SI – Lecture for undergraduates and graduates on "Integrative Systems Engineering" (42 Students)	
Fall 2016	***University of Massachusetts***	***Amherst, USA***
	ECE 671 – Lecture for graduate students on "Computer Networks" (44 Students)	
	University of Massachusetts	***Amherst, USA***
	ECE 597SI/697SI – Lecture for undergraduates and graduates on "Integrative Systems Engineering" (32 Students)	
Spring 2015	***University of Massachusetts***	***Amherst, USA***
	ECE 374 – Lecture for undergraduates on "Computer Networks & Internet" (62 Students)	

Fall 2014/ Spring 2015	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2014	***University of Massachusetts***	***Amherst, USA***
	ECE 242 – Lecture for undergraduates on "Data Structures & Algorithms" (125 Students)	
Spring 2014	***University of Massachusetts***	***Amherst, USA***
	ECE 374 – Lecture for undergraduates on "Computer Networks & Internet" (65 Students)	
Fall 2013/ Spring 2014	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2013	***University of Massachusetts***	***Amherst, USA***
	ECE 597SI/697SI – Lecture for graduates on "Integrative Systems Engineering" (47 Students)	
Spring 2013	***University of Massachusetts***	***Amherst, USA***
	ECE 374 – Lecture for undergraduates on "Computer Networks & Internet" (52 Students)	
Fall 2012/ Spring 2013	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2012	***University of Massachusetts***	***Amherst, USA***
	ECE 697SI – Lecture for graduates on "Integrative Systems Engineering" (8 Students)	
Spring 2012	***University of Massachusetts***	***Amherst, USA***
	ECE 374 – Lecture for undergraduates on "Computer Networks & Internet" (37 Students)	
Fall 2011/ Spring 2012	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2011	***University of Massachusetts***	***Amherst, USA***
	ECE 597ST/697ST – Lecture for senior undergraduates and graduates on "Systems Simulation" (23 students)	
Spring 2011	***University of Massachusetts***	***Amherst, USA***
	ECE 374 – Lecture for undergraduates on "Computer Networks & Internet" (43 Students)	
Fall 2010/ Spring 2011	***University of Massachusetts***	***Amherst, USA***
	ECE 415 – Senior Design Project: Advised a group of 4 students	
Fall 2010	***University of Massachusetts***	***Amherst, USA***
	ECE 697SI – Lecture for graduates on "Integrative Systems Engineering" (22 Students)	
Spring 2010	***University of Massachusetts***	***Amherst, USA***
	ECE 597S/697S – Lecture for senior undergraduates and graduates on "Systems Simulation" (22 students)	

Fall 2009/ Spring 2010	***University of Massachusetts*** ***Amherst, USA*** ECE 415 – Senior Design Project: Advised a group of 4 students
Fall 2006	***University of Massachusetts*** ***Amherst, USA*** CS 491M – Lecture for senior undergraduates in the CS and ECE departments "Introduction to Systems Engineering"
Fall 2005	***University of Massachusetts*** ***Amherst, USA*** CS 496A – Independent Study Class "Independent Study in Wireless Networking" (Co-taught with Prof. Kurose)
Fall 2000	***Darmstadt University of Technology*** ***Darmstadt, Germany*** Seminar "Introduction to Operating Systems"
Fall 1999, 2000, 2001, 2002	***Darmstadt University of Technology*** ***Darmstadt, Germany*** Lab Exercises "Communication Networks"
Spring 1999	***Darmstadt University of Technology*** ***Darmstadt, Germany*** Seminar "MBone: The Multicast Backbone"
2001, 2002, 2003	***Darmstadt University of Technology*** ***Darmstadt, Germany*** Substitute for lectures "Communication Networks I + II" and "Multimedia Communication"
08/2005 – present	Supervision of staff: • Emmanuel Cecchet, Senior Research Fellow • Amr Rizk, Postdoctoral Research Associate (2015-2016) • David Pepyne, Senior Research Fellow (2012-2021) • David Irwin, Postdoctoral Research Associate (2007-2011) • David Westbrook, Senior Research Fellow (2012-2021) • Eric Lyons, Research Scientist (2009-2021)
11/1998 – 06/2003	Supervision of eight Student Theses and 8 Master Theses at Darmstadt University of Technology

GRADUATE STUDENTS AND POSTDOCS

Nauman Javed	PhD (co-advised with Prof. Wolf), now with Gaikai, (defended 05/29/2013)
Dilip Kumar Krishnappa	PhD, now at Akamai (defended 11/12/2014)
Cong Wang	PhD, now at RENCI/UNC Chapel Hill (defended 6/12/2017)
Amr Rizk	Postdoc, now Assistant Professor at University of Duisburg-Essen, Germany (postdoc at UMass 03/2015 – 02/2016)
Thiago Teixeira	PhD (co-advised with Prof. Wolf), now with Brightcove (defended 08/19/2019)
Divyashri Bhat	PhD, now with Apple (defended 09/13/2019)

INVITED TALKS

10/2019	Convergent Research: Lessons from the Collaborative Adaptive Sensing of the Atmosphere (CASA) Engineering Research Center, 2019 NSF ERC Planning Grant Workshop, Alexandria, VA
07/2019	CityWarn: A Smart, Hyperlocal, Context-Aware Hazard Notification System, ErmergenCity, Seminar, Secure Mobile Networking Lab, TU Darmstadt, Germany
07/2019	Mi360World: Scalable Dissemination and Navigation of Video 360, MAKI Seminar, Multimedia Communications Lab, TU Darmstadt, Germany
04/2018	Network Assisted Content Distribution for Adaptive Bitrate Video Streaming, Computer Science Colloqium, University at Albany (SUNY), Albany, NY.
07/2014	Software Defined Exchanges: New Opportunities for Future Internet Research, The Fourth GENI Research and Educational Experiment Camp (GREE-SC 2014), Iowa State University, Ames, IA.
09/2013	Collaborative Adaptive Sensing of the Atmosphere (CASA), Architecture, Design, Implementation, and Operation of Sensor/Actuator Networks for Severe Weather Observations, Alvine Engineering Professional Effectiveness and Enrichment Program, University of New Haven, New Haven, CT.
11/2012	Collaborative Adaptive Sensing of the Atmosphere (CASA): Architecture, Design, Implementation, and Operation of

	Sensor/Actuator Networks for Severe Weather Observations. Colloquium, University of Connecticut, Storrs, CT.
07/2012	Closed-loop Sensor Networks for Atmospheric Sensing. Siemens AG Corporate Technology, Munich, Germany.
07/2012	ExoGENI and GIMI: GENI Racks and Their Measurement and Instrumentation Tools. 12th Würzburg Workshop on IP: Joint ITG and Euro-NF Workshop "Visions of Future Generation Networks" (EuroView2012), Würzburg, Germany.
08/2011	NowCasting: UMass/CASA Weather Radar Demonstration. 11th Würzburg Workshop on IP: Joint ITG and Euro-NF Workshop "Visions of Future Generation Networks" (EuroView2011), Würzburg, Germany.
02/2011	Closed-loop Sensor Networks for Atmospheric Sensing. Keynote at IEEE Sensor App. Symposium, San Antonio, TX.
01/2009	Collaborative Adaptive Sensing of the Atmosphere. Systems Engineering Colloquium, Department of Systems and Information Engineering, University of Virginia, Charlottesville, VA
09/2006	CASA IP1 Meteorological Command and Control. Presentation to members of the DOE ARM Program, Amherst, MA
01/2005	CASA - Collaborative Adaptive Sensing of the Atmosphere. Darmstadt University of Technology, Darmstadt, Germany.
06/2004	Meteorological Command and Control in CASA's IP1A Test Bed. MIT Lincoln Laboratory, Lincoln, MA, USA.
05/2004	Content Distribution in CASA. Dagstuhl Seminar on Content Distribution Networks, Dagstuhl, Germany.
03/2003	Scalable Adaptive Streaming in the Internet. Department of Informatics, University of Oslo, Oslo, Norway.
02/2002	Scalable Streaming for Internet Video Distribution. University of Massachusetts, Amherst, MA, USA.

PROFESSIONAL ACTIVITIES

06/2019 – to date	Steering Committee Member of the ACM Multimedia Systems Conference
10/2008 – 12/2019	Editorial Board Member of the Springer Multimedia Systems Journal
2022	Technical Program Co-Chair: • ACM Workshop on Network and Operating System Support for Digital Audio and Video (NOSSDAV) Program Committee Member: • IEEE ICC RAFNET Workshop • ACM Multimedia 2022
2021	Technical Program Co-Chair: • CNERT: Computer and Networking Experimental Research using Testbeds (INFOCOM Workshop) Technical Program Area Chair • ACM Multimedia 2021 Program committee member: • IFIP Networking 2021 • ACM Multimedia Systems 2021 • IEEE CloudNet 2021
2020	Technical Program Co-Chair: • CNERT: Computer and Networking Experimental Research using Testbeds (INFOCOM Workshop) Program committee member: • IFIP Networking 2020 • ACM Multimedia 2020
2019	General Chair: • ACM Multimedia Systems Conference 2019 Program committee member: • ACM Workshop on Network and Operating System Support for Digital Audio and Video (NOSSDAV) • INFOCOM 2019 • ACM Multimedia Asia 2019
2018	Technical Program Co-Chair: • ACM Multimedia Systems Conference 2018 Program committee member: • IFIP Networking 2018 • ACM SIGCOMM 2018 Workshop on Virtual Reality and Augmented Reality Network
2017	Program committee member:

- ACM Workshop on Network and Operating System Support for Digital Audio and Video (NOSSDAV)
- ACM Multimedia 2017
- ACM Multimedia Systems Conference 2017
- IEEE Workshop on Multimedia Streaming in Information Centric Networks
- 26th International Conference on Computer Communications and Networks (ICCCN)
- IFIP Networking 2017

2016 Technical Program Co-Chair:
- International Conference in Networking Science & Practice (ITC) 28 Area 4 "Next generation and future Internet architectures"
- Demo Session at ACM MM Systems

Program committee member:
- 24th IEEE International Conference on Network Protocols
- ACM Multimedia
- 9th USENIX Workshop on Cyber Security Experimentation and Test (CSET)
- Infocom Workshop on Multimedia Streaming in Information-/Content- Centric Networks (MuSIC)
- ACM Workshop on Network and Operating System Support for Digital Audio and Video (NOSSDAV)
- IEEE Local Computer Networks Conference 2016
- ACM Multimedia Systems Conference

2015 Technical Program Committee Co-Chair:
- NOSSDAV 2015

Program committee member:
- NetSys 2015
- ACM Multimedia Systems 2015
- LCN 2015
- IEEE MASS Workshop on Content-Centric Networking (CCN 2015)
- Workshop on Multimedia Streaming in Information Centric Networks (MuSiC)

2014 Program committee member:
- ACM Multimedia Systems 2014
- NOSSDAV 2014
- LCN 2014
- GREE 2014

2013 Program committee member:
- ACM Multimedia Systems 2013
- NOSSDAV 2013

- ICCCN 2013
- LCN 2013
- ACM MM 2013 (Area Chair)

2012 Technical Program Committee Chair:
- TridentCom 2012

Program committee member:
- ACM Multimedia Systems 2012
- LCN 2012

2011 Program committee member:
- INFOCOM 2011
- ACM Multimedia Conference 2011
- ACM Multimedia Systems 2011
- NOSSDAV 2011

2010 Program committee member:
- INFOCOM 2010
- ACM Multimedia Conference 2010
- ACM Multimedia Systems Conference 2010

2009 Program committee member:
- INFOCOM 2009
- ACM Multimedia 2009
- YouTube and the 2008 Election Cycle in the United States
- IEEE FNM 2009
- WASA 2009

2008 Program committee member:
- INFOCOM 2008
- ACM Multimedia 2008
- MMCN 2008
- PAM 2008

2007 Program committee member:
- ACM Multimedia 2007
- MMCN 2007

2006 Program committee member:
- ACM Multimedia 2006
- MMCN 2006
- CCNC 2006
- Euromicro 2006
- NOSSDAV 2006

2005 Program committee member:
- ACM Multimedia 2005
- CCNC 2005
- WWW 2005

- ICPP 2005
- Euromicro 2005

2004 Program committee member:
- MMCN 2004
- NRBC 2004

2003 Program committee member:
- ACM Multimedia 2003
- MMCN 2003

2000 to date Adhoc reviews for the journals:
- IEEE Transactions on Multimedia
- ACM Transactions on Multimedia Computing Communications and Applications
- Inderscience International Journal on Sensor Networks
- Elsevier International Journal on Computer and Telecommunication Networking
- IEEE Transactions on Networking

AWARDS

2021 ***Best Student Paper Award at IEEE International Symposium on Multimedia (ISM) for our paper "L3BOU: Low Latency, Low Bandwidth, Optimized Super-Resolution Backhaul for 360-Degree Video Streaming"***

2020 ***Best Paper Award at IEEE International Symposium on Multimedia (ISM) for our paper "SEAWARE: Semantic Aware View Prediction System for 360-degree Video Streaming"***

2016 ***Excellence in DASH Award at ACM Multimedia Systems 2016 for our paper "SQUAD: A Spectrum-based Quality Adaptation for Dynamic Adaptive Streaming over HTTP"***

2014 ***NSF CAREER Award (2014)***

2013 ***Best Paper Award at the Second GENI Research and Educational Experiment Workshop (GREE2013).***

2008 ***Best Paper Award at SPIE/ACM Multimedia Communication and Networking Conference 2008***

2007 ***"Journal's best reviewer in 2007", Springer/ACM Multimedia Systems Journal***

BOOKS

B-2 Thanasis Korakis, Michael Zink, Max Ott (Eds.). Testbeds and Research Infrastructure. Development of Networks and Communities. Springer. ISBN 978-3-642-35575-2

B-1 M. Zink. Scalable Video-on-Demand: Adaptive Internet-based Distribution. Wiley. October 2005. ISBN 0-470-02268-X.

BOOK CHAPTERS

BC-3 George Papadimitriou, Cong Wang, Eric Lyons, Komal Thareja, Paul Ruth, J. J. Villalobos, Ivan Rodero, Ewa Deelman, Michael Zink, Anirban Mandal. Dynamic Network-centric Multi-cloud Platform for Real-Time and Data-Intensive Science Workflows. In *Frederica Darema, Handbook of Dynamic Data Driven Applications Systems, Volume 2*. Springer, Springer Switzerland, 2021.

BC-2 Thierry Rakotoarivelo, Guillaume Jourjon, Olivire Nehani, Max Ott, and Michael Zink. A walk through the geni experiment cycle. In *Rick McGeer, Mark Berman, Chip Elliott, and Rob Ricci, editors, The GENI Book, chapter 10, pages 266–290.* Springer, Springer Switzerland, 2016.

BC-1 M. Zink, and P. Shenoy. Caching and Distribution Issues for Streaming Content Distribution. In *Web Content Delivery.* Springer. August 2005. ISBN 0-387-24356-9.

JOURNAL ARTICLES

(Names in **bold** indicate my graduate students, names in *italic* my postdoc, and names in ***bold and italic*** CASA researchers I supervise.)

J-22 **Ishita Dasgupta**, Susmit Shannigrahi, Michael Zink. A hybrid NDN-IP Architecture for Live Video Streaming: From Host-based to Content-based delivery to Improve QoE. *Accepted for publication in the International Journal of Semantic Computing*.

J-21 Miriam Leeser, Suranga Handagala, Michael Zink. FPGAs in the Cloud. *IEEE Computing in Science and Engineering*, 2001. DOI: 10.1109/MCSE.2021.3127288

J-20 George Papadimitriou, ***Eric Lyons***, Cong Wang, Komal Thareja, Ryan Tanaka, Paul Ruth, Ivan Rodero, Ewa Deelman, Michael Zink, Anirban Mandal. Fair sharing of network resources among workflow ensembles. *Cluster Comput* (2021). https://doi.org/10.1007/s10586-021-03457-3

J-19 Hamideh Habibi, **Ishita Dasgupta**, Seongjin Noh, Sunghee Kim, Michael Zink, Dong-Jun Seo, Matthew Bartos, Branko Kerkez. High-resolution hydrologic forecasting for very large urban areas, Journal of Hydroinformatics, vol. 21, no. 3, pp. 441-454, May 2019. DOI: *https://doi.org/10.2166/hydro.2019.100*

J-18 M. Zink, R. Sitaraman and K. Nahrstedt, Scalable 360° Video Stream Delivery: Challenges, Solutions, and Opportunities, *Proceedings of the IEEE*, vol. 107, no. 4, pp. 639-650, April 2019. DOI: *10.1109/JPROC.2019.2894817*

J-17 M. M. Tajiki, B. Akbari, M. Shojafar, S. H. Ghasemi, M. L. Barazandeh, N. Mokari, L. Chiaraviglio, M. Zink, CECT: computationally efficient congestion-avoidance and traffic engineering in software-defined cloud data centers, *Cluster Computing 21(4), 2018, Pages 1881-1897, ISSN 1573-7543,* DOI: *https://doi.org/10.1007/s10586-018-2815-6*

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