



TMA Conference 2021

Proceedings of the 5th Network Traffic
Measurement and Analysis Conference

Virtual, September 14-15, 2021

ISBN: 978-3-903176-40-9

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1 CHAIRS' WELCOME

Dear all,

We look forward to the 5th edition of the Network Traffic Measurement and Analysis Conference (TMA Conference 2021). Despite the ongoing pandemic forcing us to hold the conference online, we are excited to have lined up an exciting program of 18 papers (selected out of 44 submissions) and 2 inspiring keynotes by Professor Henning Schulzrinne and Professor Srinivasan Keshav. The papers represent a diverse research portfolio across all areas of networking and systems, addressing timely topics using measurement.

We would like to thank the steering committee, the organising committee, and the program committee for voluntarily dedicating their time to shaping up TMA'21 in the middle of a global pandemic.

Looking forward to wonderful scientific discussions over this year's program.

Best Wishes,

General chair

Oliver Hohlfeld (Brandenburg University of Technology)

TPC chairs

Vaibhav Bajpai (Technical University of Munich)

Hamed Haddadi (Imperial College London)

Oliver Hohlfeld
Brandenburg University of Technology

Hamed Haddadi
Imperial College London

Vaibhav Bajpai
Technical University of Munich

TMA Conference 2021 general chair and program chairs.

2 TMA CONFERENCE 2021 ORGANIZATION

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Vaibhav Bajpai, *Technical University of Munich, Germany*

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3 TMA TECHNICAL PROGRAM

3.1 TMA Conference Program

Session 1: Tools and Operations

Characterization of Anycast Adoption in the DNS Authoritative Infrastructure

*Raffaele Sommese (University of Twente), Gautam Akiwate (UC San Diego)
Mattijs Jonker (University of Twente), Giovane C. M. Moura (SIDN Labs)
Marco Davids (SIDN Labs), Roland van Rijswijk-Deij (University of Twente)
Geoffrey M. Voelker (UC San Diego), Stefan Savage (UC San Diego) K.C. Claffy
(CAIDA/UC San Diego), Anna Sperotto (University of Twente)*

IP Geolocation Database Stability and Implications for Network Research: A Reproducibility Study

*Matthieu Gouel (Sorbonne Université), Kevin Vemeulen (Columbia University),
Robert Berverly (Naval Postgraduate School), Olivier Fourmaux (Sorbonne Université),
Timur Friedman (Sorbonne Université)*

Travelling Without Moving: Discovering Neighborhood Adjacencies

Jean-François Graïlet (University of Liège), Benoit Donnet (University of Liège)

Session 2: Learning and Modeling

A First Look at Class Incremental Learning in Deep Learning Mobile Traffic Classification

*Giampaolo Bovenzi (Universita' di Napoli Federico II), Lixuan Yang (Huawei Technologies France),
Alessandro Finamore (Huawei Technologies France), Domenico Ciuonzo (Universita' di Napoli Federico II),
Giuseppe Aceto (Universita' di Napoli Federico II), Antonio Pescapé (Universita' di Napoli Federico II),
Dario Rossi (Huawei Technologies France)*

Fantastic Traffic Models and Where to Find Them - A Literature Review

*Manuel Kieweg (Darmstadt University of Applied Sciences), Tim Bender (Darmstadt University of Applied Sciences),
Martin Stiemerling (Darmstadt University of Applied Sciences)*

Revisiting IoT Device Identification

*Roman Kolcun (University of Cambridge), Diana Andreea Popescu (University of Cambridge),
Vadim Safronov (University of Cambridge), Poonam Yadav (University of York) Anna Maria Mandalari (Imperial College London), Richard*

Mortier (University of Cambridge), Hamed Haddadi (Imperial College London)

Session 3: Social Media and the Web

Third-party Link Shortener Usage on Twitter

Martin Lindblom (Linköping University), Oscar Järpehult (Linköping University), Mathilda Moström (Linköping University), Alexander Edberg (Linköping University), Niklas Carlsson (Linköping University)

WebTune: A Distributed Platform for Web Performance Measurements

Byungjin Jun (Northwestern University), Matteo Varvello (Nokia Bell Labs), Yasir Zaki (NYU Abu Dhabi), Fabian Bustamante (Northwestern University)

Sound Methodology for Downloading Webpage

Soumya Indela (University of Maryland), Dave Levin (University of Maryland)

Session 4: Security and Routing

Forecasting the Impact of IXP Outages Using Anycast

Leandro M. Bertholdo (University of Twente), Joao M. Ceron (SIDN Labs), Lisandro Zambenedetti Granville (Federal University of Rio Grande do Sul), Roland van Rijswijk-Deij (University of Twente)

Revisiting RPKI Route Origin Validation on the Data Plane

Nils Rodday (Universität der Bundeswehr München), Italo Cunha (Universidade Federal de Minas Gerais) Randy Bush (IIJ Research Lab / Dragon Research), Ethan Katz-Bassett (Columbia University) Gabi Dreo Rodosek (Universität der Bundeswehr München), Thomas C. Schmidt (Hamburg University of Applied Sciences), Matthias Wählisch (Freie Universität Berlin)

Revisiting Recommended BGP Route Flap Damping Configurations

Clemens Mosig (Freie Universität Berlin), Randy Bush (Internet Initiative Japan Arrcus, Inc), Cristel Pelsser (Université de Strasbourg), Thomas C. Schmidt (HAW Hamburg), Matthias Wählisch (Freie Universität Berlin)

Session 5: Latency and Caching

NRG: A Network Perspective on Applications' Performance

Noa Zilberman (University of Oxford), Andrew W Moore (University of Cambridge), Billy Cooper, Jackson Woodruff (University of Edinburgh), Yuta Tokusashi (University of Cambridge), Pietro Bressana (Università della

Svizzera italiana), Murali Ramanujam (UCLA), Diana Andreea Popescu (University of Cambridge), Salvator Galea (University of Cambridge)

When Locality is not enough: Boosting Peer Selection of Hybrid CDN-P2P Live Streaming Systems

Zhejiayu Ma (Easybroadcast Université Côte d'Azur), Frederic Giroire (Université Côte d'Azur) Guillaume Urvoy-Keller (Université Côte d'Azur), Soufiane Rouibia (Easybroadcast)

Reassessing the Constancy of End-to-End Internet Latency

Lily Davisson (Colgate University), Joakim Jakovleski (Colgate University), Nhiem Ngo (Colgate University), Chau Pham (Colgate University), Joel Sommers (Colgate University)

Session 6: Performance and Energy

WHOIS sunset? A primer in Registration Data Access Protocol (RDAP) performance

Carlos Ganan (ICANN)

ELF: High-Performance In-band Network Measurement

Joel Sommers (Colgate University), Ramakrishnan Durairajan (University of Oregon)

Shedding (Some) Light on Mobile Browsers Energy Consumption

Matteo Varvello (Nokia, Bell Labs), Benjamin Livshits (Brave Software)