Day 1 – Thursday September 5, 2019 08:00 Registration 09:00 Opening Session 10:00 Session 1 11:00 Break 11:15 Session 2 12:15 Lunch 1:30P Session 3 2:30P Lightning Talks 4:00P Posters and Demos 6:00P Day 1 Closing = Day 2 – Friday September 6, 2019 08:00 registration 09:00 Session 4 10:00 Session 5 11:00 Break 11:15 Panel 1 12:15 Lunch 1:30P Panel 2 2:30P Session 6 3:30P Break 4:00P Session 7 5:00P Closing

#### **Panels**

Panel 1: Enabling a Data-Centric Ecosystem for Big Data Applications

Panel 2: Towards easier NDN application development

#### **Presentations**

#### **Building a Bridge from Applications to NDN**

Kathleen Nichols, Pollere, Inc.; Van Jacobson, UCLA

**Commercialization of NDN in Cybersecure Energy System Communications** Randall King, Operant Networks

## Information-Centric Networking in Wireless Edge Networks

Christian Tschudin, University of Basel

The Case for Hop-by-Hop Traffic Engineering

Klaus Schneider, University of Arizona; Beichuan Zhang, University of Arizona; Van Sy Mai, NIST; Lotfi Benmohamed, NIST

Enhancing Resiliency in Electrical Grid OT Networks Using NDN Travis Machacek, MITRE Corporation; Tamer Refaei, MITRE Corporation

#### GitSync

Xinyu Ma, University of California, Los Angeles; Zhaoning Kong, University of California, Los Angeles

#### NDN-ABS: Attribute Based Signature Scheme for Named Data Networking

Sanjeev Kaushik Ramani, Florida International University; Reza Tourani, St. Louis University; George Torres, New Mexico State University; Satyajayant Misra, New Mexico State University; Alex Afanasyev, Florida International University

#### Hyper-connected Intelligence Infrastructure based on NDN

Namseok Ko, ETRI; Sunghyuk Byun, ETRI; Sunme Kim, ETRI

## NDN-DPDK: High-Speed Named Data Networking Forwarder

Junxiao Shi, NIST; Lotfi Benmohamed, NIST

## DLedger

Zhiyi Zhang, UCLA ; Vishrant Vasavada, UCLA ; Xinyu Ma, UCLA ; Lixia Zhang, UCLA

# ICT-Sync and its use in DARPA SHARE

John DeHart, Washington University in St. Louis

# Secure Predictive Low-Latency Information Centric Edge for Next Generation Wireless Networks

Srinivas Shakkottai, Texas A&M University; I-Hong Hou, Texas A&M University

## Service Discovery in NDN IoT

Yufeng Zhang, UCLA; Zhiyi Zhang, UCLA

## Secure Onboarding and Provisioning of NDNoT Devices

Davide Pesavento, NIST; Kerry McKay, NIST; Junxiao Shi, NIST; David Cooper, NIST; Lotfi Benmohamed, NIST

# NDND: NDN Neighbor Discovery

Xinyu Ma, UCLA ; Zhiyi Zhang, UCLA ; Lan Wang, U. Memphis ; Lixia Zhang, UCLA

## Data-Centric Medium Access Control Supporting Robust Multicast

Mohammed Elbadry, Stony Brook University; Fan Ye, Stony Brook University; Peter Milder, Stony Brook University

## On the Power of In-Network Caching in the Hadoop Distributed File System

Eric Newberry, The University of Arizona; Beichuan Zhang, The University of Arizona)

## On Namespace Management in NDN and How DNSSEC Might Help

Pouyan Fotouhi Tehrani, Fraunhofer FOKUS; Eric Osterweil, George Mason University; Jochen Schiller, Freie Universität Berlin; Thomas C. Schmidt, HAW Hamburg; Matthias Waehlisch, Freie Universität Berlin

## **Result Provenience in Named-Function Networking**

Claudio Marxer, University of Basel; David Kuhn, University of Basel; Christian Tschudin, University of Basel

## **Posters and Demos**

#### Demo: Towards an NDN-based Online Gaming Architecture

Philipp Moll, Klagenfurt University; Sebastian Theuermann, Klagenfurt University; Hermann Hellwagner, Klagenfurt University; Jeff Burke, UCLA

#### **Location-Based Certificates**

Dan Ameme, New Mexico State University; Travis Machacek, New Mexico State University; Abderrahmen Mtibaa, New Mexico State University; Sanjeev Kaushik Ramani, Florida International University; Satyajayant Misra, New Mexico State University; Alex Afanasyev, Florida International University

#### Better Multipath Route Calculation for ndnSIM

Klaus Schneider, University of Arizona

#### **Demo: NDN Control Center**

Xinyu Ma, UCLA ; Zhaoning Kong, UCLA ; Zhiyi Zhang, UCLA

#### Demo: Decentralized multimedia sharing Android application over NDN

Ashlesh Gawande, University of Memphis; Jeremy Clark, University of Memphis; Lan Wang, University of Memphis

#### **Automated Fuzz Testing for NDN**

George Torres, NIST; Davide Pesavento, NIST; Junxiao Shi, NIST; Lotfi Benmohamed, NIST

## An NDN Push-To-Talk Application for Public Safety Communications

Edward Lu, NIST; Davide Pesavento, NIST; Junxiao Shi, NIST; Lotfi Benmohamed, NIST; Maxwell Maurice, NIST

## Demo: A Comparison of Bootstrapping Protocols for IoT over Named Data Networking

Laqin Fan, University of Memphis; Lan Wang, University of Memphis

#### Medium Integration Architecture for ICDTNs using NDN

Katherine Russell, George Mason University; Robert Simon, George Mason University