Internet-QoE 2016

ACM SIGCOMM Workshop on QoE-based Analysis and Management of Data Communication Networks

1. CALL FOR PAPERS

Measuring and analyzing complex networks such as the Internet has been the focus of many research efforts for over two decades now. While this approach has lead to an improved understanding of the Internet and an enhancement of the management and operation of large-scale complex networks, little has been done to understand and manage the traffic and the network from a user-centric perspective. QoE remains a poorly understood domain, currently restricted to small scale lab studies and very far from the analysis of real large scale traffic measurements and networks. Especially in the industry, QoE has become a buzz word, far from its reality within the research community, and partly due to the complexity involved in deploying QoE-based network analysis and management solutions.

In addition, network operators and service providers currently struggle to keep their increasingly demanding customers happy in an increasingly competitive and complex environment, while remaining profitable at the same time. The sheer development of novel end-user services demands more and better user-centric quality concepts and metrics applied to real world operational networks. We see current and future networks becoming more and more end-user experience aware, but there is still a long way to go to make of QoE one of the guiding paradigms for network design, management, and operation. As a first step, we need to better understand real networks and their traffic through the eyes of the end-user.

The goal of the Internet-QoE workshop is to scale QoE out of the lab studies context and bring it to the design, analysis and operation of real world networks and traffic. By fostering an explicit and deep integration of the end-user directly into the analysis and management of traffic and networks, we expect to reduce the gap between QoE research and its application to future network management paradigms, as well as to provide a more targeted end-user perspective to the research on Internet analysis and its future development.

Internet-QoE brings together researchers and practitioners from the Internet measurements and analysis domain and the QoE modeling and assessment domain, as well as industry players willing to integrate QoE aspects into the DNA of their daily business, with direct applications in network dimensioning, monitoring, management, and troubleshooting among others. We invite submissions in the following non-exhaustive list of topics:

- QoE-aware networking
- Internet measurements related to QoE
- QoE characterization from Internet measurements
- QoE metrics for smartphones & mobile networks
- QoE-based traffic monitoring and troubleshooting
- Novel algorithms to improve Internet QoE
- QoE-based network management and analysis
- QoS/QoE mapping, metrics and measurements in the large-scale
- Application of QoE models and metrics to network and traffic analysis
- Tools and techniques to gather QoE-related Internet measurements
- Large-scale field trials shedding light on QoE aspects
- Qualitative measurements for Internet traffic analysis
- SDN for QoE-based network management
- QoE-based analysis of CDNs and Cloud networks
- Large-scale network simulation for QoE analysis
- Novel approaches for large-scale QoE crowd-sourcing

1.1 Submission Instructions

Submissions must be original, unpublished work, and not under consideration at another conference or journal. Submitted papers must be at most six (6) pages long, including all figures, tables, references, and appendices in two-column 10pt ACM format. Papers must include authors names and affiliations for single-blind peer reviewing by the PC. Authors of accepted papers are expected to present their papers at the workshop. Accepted papers will be published in the ACM Digital Library.

2. IMPORTANT DATES

- Paper registration deadline: 18th March 2016
- Paper submission deadline: 25th March 2016
- Paper acceptance notifications: 29th April 2016
- Camera ready due: 20th May 2016

3. COMMITTEES

Workshop Co-chairs

- Pedro Casas, Austrian Institute of Technology, Austria
- Fabián Bustamante, Northwestern University, US
- Martín Varela, VTT Technical Research Centre of Finland, Finland
- David Choffnes, Northeastern University, US

Program Committee

- Suman Banerjee, University Wisconsin Madison, US
- Rocky Chang, The Hong Kong Polytechnic University, Hong-Kong
- kc Claffy, CAIDA/USCD, US
- Sebastian Egger, Austrian Institute of Technology, Austria
- Markus Fiedler, BTH Karlskrona, Sweden
- Emir Halepovic, AT&T Research, US
- Tobias Hoßfeld, University of Duisburg-Essen, Germany
- Lucjan Janowski, AGH University of Science and Technology, Poland
- Patrick Le Callet, Polytech Nantes, France
- Morley Mao, University Michigan, US
- Maria Papadopouli, University of Crete/ICS-FORTH, Greece
- Peter Reichel, University of Vienna, Austria
- Raimund Schatz, Austrian Institute of Technology, Austria
- Lea Skorin-Kapov, University of Zagreb, Croatia
- Shobha Venkataraman, AT&T Research, US
- Florian Wamser, University of Würzburg, Germany
- Hui Zhang, Carnegie Mellon University and CONVIVA, US