

CONTACT INFORMATION

Chair of Connected Mobility, I11
Department of Informatics
Technische Universität München
Boltzmannstraße 3, Garching bei München 85748, Germany

✉ bajpaiv@in.tum.de
🌐 www.vaibhavbajpai.com

RESEARCH INTERESTS

▷ Future Internet Protocols
[TON'19](#) [SIGCOMM CCR'17](#) [PAM'15](#)
▷ Web and Video Content Delivery
[SIGCOMM'18](#) [COMMAG'19](#) [PAM'19](#) [PAM'18](#)
▷ Mobile and Fixed-line Network Operations
[MOBICOM'18](#) [SIGCOMM CCR'17](#) [COMST'15](#) [SIGCOMM CCR'15](#)
▷ Network and Service Management
[TNSM'19](#) [TNSM'17](#)
▷ Reproducibility of Scientific Internet Research
[SIGCOMM CCR'19](#) [SIGCOMM CCR'18](#)

AWARDS

Best of CCR award at ACM SIGCOMM 2019
ACM SIGCOMM Best Paper Award 2018
IEEE ComSoc Award for the Best Dissertation in Network and Service Management 2017

EDUCATION

Jacobs University Bremen, Germany
– Doctor of Philosophy, Computer Science 2012 – 2016
– Master of Science, Computer Science 2010 – 2012
Uttar Pradesh Technical University, India
– Bachelor of Technology, Computer Science and Engineering 2005 – 2009

APPOINTMENTS

Technische Universität München, Germany (– advised by Prof. Jörg Ott)
– Senior Researcher 2019 –
– Postdoctoral Fellow 2017 – 2018
Jacobs University Bremen, Germany (– advised by Prof. Jürgen Schönwälder)
– Research Associate 2012 – 2016
Infosys Technologies Ltd, Bangalore, India
– Systems Engineer 2009 – 2010

SELECTED PUBLICATIONS

Vaibhav Bajpai, Jürgen Schönwälder
A Longitudinal View of Dual-stacked Websites:
Failures, Latency & Happy Eyeballs [TON'19](#)
IEEE/ACM Transactions on Networking (TON)
April 2019 [ISI Impact: 3.11]
<https://doi.org/10.1109/TNET.2019.2895165>

A.Dhamdhere, D.Clark, A.Garrido, M.Luckie, R.Mok,
G.Akiwate, K.Gogia, V.Bajpai, A.Snoeren, k.claffy
Inferring Persistently Congested Interdomain Links. [SIGCOMM'18](#)
ACM SIGCOMM, August 2018 [18%, 40/222] [Best Paper Award](#)
<https://doi.org/10.1145/3230543.3230549>

A.Mandalari, A.Lutu, A.Custura, A.Safari, O.Alay,
M.Bagnulo, V.Bajpai, A.Brunstrom, J.Ott, M.Mellia, G.Fairhurst
Experience: Implications of Roaming in Europe. [MOBICOM'18](#)

ACM MOBICOM (Experience Paper), October 2018 [22.5%, 42/187]

<https://doi.org/10.1145/3241539.3241577>

V.Bajpai, A.Brunstrom, A.Feldmann, W.Kellerer, A.Pras,
H.Schulzrinne, G.Smaragdakis, M.Wählisch, K.Wehrle
The Dagstuhl Beginners Guide to Reproducibility
for Experimental Networking Research
ACM Computer Communication Review (CCR Editorial), Jan 2019
<https://doi.org/10.1145/3314212.3314217>

SIGCOMM CCR'19

Best of CCR

Vaibhav Bajpai, Saba Ahsan, Jürgen Schönwälder, Jörg Ott
Measuring YouTube Content Delivery over IPv6
ACM SIGCOMM Computer Communication Review (CCR)
October 2017 [ISI Impact: 3.81]
<https://doi.org/10.1145/3155055.3155057>

SIGCOMM CCR'17

Vaibhav Bajpai, Steffie Jacob Eravuchira, Jürgen Schönwälder
Dissecting Last-mile Latency Characteristics
ACM SIGCOMM Computer Communication Review (CCR)
October 2017 [ISI Impact: 3.81]
<https://doi.org/10.1145/3155055.3155059>

SIGCOMM CCR'17

Vaibhav Bajpai, Jürgen Schönwälder
A Survey on Internet Performance Measurement
Platforms & Standardization Efforts.
IEEE Communications Surveys & Tutorials (COMST)
April 2015: [ISI Impact: 17.2]
<http://dx.doi.org/10.1109/COMST.2015.2418435>

COMST'15

Trinh Viet Doan, Ljubica Pajević, Vaibhav Bajpai, Jörg Ott
Tracing the Path to YouTube: A Quantification of Path Lengths and
Latencies toward Content Caches
IEEE Communications Magazine, January 2019 [ISI Impact: 10.44]
<https://doi.org/10.1109/MCOM.2018.1800132>

COMMAG'19

Vaibhav Bajpai, Jürgen Schönwälder
Network Flow Query Language:
Design, Implementation, Performance & Applications
IEEE Transactions on Network and Service Management (TNSM)
March 2017 [ISI Impact: 3.28]
<http://dx.doi.org/10.1109/TNSM.2016.2633511>

TNSM'17

A.Asrese, S.Eravuchira, V.Bajpai, P.Sarolahti, J.Ott
Measuring Web Latency and Rendering Performance:
Method, Tools & Longitudinal Dataset
IEEE Transactions on Network and Service Management (TNSM)
June 2019 [ISI Impact: 3.28]
<https://doi.org/10.1109/TNSM.2019.2896710>

TNSM'19

Vaibhav Bajpai, Steffie Jacob Eravuchira, Jürgen Schönwälder
Lessons Learned from using the RIPE Atlas Platform for Measurement Research
ACM Computer Communication Review (CCR Editorial)
July 2015 [ISI Impact: 3.81]
<http://dx.doi.org/10.1145/2805789.2805796>

SIGCOMM CCR'15

Vaibhav Bajpai, Jürgen Schönwälder
Understanding the Impact of Network Infrastructure Changes
Using Large-Scale Measurement Platforms
Symposium on Integrated Network Management, May 2017
<https://doi.org/10.23919/INM.2017.7987382>

IM'17

Best Dissertation Digest Award

RESEARCH VISITS	MPI Informatik , DE (– hosted by Prof. Anja Feldmann)	
	– Duration: 1 Week	11/2018
	CAIDA , USA (– hosted by Prof. kc claffy)	
	– Duration: 1 Week	08/2017
PROJECT PARTICIPATION	SSICLOPS – Scalable & Secure Infrastructures for Cloud Operations	2017 – 2018
	– Contributions to WP1 and WP5	
	FLAMINGO – Management of the Future Internet	2015 – 2016
	– Responsible for WP1	
	– Contributions to WP2, WP3, WP4, and WP5	
	LEONE – From Global Measurements to Local Management	2012 – 2015
	– Contributions to WP1, WP2, WP3 and WP4	
TEACHING	Lecturer – Technische Universität München	
	– Lab: Internet Measurements and Reproducibility Lab	2019
	– Seminar: Future Internet Protocols, Consolidation and Decentralization	2019
	– Seminar: Internet of People: Connectivity, Mobility and Privacy	2019
	– Seminar: Internet Measurements	2017, 2018, 2019
	– Seminar: Decentralized Internet Architectures: Opportunities and Challenges	2018
	– Seminar: Future Internet Protocols: Design Principles and Deployment	2017, 2018
	Guest Lecturer – Technische Universität München	
	– Protocol Design	2018
	– Connected Mobility Basics	2018
	– Networked Multimedia Systems	2017
	Guest Lecturer – Jacobs University Bremen	
	– Operating Systems	2013, 2014
	– Computer Networks	2013, 2014
	– Advanced Computer Networks	2012, 2014
	Teaching Assistant – Jacobs University Bremen	
	<i>responsibilities involved preparing and grading assignments</i>	
	– Internet Measurement and Management Lab	2014
	– Computer Networks	2011, 2013, 2014
– Software Engineering Lab	2012	
– Algorithms and Data Structures	2011	
SERVICE	Organiser:	
	– Dagstuhl Seminar (#18412): Encouraging Reproducibility in Scientific Research of the Internet	2018
	– Traffic Measurement and Analysis (TMA) Shadow PC.	2018
	Coordinator:	
	– Munich Internet Research Retreat (MIR)	2017, 2018
	– Dagstuhl Seminar (#16012): Global Measurement Practice and Experience	2016
	Technical Program Committee:	
	– IFIP Networking	2017 – 2020
	– ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)	2019
	– IEEE/IFIP Conference on Network and Service Management (CNSM)	2019
– ACM MOBICOM Workshop on QoE	2019	
– ACM SIGCOMM Workshop on QUIC	2019	
– IFIP Traffic Measurement and Analysis Conference (TMA)	2018, 2019	
– IFIP/IEEE International Symposium on Integrated Network Management (IM)	2017, 2019	
– ACM CoNEXT Workshop on QUIC	2018	

- ACM SIGCOMM Workshop on Big Data Analytics and Machine Learning (Big-DAMA) 2018
- IEEE/IFIP Network Operations and Management Symposium (NOMS) 2018
- ACM CoNEXT Student Workshop 2017

Jury:

- NetSys Best Poster/Demo Awards 2019
- SIGCOMM Hackathon 2018

Shadow Technical Program Committee:

- Conference on Network and Service Management (CNSM) 2016
- Conference on emerging Networking EXperiments and Technologies (CoNEXT) 2015

External Reviewer:

- IEEE INFOCOM 2018, 2019
- IEEE Communications Magazine (Network & Service Management Series) 2014 – 2019
- IEEE Communications Magazine (Open Call) 2018, 2019
- IEEE Transactions on Network and Service Management (TNSM) 2016 – 2019
- Elsevier Performance Evaluation (PEVA) 2019
- IEEE Communications Magazine (Feature Topic: Green Internet of Things) 2018
- IEEE/ACM Transactions on Networking (TON) 2018
- ACM SIGCOMM Computer Communication Review (CCR) 2016, 2018
- Wiley International Journal of Network Management (IJNM) 2016, 2018
- ACM SIGCOMM Computer Communication Review (CCR) Artefacts Review 2017
- IEEE Communications Surveys and Tutorials (COMST) 2017
- IEEE Communications Magazine (Network Testing & Analytics Series) 2017
- IEEE Communications Magazine (Feature Topic: Human-Driven Edge Computing) 2017
- ACM Transactions on Multimedia Computing, Communications & Applications (TOMM) 2017
- ACM Transactions on Internet Technology (TOIT) 2017
- IFIP Traffic Measurement and Analysis Conference (TMA) 2017
- ACM Multimedia Conference (ACM-MM) 2017
- ACM SIGCOMM Workshop on Network & OS Support for Digital Audio & Video (NOSSDAV) 2017
- IEEE Communications Magazine (Feature Topic: Advances in Networking Software) 2016
- IEEE Communications Magazine (Standards Supplement Series) 2016
- Springer Journal of Network and Systems Management (JNSM) 2014, 2016
- IEEE Communications Letters 2016
- Wiley International Journal of Network Management (IJNM) 2016
- IEEE Conference on Network and Service Management (CNSM) 2015
- IFIP/IEEE International Symposium on Integrated Network Management (IM) 2013, 2015
- Conference on Autonomous Infrastructure, Management and Security (AIMS) 2013, 2014
- IFIP Networking Conference 2014
- IEEE/IFIP Network Operations and Management Symposium (NOMS) 2014

University Services:

- TUM Connected Mobility Doctoral Retreat. 2017, 2018
- TUM Admissions Committee for CS Masters Applications. 2017, 2018

MENTORING

Doctoral Students (– supervisor: Prof. Jörg Ott)

- Bernhard Häfner. *Communication Architecture for Autonomous Driving* 2018–
- Trinh Viet Doan. *Decentralised Internet* 2018–
- Alemnew Sheferaw Asrese. *Web Quality of Experience* 2017–
- Stefan Neumeier. *Teleoperated Driving* 2017–
- Ermias Walelgne. *Mobile Network Characteristics* 2017–

Master Students

- Luca Schumann. *Investigating Internet Application Mix using CAIDA Passive Datasets* 2019
- Justus Fries. *A Deep Dive into FCC's Measuring Broadband America Dataset* 2019
- Dinh Nguyen. *A Longitudinal Analysis of QoE using the Google CRUX Dataset* 2019
- David Nguyen. *A Deep Dive into Netflix Performance and QoE* 2019
- Stefan Su. *Comparing YouTube and Netflix Content Delivery* 2019
- Tat Dat Pham. *Comparison of (de-)centralised Video Streaming Platforms over Mobile Networks* 2019

- Rohit Gupta. *A Longitudinal View of FCC Dataset on Broadband Performance* 2019
- Rohit Panda. *Evaluating Web and Video Content Delivery over Google QUIC* 2019
- Jeslin Thomas John. *Performance Measurements and Evaluations of Centralized DNS Services* 2018
- Taimoor Alam. *Cross-media Sensor Data Synchronisation for Teleoperated Driving* 2018
- Sornrakitch Thanumaiweerakun. *An Active Measurement Tool for P2P-based Video Streaming* 2018
- Sergey Podanev. *Measuring YouTube Content Delivery over Google QUIC* 2018
- Abhishek Kapoor. *Measuring Netflix Performance over IPv6* 2018
- Trinh Viet Doan. *Quantifying Latency and Path Lengths of Content Caches* 2017
- Steffie Jacob Eravuchira. *Measuring Webpage Similarity from Dual-Stacked Hosts* 2015
- Corneliu-Claudiu Prodescu. *IPFIX support for NFQL* 2013

Bachelor Students

- Nils Faulhaber. *Measuring the Growth of TLS 1.3 Adoption* 2019
- Felix Bergmann. *Evaluating the Adoption and Performance of TLS 1.3* 2019
- Florian Sprang. *Interactive Dashboard of Content Delivery using Longitudinal Datasets* 2019
- Luca Schumann. *Impact of Packet Loss and its Implications on Content Delivery using QUIC* 2019
- Altan Kesan. *Investigation of Mobile Roaming in Europe using a Netalyzr Dataset* 2018
- Justus Fries. *Measuring the Extend of CDN Centralisation on the Web* 2018
- Markus Oberprieler. *A Mobile App to measure a Decentralised Video Streaming Platform* 2018
- Bernhard Jaeger. *Measuring Google QUIC Connect Times* 2018
- Stefan Su. *Correlating YouTube QoE with Content Delivery Paths* 2018
- Martin Kunzmann. *Analysing the Impact of CDNs on IPv6 performance* 2018
- Muhammed Sahin. *Analysing the Impact of CDNs on IPv6 penetration* 2018
- Ozan Kaya. *Comparison of IPv4 and IPv6 Geolocation Accuracy* 2017
- Otar Bichiashvil. *Large-scale TCP throughput performance measurement over IPv4 and IPv6* 2015
- Vlad Victor Ungureanu. *LMAP Protocol Implementation* 2015
- Durim Morina. *A front-end parser for NFQL* 2013
- Mjellma Berisha. *NETCONF over TLS implementation* 2013

JOURNAL PUBLICATIONS

A.Asrese, S.Eravuchira, V.Bajpai, P.Sarolahti, J.Ott
 Measuring Web Latency and Rendering Performance:
 Method, Tools & Longitudinal Dataset
 IEEE Transactions on Network and Service Management (TNSM)
 June 2019 [ISI Impact: 3.28]
<https://doi.org/10.1109/TNSM.2019.2896710>.

TNSM'19

Vaibhav Bajpai, Jürgen Schönwälder
 A Longitudinal View of Dual-stacked Websites:
 Failures, Latency & Happy Eyeballs
 IEEE/ACM Transactions on Networking (TON)
 April 2019: [ISI Impact: 3.11]
 IETF 99 presentation: <https://goo.gl/Xd42wf>
<https://doi.org/10.1109/TNET.2019.2895165>

TON'19

V.Bajpai, A.Brunstrom, A.Feldmann, W.Kellerer, A.Pras,
 H.Schulzrinne, G.Smaragdakis, M.Wählisch, K.Wehrle
 The Dagstuhl Beginners Guide to Reproducibility
 for Experimental Networking Research
 ACM Computer Communication Review (CCR Editorial), Jan 2019
<https://doi.org/10.1145/3314212.3314217>

SIGCOMM CCR'19

Best of CCR

Trinh Viet Doan, Ljubica Pajević, Vaibhav Bajpai, Jörg Ott
 Tracing the Path to YouTube: A Quantification of Path Lengths and
 Latencies toward Content Caches
 IEEE Communications Magazine, January 2019 [ISI Impact: 10.44]
<https://doi.org/10.1109/MCOM.2018.1800132>
 RIPE 77 presentation: <https://ripe77.ripe.net/archives/video/2253>

COMMAG'19

Matthias Flittner, Mohamed Mahfoudi, Damien Saucez, Matthias Wählisch,

	Luigi Iannone, Vaibhav Bajpai, Alex Afanasyev A Survey on Artifacts from CoNEXT, ICN, IMC, & SIGCOMM in 2017 ACM Computer Communication Review (CCR Editorial), Jan 2018 https://doi.org/10.1145/3211852.3211864 Dataset: https://artefacts.cm.in.tum.de/2017	SIGCOMM CCR'18
	Vaibhav Bajpai, Saba Ahsan, Jürgen Schönwälder, Jörg Ott Measuring YouTube Content Delivery over IPv6 ACM SIGCOMM Computer Communication Review (CCR) October 2017 [ISI Impact: 3.81] https://doi.org/10.1145/3155055.3155057 IETF 99 presentation: https://goo.gl/YbyqoD APNIC labs coverage: https://goo.gl/mCEjEX	SIGCOMM CCR'17
	Vaibhav Bajpai, Steffie Jacob Eravuchira, Jürgen Schönwälder Dissecting Last-mile Latency Characteristics ACM SIGCOMM Computer Communication Review (CCR) October 2017 [ISI Impact: 3.81] https://doi.org/10.1145/3155055.3155059	SIGCOMM CCR'17
	Vaibhav Bajpai, Jürgen Schönwälder Network Flow Query Language: Design, Implementation, Performance & Applications IEEE Transactions on Network and Service Management (TNSM) March 2017 [ISI Impact: 3.28] http://dx.doi.org/10.1109/TNSM.2016.2633511 .	TNSM'17
	Vaibhav Bajpai, Steffie Jacob Eravuchira, Jürgen Schönwälder Lessons Learned from using the RIPE Atlas Platform for Measurement Research ACM Computer Communication Review (CCR Editorial) July 2015 [ISI Impact: 3.81] http://dx.doi.org/10.1145/2805789.2805796 RIPE 68 presentation: https://goo.gl/A7o79y	SIGCOMM CCR'15
	Vaibhav Bajpai, Jürgen Schönwälder A Survey on Internet Performance Measurement Platforms & Standardization Efforts. IEEE Communications Surveys & Tutorials (COMST) April 2015: [ISI Impact: 17.2] http://dx.doi.org/10.1109/COMST.2015.2418435	COMST'15
CONFERENCE PUBLICATIONS	S.Neumeier, E.Walelgne, V.Bajpai, J.Ott, C.Facchi Measuring the Feasibility of Teleoperated Driving in Mobile Networks Traffic Measurement and Analysis Conference, June 2019 [32.3%, 21/65]	TMA'19
	A.Asrese, E.Walelgne, V.Bajpai, A.Lutu, O.Alay, J.Ott Measuring Web Quality of Experience in Cellular Networks Passive and Active Measurement Conference, March 2019 [26.6%, 20/75] https://doi.org/10.1007/978-3-030-15986-3_2	PAM'19
	A.Mandalari, A.Lutu, A.Custura, A.Safari, O.Alay, M.Bagnulo, V.Bajpai, A.Brunstrom, J.Ott, M.Mellia, G.Fairhurst Experience: Implications of Roaming in Europe. ACM MOBICOM (Experience Paper), October 2018 [22.5%, 42/187] RIPE 78 presentation: https://bit.ly/2VDoOi4 https://doi.org/10.1145/3241539.3241577	MOBICOM'18
	A.Dhamdhere, D.Clark, A.Garrido, M.Luckie, R.Mok, G.Akiwate, K.Gogia, V.Bajpai, A.Snoeren, k.claffy Inferring Persistently Congested Interdomain Links. ACM SIGCOMM, August 2018 [18%, 40/222]	SIGCOMM'18 Best Paper Award

<https://doi.org/10.1145/3230543.3230549>

E.Walelgne, S.Kim, V.Bajpai, S.Neumeier, J.Manner, J.Ott
Factors Affecting Web Flows in Cellular Networks
IFIP Networking, Zürich, May 2018 [24.4%, 55/225]
RIPE 77 presentation: <https://goo.gl/YL2aRL>
<https://doi.org/10.23919/IFIPNetworking.2018.8696661>

IFIP NETWORKING'18

Ermias Walelgne, Jukka Manner, Vaibhav Bajpai, Jörg Ott
Analyzing Throughput and Stability in Cellular Networks
Network Operations & Management Symposium, Apr 2018 [32.2%, 56/174]
<https://doi.org/10.1109/NOMS.2018.8406261>

NOMS'18

Ricky Mok, Vaibhav Bajpai, Amogh Dhamdhere, kc claffy
Revealing the Load Balancing Behavior of YouTube Traffic on Interdomain Links
Passive and Active Measurement Conference (PAM), Mar 2018 [40%, 20/50]
https://doi.org/10.1007/978-3-319-76481-8_17

PAM'18

Vaibhav Bajpai, Jürgen Schönwälder
Understanding the Impact of Network Infrastructure Changes
Using Large-Scale Measurement Platforms
Symposium on Integrated Network Management, May 2017
<https://doi.org/10.23919/INM.2017.7987382>

IM'17

Best Dissertation Digest Award

V.Bajpai, S.Eravuchira, J.Schönwälder, R.Kisteleki, E.Aben
Vantage Point Selection for IPv6 Measurements:
Benefits & Limitations of RIPE Atlas Tags
Symposium on Integrated Network Management, May 2017 [28.6%, 44/154]
<https://doi.org/10.23919/INM.2017.7987262>
RIPE 72 presentation: <https://goo.gl/AQj2WN>

IM'17

S. Eravuchira, V.Bajpai, J.Schönwälder, S.Crawford
Measuring Web Similarity from Dual-stacked Hosts
Conference on Network & Service Management, Oct 2016 [27.6%, 32/116]
<https://doi.org/10.1109/CNSM.2016.7818415>
RIPE 72 presentation: <https://goo.gl/pÜry46>

CNSM'16

Vaibhav Bajpai, Jürgen Schönwälder
IPv4 versus IPv6 – Who connects faster?
IFIP Networking Conference, May 2015 [23.2%, 47/202]
<http://dx.doi.org/10.1109/IFIPNetworking.2015.7145323>

IFIP NETWORKING'15

Saba Ahsan, Vaibhav Bajpai, Jörg Ott, Jürgen Schönwälder
Measuring YouTube from Dual-Stacked Hosts
Passive and Active Measurement Conference, March 2015 [27%, 27/100].
http://dx.doi.org/10.1007/978-3-319-15509-8_19
Invited at Workshop on Research & Applications of Internet Measurements, Oct 2015

PAM'15

Vaibhav Bajpai, Johannes Schauer, Jürgen Schönwälder
NFQL: A Tool for Querying Network Flow Records
International Symposium on Integrated Network Management, May 2013
<https://goo.gl/dpW4uR>
IETF 87 presentation: <https://goo.gl/w178yy>

IM'13

V.Bajpai, V. Bashko, C.David, S.Kuryla, V.Perelman, J.Schauer,
N.Melnikov, A.Sehgal, J.Schönwälder
Design & Prototype Implementation of the WattsApp Telemetry Platform
International Conference on Green Computing and Communications, Nov 2012
<http://dx.doi.org/10.1109/GreenCom.2012.21>

	<p><u>Vaibhav Bajpai, Vladislav Perelman</u> A 3D Object Reconstruction System using a Laser Line Projector IEEE Germany Student Conference (GSC), November 2012 https://goo.gl/oPcE4P</p>	
	<p><u>Vaibhav Bajpai, Nikolay Melnikov, Anuj Sehgal, Jürgen Schönwälder,</u> Flow-based Identification of Failures Caused by IPv6 Transition Mechanisms Autonomous Infrastructure, Management & Security, June 2012 [43.5%, 10/23] http://dx.doi.org/10.1007/978-3-642-30633-4_19</p>	AIMS'12
IETF RFCs	<p><u>Jürgen Schönwälder, Vaibhav Bajpai</u> A YANG Data Model for LMAP Measurement Agents IETF RFC 8194, August 2017 http://dx.doi.org/10.17487/RFC8194</p>	RFC 8194
WORKSHOP PUBLICATIONS	<p><u>V.Bajpai, M.Kühlewind, J.Ott, J.Schönwälder, A.Sperotto, B.Trammell</u> Challenges with Reproducibility ACM SIGCOMM 2017 Reproducibility Workshop, August 2017. https://doi.org/10.1145/3097766.3097767</p>	SIGCOMM WORKSHOP'17
	<p><u>Vaibhav Bajpai, Jürgen Schönwälder</u> Measuring the Effects of Happy Eyeballs Applied Networking Research Workshop, July 2016. [30%, 9/30] http://dx.doi.org/10.1145/2959424.2959429 Register coverage: https://goo.gl/XGsLtJ APNIC labs coverage: https://goo.gl/xzJbtQ</p>	IRTF ANRW'16
	<p><u>Vaibhav Bajpai, Jürgen Schönwälder</u> Understanding the Impact of Network Infrastructure Changes using Large-Scale Measurement Platforms Autonomous Infrastructure, Management & Security, June 2013. [50%, 7/14] http://dx.doi.org/10.1007/978-3-642-38998-6_5</p>	AIMS'13
THESIS	<p><u>Vaibhav Bajpai</u> Understanding the Impact of Network Infrastructure Changes using Large-Scale Measurement Platforms PhD Thesis, Jacobs University Bremen, August 2016 http://nbn-resolving.de/urn:nbn:de:gbv:579-opus-1005861</p>	PhD'16
	<p><u>Vaibhav Bajpai</u> Network Flow Query Language Masters Thesis, Jacobs University Bremen, August 2012 http://cnds.eecs.jacobs-university.de/archive/msc-2012-vbajpai.pdf</p>	MSc'12
EVENT REPORTS	<p><u>Vaibhav Bajpai, Olivier Bonaventure, Kimberly Claffy, Daniel Karrenberg</u> Encouraging Reproducibility in Scientific Research of the Internet (Report on Dagstuhl Seminar #18412) Reports, Volume 8, Issue 10, April 2019 http://dx.doi.org/10.4230/DagRep.8.10.41</p>	
	<p><u>V. Bajpai, A.Berger, P.Eardley, J.Ott, J.Schönwälder</u> Global Measurements: Practice and Experience (Report on Dagstuhl Seminar #16012) ACM Computer Communication Review (CCR Editorial) April 2016 http://dx.doi.org/10.1145/2935634.2935641 Dagstuhl Reports, Volume 6, Issue 1, May 2016 http://dx.doi.org/10.4230/DagRep.6.1.15</p>	SIGCOMM CCR'16
	<p><u>Vaibhav Bajpai, Jürgen Schönwälder</u></p>	

POSTERS

E.Walelgne, A.Asrese, V.Bajpai, J.Ott, J.Manner
Using Crowdsourcing Data for Adaptive Video Streaming in Cellular Network
ACM Mobisys Poster, June 2018
<http://doi.acm.org/10.1145/3210240.3210804>

E.Walelgne, J.Manner, V.Bajpai, J.Ott
Analyzing the Performance & Stability of Cellular Networks
ACM Internet Measurement Conference (IMC) Poster, Nov 2017
(Extended to NOMS 2018)

S.Neumeier, E.Walelgne, V.Bajpai, J.Ott, C.Facchi
Ping on the Move
ACM Internet Measurement Conference (IMC) Poster, Nov 2017
(Extended to TMA 2019)

Vaibhav Bajpai, Radek Krejčí
Managing SamKnows Probes using NETCONF
Network Operations & Management Symposium (NOMS) Poster
May 2014 <http://dx.doi.org/10.1109/NOMS.2014.6838279>

Vaibhav Bajpai, Jürgen Schönwälder
NETCONF Interoperability Lab
Network Operations & Management Symposium (NOMS) Poster
May 2014 <http://dx.doi.org/10.1109/NOMS.2014.6838278>

Vaibhav Bajpai, Jürgen Schönwälder
Measuring TCP Connect Times of Dual-Stacked Web Services
Conference on Network and Service Management (CNSM) Poster, Oct 2013
<http://dx.doi.org/10.1109/CNSM.2013.6727822>
(Extended to IFIP Networking 2015)

INTERNET DRAFTS

Jürgen Schönwälder, Vaibhav Bajpai
Using RESTCONF with LMAP Measurement Agents
IETF Internet Draft (I-D), June 2017 [**Expired Document**]
<http://tools.ietf.org/html/draft-ietf-lmap-restconf-04>

M.Bagnulo, T.Burbridge, S.Crawford, J.Schönwälder, V.Bajpai
Large Measurement Platform Protocol
IETF Internet Draft (I-D), September 2014 [**Expired Document**]
<http://tools.ietf.org/html/draft-bagnulo-lmap-http-03>

Vaibhav Bajpai, Jürgen Schönwälder
Measuring the Effects of Happy Eyeballs
IETF Internet Draft (I-D), July 2013 [**Expired Document**]
<http://tools.ietf.org/html/draft-bajpai-happy-01>

TALKS

V.Bajpai, A.Brunstrom, A.Feldmann, W.Kellerer, A.Pras,
H.Schulzrinne, G.Smaragdakis, M.Wählisch, K.Wehrle
The Dagstuhl Beginners Guide to Reproducibility
for Experimental Networking Research
ACM SIGCOMM 2019 (Best of CCR Session), Aug 2019

SIGCOMM '19

Vaibhav Bajpai
A Data-Driven Approach to Informing Future Internet Architectures
University of Edinburgh, March 2019

Invited Talk

- Vaibhav Bajpai, Jürgen Schönwälder
A Longitudinal View of Dual-stacked Websites: Failures, Latency & Happy Eyeballs
IETF 99 IPv6 Operations Working Group, Prague, Jul 2017
Also presented at NetSys, Garching bei München, March 2019,
Orange R&D, Nov 2017 and CAIDA, San Diego, Aug 2017,
<https://goo.gl/Xd42wf> IETF 99
- Vaibhav Bajpai, Saba Ahsan, Jörg Ott, Jürgen Schönwälder
Measuring YouTube Content Delivery over IPv6
IETF 99 Measurements and Analysis for Protocols Working Group, Prague, Jul 2017
Also presented at Max Planck Institute for Informatik, Saarbrücken, Nov 2018,
Orange R&D, Nov 2017 and CAIDA, San Diego, Aug 2017,
<https://goo.gl/YbyqoD> IETF 99
- Vaibhav Bajpai
Measuring IPv6 Performance
Munich Internet Research Retreat, Raitenhaslach, Nov 2016
<https://goo.gl/ANk2b5> Invited Talk
- Vaibhav Bajpai
Understanding the Impact of Network Infrastructure Changes using
Large-scale Measurement Platforms.
TU Munich Doctoral Seminar, Raitenhaslach, Oct 2016
<https://goo.gl/83snjp> Invited Talk
- Vaibhav Bajpai, Jürgen Schönwälder
Measuring the Effects of Happy Eyeballs
RIPE 73 IPv6 Working Group, Madrid, Oct 2016
<https://ripe73.ripe.net/archives/video/1467> RIPE 73
- V.Bajpai, S.Eravuchira, J.Schönwälder, S.Crawford
Measuring Webpage Similarity from Dual-Stacked Hosts
RIPE 72 Plenary, Copenhagen, May 2016
<https://ripe72.ripe.net/archives/video/126> RIPE 72
- V.Bajpai, S.Eravuchira, J.Schönwälder, R.Kisteleki, E.Aben
Vantage Point Selection for IPv6 Measurements:
Benefits and Limitations of RIPE Atlas Tags
MAT Working Group Meeting at RIPE 72, Copenhagen, May 2016
<https://ripe72.ripe.net/archives/video/167> RIPE 72
- Vaibhav Bajpai
Measuring IPv6 Performance
DE-CIX, Frankfurt, April 2016.
<https://goo.gl/No9pRS>
- M.Bagnulo, T.Burbridge, S.Crawford, J.Schönwälder, V.Bajpai
Large Measurement Platform Protocol
LMAP Working Group Meeting at IETF 91, Honolulu, Nov 2014.
<http://www.ietf.org/proceedings/91/slides/slides-91-lmap-8.pdf> IETF 91
- Steffie Jacob Eravuchira, Vaibhav Bajpai, Jürgen Schönwälder
Measurement Research within the Python3 Ecosystem
MAT Working Group Meeting at RIPE 69, London, Nov 2014
<https://ripe69.ripe.net/archives/video/10125> RIPE 69
- Vaibhav Bajpai, Steffie Jacob Eravuchira, Jürgen Schönwälder
Lessons Learned From Using the RIPE Atlas Platform for Measurement Research
MAT Working Group Meeting at RIPE 68, Warsaw, May 2014.
<https://ripe68.ripe.net/archives/video/240> RIPE 68

Vaibhav Bajpai, Jürgen Schönwälder
 Measuring TCP Connect Times of Dual-Stacked Web Services
 IRTF NMRG Workshop on Large-Scale Network Measurements
 CNSM 2013, Zürich, October 2013.
<http://goo.gl/3ACsAA>

V.Bajpai, J.Schauer, C.Prodescu, J.Schönwälder
 NFQL: A Tool for Querying Network Flow Records IETF 87
 IRTF NMRG Workshop on NetFlow/IPFIX at IETF 87, Berlin, July 2013
<http://www.ietf.org/proceedings/87/slides/slides-87-nmrg-0.pdf>

Vaibhav Bajpai, Jürgen Schönwälder IETF 87
 Measuring the Effects of Happy Eyeballs
 v6ops Working Group Meeting at IETF 87, Berlin, July 2013
<http://www.ietf.org/proceedings/87/slides/slides-87-v6ops-8.pdf>

Vaibhav Bajpai, Jürgen Schönwälder RIPE 66
 Measuring the Effectiveness of Happy Eyeballs
 IPv6 Working Group Meeting at RIPE 66, Dublin, May 2013.
<https://ripe66.ripe.net/archives/video/1208>
 RIPE Labs coverage: <https://goo.gl/1mERyV>

TUTORIALS
 Vaibhav Bajpai, Nikolay Melnikov
 Large-Scale Measurement Platforms
 Autonomous Infrastructure, Management & Security (AIMS), Barcelona, June 2013.
<http://cnds.eecs.jacobs-university.de/tutorials>

INVITED SEMINARS

- MIR. *Munich Internet Research Retreat, Raitenhaslach* 2016
- CM Doctoral Retreat. *TU Munich Connected Mobility Doctoral Retreat, Raitenhaslach* 2016
- Leone/IETF/BBF Workshop. *Large-scale Measurements, Dublin* 2014
- Dagstuhl Seminar (#13472). *Global Measurement Framework, Wadern* 2013

HONORS

- RIPE RACI fellowship to attend RIPE 66 2013
- Graduated with a 1.0 grade on the masters thesis, 1.64 overall GPA in masters 2012
- Graduated as a top student of the class (80.84%) in bachelors 2009
- Ranked 9th amongst bachelor freshmen from 600 colleges affiliated with university 2005
- Graduated as a top student of the class (3rd in city) in XII (93.4%) 2005
- Merit certificate for 100% marks in Computer Science in XII 2005
- Graduated as a top student of the class in X (86.0%) 2003
- Merit certificate for 100% marks in Science in X (felicitated by the State Govt) 2003
- All-India merit position 35th in Junior Mathematics Olympiad 2002

OPEN SOURCE CONTRIBUTIONS

- [youtube](#), A tool to measure youtube performance delivered over IPv4 and IPv6
- [simweb](#), A tool to measure similarity of webpages delivered over IPv4 and IPv6
- [nfql](#), A C implementation of the network flow query language
- [happy](#), A happy eyeballs [RFC 6555] probing tool
- [ncclient](#), A Python library for NETCONF clients
- [libnetconf](#), A NETCONF library in C intended for building NETCONF clients and servers.
- [scamper](#), A scalable and extensible packet prober for active measurement of the Internet
- [mtr](#), A network diagnostic tool
- [homebrew-versions](#), Versioned formulae for the Homebrew package manager

MEMBERSHIPS

- IEEE Membership
- IEEE Communications Society Membership
- Internet Society Membership
- SIGCOMM Membership
- IFIP TC6 Working Group 6.6 Membership

LANGUAGES	<ul style="list-style-type: none">– English– Hindi– German	fluent native A1 level
REFERENCES	<p>Jürgen Schönwälder Jacobs University Bremen, DE j.schoenwaelder@jacobs-university.de</p> <p>Philip Eardley BT Research, UK philip.eardley@bt.com</p> <p>Filip De Turck Ghent University, BE filip.deturck@ugent.be</p>	<p>Jörg Ott Technische Universität München, DE ott@in.tum.de</p> <p>Sam Crawford SamKnows Limited, UK sam@samknows.com</p>