SIGCOMM 2014

➢ Data Plane

1. Vimalkumar Jeyakumar (Stanford University); Mohammad Alizadeh; Yilong Geng; Changhoon Kim; David Mazières. Millions of Little Minions: Using Packets for Low Latency Network Programming and Visibility.

2. Kirill Kogan (Purdue Univ.); Sergey Nikolenko ; Ori Rottenstreich; William Culhane; Patrick Eugster. SAX-PAC(Scable and eXpressive Packet Classification).

3. Rohan Gandhi (Purdue University); Hongqiang Harry Liu; Y. Charlie Hu; Guohan Lu; Jitu Padhye; Lihua Yuan; Ming Zhang. Duet: Cloud Scale Load Balancing with Hardware and Softwar.

4. Tong Yang (Institute of Computing Technology, Chinese Academy of Sciences); Gaogang Xie; Yanbiao Li; Qiaobin Fu; Alex X. Liu; Qi Li; Laurent Mathy. Guarantee IP Lookup Performance with FIB Explosion.

➢ Network Architecture

1. Ethan Heilman (Boston University); Danny Cooper; Leonid Reyzin; Sharon Goldberg. From the Consent of the Routed: Improving the Transparency of the RPKI.

2. Zhiyong Zhang (U. of Electronic Science and Technology, China); Ovidiu Mara; Katerina Argyraki. Network Neutrality Inference.

3. David Naylor (Carnegie Mellon University); Matthew K. Mukerjee; Peter Steenkiste. Balancing Accountability and Privacy in the Network.

4. akub Czyz (University of Michigan); Mark Allman; Jing Zhang; Scott Iekel-Johnson; Eric Osterweil; Michael Bailey. Measuring IPv6 Adoption.

5. Simon Peter (University of Washington); Umar Javed; Qiao Zhang; Doug Woos; Arvind Krishnamurthy; Thomas Anderson. One Tunnel is (Often) Enough.

6. Aaron Yi Ding (University of Cambridge), Jouni Korhonen, Teemu Savolainen, Markku Kojo, Joerg Ott (Aalto University), Sasu Tarkoma, Jon Crowcroft. Bridging the Gap between Internet Standardization and Networking Research.

7. Abhigyan Sharma (University of Massachusetts Amherst); Xiaozheng Tie (University of Massachusetts Amherst); Hardeep Uppal (University of Massachusetts Amherst); Arun Venkataramani (University of Massachusetts Amherst); David Westbrook (University of Massachusetts Amherst); Aditya Yadav (University of Massachusetts Amherst). A Global Name Service for a Highly Mobile Internet.

8. Zhaoyu Gao (University of Massachusetts Amherst); Arun Venkataramani (University of Massachusetts Amherst); Jim Kurose (University of Massachusetts Amherst); Simon Heimlicher (University of Massachusetts Amherst). Towards a Quantitative Comparison of the Cost-Benefit Trade-offs of Location-Independent Network Architectures.

9. Tiffany Hyun-Jin Kim (Carnegie Mellon University); Cristina Basescu (ETH Zurich); Limin Jia (Carnegie Mellon University); Soo Bum Lee (Qualcomm); Yih-Chun Hu (UIUC); Adrian Perrig (ETH Zurich). Lightweight Source Authentication and Path Validation.

➢ Middleboxes And Network Services

1. Ryan Craven (Naval Postgraduate School); Robert Beverly; Mark Allman. A Middlebox-Cooperative TCP for a non End-to-End Internet.

2. Aaron Gember-Jacobson (University of Wisconsin-Madison); Raajay Viswanathan; Chaithan Prakash; Robert Grandl; Junaid Khalid; Sourav Da; Aditya Akella. OpenNF: Enabling Innovation in Network Function Control.

3. Ilias Marinos (University of Cambridge); Robert N.M. Watson; Mark Handley. Network stack specialization for performance.

4. Te-Yuan Huang (Stanford University); Ramesh Johar; Nick McKeow; Matthew Trunnell; Mark Watson. A Buffer-Based Approach to Rate Adaptation: Evidence from a Large Video Streaming Service.

➢ Wireless

1. Dinesh Bharadia (Stanford University); Sachin Katti. FastForward: Fast and Constructive Full Duplex Relays.

2. Swarun Kumar (Massachusetts Institute of Technology); Ezzeldin Hamed; Dina Katabi; Li Erran Li. LTE Radio Analytics Made Easy and Accessible.

3. Guan-Hua Tu (UCLA); Yuanjie Li; Chunyi Peng; Chi-Yu Li; Hongyi Wang; Songwu Lu. Control-Plane Protocol Interactions in Cellular Networks.

4. Jue Wang (MIT); Deepak Vasisht; Dina Katabi. RF-IDraw: Virtual Touch Screen in the Air Using RF Signals.

5. Vivek Yenamandra (The Ohio State University); Kannan Srinivasan (The Ohio State University). Vidyut: Exploiting Power Line Infrastructure for Enterprise Wireless Networks.

6. Bryce Kellogg (University of Washington); Aaron N. Parks (University of Washington); Shyamnath Gollakota (University of Washington); Joshua R. Smith (University of Washington); David Wetherall (University of Washington). Wi-Fi Backscatter: Internet Connectivity for RF-Powered Devices.

7. Aaron N. Parks (University of Washington); Angli Liu (University of Washington); Shyamnath Gollakota (University of Washington); Joshua R. Smith (University of Washington). Turbocharging Ambient Backscatter Communication.

8. Konstantinos Nikitopoulos (University of Surrey, 5G Innovation Center); Juan Zhou (University College London); Ben Congdon (University College London); Kyle Jamieson (University College London). Geosphere: Consistently Turning MIMO Capacity into Throughput.

➢ Monitoring And Diagnostics

1. Yang Wu (University of Pennsylvania); Mingchen Zhao; Andreas Haeberlen; Wenchao Zhou; Boon Thau Loo. Diagnosing Missing Events in Distributed Systems with Negative Provenance.

2. Colin Scott (UC Berkeley); Andreas Wundsam; Barath Raghavan; Aurojit Panda; Zhi Liu; Sam Whitlock; Ahmed El-Hassany; Andrew Or; Jefferson Lai; Eugene Huang; Hrishikesh B. Acharya; Kyriakos Zarifis; Scott Shenker. Troubleshooting SDN Control Software with Minimal Causal Sequences.

3. Jeff Rasley (Brown University); Brent Stephens; Colin Dixon; Eric Rozner; Wes Felter; Kanak Agarwal; John Carter; Rodrigo Fonseca. Planck: Millisecond-scale Monitoring and Control for Commodity Networks.

4. Masoud Moshref (University of Southern California); Minlan Yu; Ramesh Govindan; Amin Vahdat. DREAM: Dynamic Resource Allocation for Software-defined Measurement.

➢ Novel Datacenter Network Designs

1. Yunpeng James Liu (University of Waterloo); Peter Xiang Gao; Bernard Wong; S. Keshav. Quartz: A New Design Element for Low-Latency DCNs.

2. Anuj Kalia (Carnegie Mellon University); Michael Kaminsky; David Andersen. Using RDMA Efficiently for Key-Value Services.

3. Jonathan Perry; Amy Ousterhout; Hari Balakrishnan; Devavrat Shah; Hans Fugal. FastPass: A Zero-Queue Datacenter Network Architecture.

4. Navid Hamedazimi (Stony Brook University); Zafar Ayyub Qazi; Himanshu Gupta; Samir R Das; Vyas Sekar; Jon P Longtin; Himanshu Shah; Ashish Tanwer. FireFly: A Reconfigurable Wireless Datacenter Fabric using Free-Space Optics.

5. K. V. Rashmi (UC Berkeley); Nihar B. Shah; Dikang Gu; Hairong Kuang; Dhruba Borthakur; Kannan Ramchandran. A "Hitchhiker's" Guide to Fast and Efficient Data Reconstruction in Erasure-coded Data Centers.

➢ Scheduling In Datacenter Networks

1. Fahad Dogar (Microsoft Research); Thomas Karagiannis (Microsoft Research); Hitesh Ballani (Microsoft Research); Ant Rowstron (Microsoft Research); Hitesh Ballani (Microsoft Research). Decentralized Task-aware Scheduling for Data Center Networks.

2. Mosharaf Chowdhury (UC Berkeley); Yuan Zhong (Columbia University); Ion Stoica (UC Berkeley). Application-Aware Network Scheduling in Data-Intensive Clusters.

3. Robert Grandl (Univ of Wisconsin, Madison); Ganesh Ananthanarayanan (Microsoft Research); Srikanth Kandula (Microsoft Research); Sriram Rao (Microsoft Research); Aditya Akella (Univ of Wisconsin, Madison). Multi-Resource Packing for Cluster Schedulers.

4. Jeongkeun Lee (HP Labs); Yoshio Turner (HP Labs); Myungjin Lee (Edinburgh University); Lucian Popa (Databricks); Sujata Banerjee (HP Labs); Joon-Myung Kang (HP Labs); Puneet Sharma (HP Labs). Application-Driven Bandwidth Guarantees in Datacenters.

➢ Networks Operation

1. Srikanth Kandula (Microsoft); Ishai Menache (Microsoft); Roy Schwartz (Microsoft); Spandana Babbula (Microsoft). Calendaring for Wide Area Networks.

2. Hongqiang Harry Liu (Yale University); Srikanth Kandula (Microsoft Research); Ratul Mahajan (Microsoft Research); Ming Zhang (Microsoft Research); David Gelernter (Yale University). Traffic Engineering with Forward Fault Correction.

3. Xin Jin (Princeton University); Hongqiang Harry Liu (Yale University); Rohan Gandhi (Purdue University); Srikanth Kandula (Microsoft Research); Ratul Mahajan (Microsoft Research); Jennifer Rexford (Princeton University); Roger Wattenhofer

(ETH); Ming Zhang (Microsoft Research). Dionysus: Dynamic Scheduling of Network Updates.

4. Arpit Gupta (Georgia Institute of Technology), Laurent Vanbever, Muhammad Shahbaz, Sean P. Donovan, Brandon Schlinker, Nick Feamster, Jennifer Rexford, Scott Shenker, Russ Clark, Ethan Katz-Bassett. SDX: A Software Defined Internet Exchange.

5. Peng Sun (Princeton University); Ahsan Arefin; Ratul Mahajan; Jennifer Rexford; Lihua Yuan); Ming Zhang. Statesman: A Network-State Management Service.

➢ Transport and CC

1. Anirudh Sivaraman (MIT Computer Science and Artificial Intelligence); Keith Winstein; Pratiksha Thaker; Hari Balakrishnan. An Experimental Study of the Learnability of Congestion Control.

2. Ali Munir (Michigan State University); Ghufran Baig (LUMS); Syed Muhammad Irteza (LUMS); Ihsan Ayyub Qazi (LUMS); Alex Liu; Fahad Dogar. Friends, not Foes — Synthesizing Existing Transport Strategies for Data Center Networks.

3. Mohammad Alizadeh (Cisco); Tom Edsall; Sarang Dharmapurikar; Ramanan Vaidyanathan; Kevin Chu; Andy Fingerhut; Terry Lam; Francis Matus; Rong Pan; Navindra Yadav; George Varghese. CONGA: Distributed Congestion-Aware Load Balancing for Datacenters.