



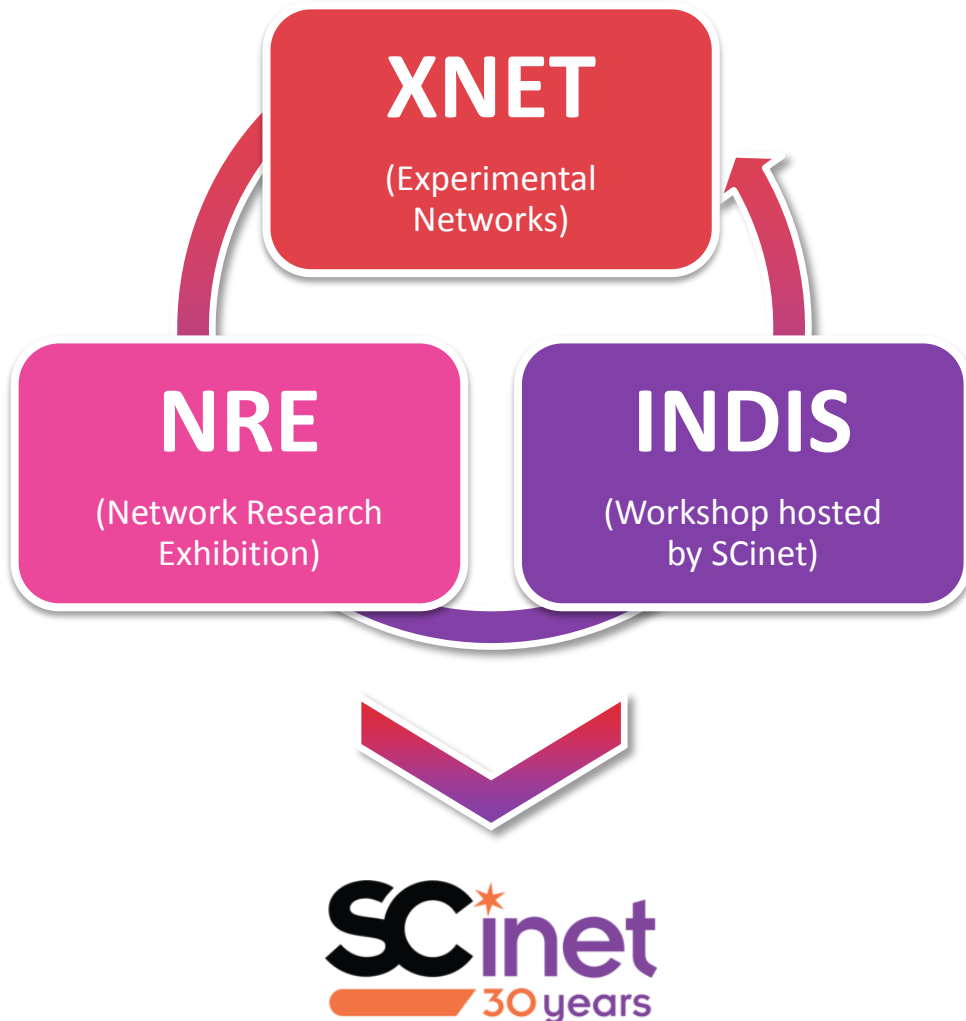
SC20

Everywhere | more
we are | than hpc.

INDIS Workshop *Welcome Message*

November 12, 2020 • Everywhere We Are

7th International Workshop on Innovating the Network for Data-Intensive Science



Contact us via: scinet-workshop@scinet.supercomputing.org

INDIS 2020 – Who are We

Co-Chairs and Workshop Co-Organizers:

- **Michelle Zhu**, Montclair State University, USA
 - **Sarah M. Neuwirth**, Heidelberg University, Germany
 - **Mariam Kiran**, ESnet, Lawrence Berkeley National Laboratory, USA
- + 29 Program Committee Members from all over the world**

SCinet Team Collaboration Driving the Future Innovation

- **XNET** pushes the boundaries of network technologies and sets the stage for SCinet's continuous evolution.
- **NRE** empowers researchers, computer scientists, and network engineers to experiment using the state-of-the-art SCinet network.
- **INDIS** serves as the academic forum and provides a stage for SCinet to discuss state-of-the-art, cutting edge, and future network technologies with researchers and experts.

In Memoriam of Malathi Veeraraghavan

Milestones

- **University of Virginia, 2003-2020**, Professor of Electrical and Computer Engineering
- **Polytechnic University, Brooklyn, New York, 1999-2002**, Associate Professor
- **Bell Laboratories, 1988-1998**, Distinguished Member of Technical Staff
- **Ph.D. Duke University, 1988**
- **M.S. Duke University, 1985**
- **B.S. Indian Institute of Technology, Madras, 1984**



**INDIS Workshop Co-Chair
in 2016 and 2017**

Thank you for your amazing work ethics and contributions!

Achievements

- Won over \$17 million dollars in competitive research funding
- Graduated 13 PhD students and 16 Master's students
- Mentored six postdoctoral associates and research scientists
- Co-authored 30 patents and over 200 refereed research publications in journals, conferences and workshops
- Received six best paper awards, including one last year



Dr. Malathi Veeraraghavan
Champion of Ideas and Experiences

INDIS 2020 Workshop Program – A Full Day of Inspiration



- **10:00am** Welcome Message (*Live*)
- **10:05am** A Brief History of **INDIS** (*Video*)
- **10:10am** **Keynote 1**: "Grand" Challenges for a Science Mission Network (*Live*)
- **10:55am** Introduction to **SCinet** (*Video*)
- **11:00am** **SCinet Architecture** – Past, Present, Future (*Video*)
- **11:05am** **XNET**: Panel Introduction (*Live*)
- **11:10am** **XNET**: Lightning Talks (*Live*)
- **11:30am** **XNET**: Panel Discussion (*Live*)
- **11:55am** **INDIS "Morning" Break**
- **12:10pm** Network Research Exhibition: An Introduction (*Live*)
- **12:15pm** **NRE Demo Talk I**: P4 Experimental Networks for the Global Research Platform (*Live*)
- **12:35pm** **NRE Demo Talk II**: Advanced Data Algorithms and Architectures for Security Monitoring (*Live*)
- **12:55pm** **Paper 1**: Using P4 and RDMA to collect Telemetry Data (*Video + Live Q&A*)
- **01:20pm** **Paper 2**: Application Aware Software Defined Flows of Workflow Ensembles (*Video + Live Q&A*)

- **01:45pm** **INDIS "Lunch" Break**
- **02:30pm** **Keynote 2**: Enhancing Distributed Computing with Programmable and Open Optical Networks (*Live*)
- **03:15pm** **Paper 3**: A Trial Deployment of a Reliable Network-Multicast Application across Internet2 (*Video + Live Q&A*)
- **03:40pm** **Paper 4**: ROBIN: A Next-Generation High-Performance Data Service Platform (*Video + Live Q&A*)
- **04:05pm** **Paper 5**: The NetSage Measurement Framework: Design, Development, and Discoveries (*Video + Live Q&A*)
- **04:30pm** **INDIS "Afternoon" Break**
- **04:45pm** **Invited Talk**: AI for Networking: the Engineering Perspective (*Live*)
- **05:15pm** **Paper 6**: An Evaluation of Ethernet Performance for Scientific Workloads (*Video + Live Q&A*)
- **05:40pm** **Paper 7**: Computing Bottleneck Structures at Scale for High-Precision Network Performance Analysis (*Video + Live Q&A*)
- **06:05pm** Awards Ceremony and Closing Remarks (*Live*)
- **06:30pm** 1st Virtual Happy Hour (*Zoom Meeting*)

All times are in Eastern Standard Time (EST).