

Universidade do Minho
UC: Qualidade de Serviço em Redes IP
TP 1: Discussão de um artigo na área de QoS
Ano lectivo 2022/2023 — MEI / MIEI — 2º Sem

Objectivos: Este ensaio exploratório visa promover o contacto com a investigação que está a ser feita atualmente na área de QoS em redes IP, desta forma, propõe-se o contacto as principais conferências desta área. Assim, o trabalho terá duas componentes: 1) um breve estudo de um artigo atual seleccionado de uma das conferências referenciadas e a escrita de um resumo sobre o mesmo; e 2) uma apresentação e discussão do artigo estudado durante a aula. Desta forma, pretende-se contribuir para uma maior sensibilização coletiva para a abordagem e resolução dos problemas propostos, permitindo também avaliar a capacidade de análise, compreensão, síntese e exposição dos alunos sobre temáticas relacionadas com QoS. Nesse sentido são propostas as seguintes conferências, com incidência nos anos **2021** e **2022** para uma melhor relevância dos artigos em análise:

1 - PMA – Springer Passive and Active Measurement Conference

The Passive and Active Measurement (PAM) conference brings together researchers and operators to discuss novel and emerging work in the area of network measurement and analysis. PAM is inclusive of all areas of network measurement, but focuses on systems-based research and real-world data. Indeed, measurement technology is needed at all layers of the network stack, ranging from power profiling of hardware components to virtualization in data centers to application profiling and even user experience. Work with operational impact or relevance to the broader network research community is especially welcome, as are early and promising measurement techniques and replications of existing studies.

2 - TMA – IEEE Network Traffic Measurement and Analysis Conference

The Network Traffic Measurement and Analysis Conference (TMA) is a highly selective venue for the presentation of both early-stage and mature research as well as controversial works on all the aspects of network measurements. The focus is on improving the practice or application of measurements, across the entire network stack up to the application layer, with an emphasis on new areas of network communication such as Software-Defined Networks, Cloud services, Content Distribution Networks, Social Networks, mobile applications and data centers. We also welcome more traditional measurement topics, such as traffic classification, anomaly detection, network performance evaluation and traffic analysis.

3 - IMC - ACM Internet Measurement Conference

The Internet Measurement Conference is an annual conference focusing on Internet measurement and analysis, sponsored by ACM SIGCOMM and ACM SIGMETRICS. The aim is that papers presented at the conference contribute to the current understanding of how to collect or analyze Internet measurements, or give insight into how the Internet behaves.

IMC was begun as a workshop in 2001 in response to the difficulty at that time finding appropriate publication/presentation venues for high-quality Internet measurement research in general, and frustration with the annual ACM SIGCOMM conference's treatment of measurement submissions in particular.

4 - INFOCOM - IEEE International Conference on Computer Communications

IEEE INFOCOM is a top-ranked conference on networking in the research community. It is a major conference venue for researchers to present and exchange significant and innovative contributions and ideas in the field of networking and closely related areas. IEEE INFOCOM covers both theoretical and systems research.

5 - ACM SIGMETRICS Conference

SIGMETRICS is the ACM Special Interest Group (SIG) for the computer performance evaluation community. SIGMETRICS promotes research in performance analysis techniques as well as the advanced and innovative use of known methods and tools. Target areas of performance analysis include file and memory systems, database systems, computer networks, operating systems, architecture, distributed systems, fault tolerant systems, and real-time system.

6 - ACM SIGCOMM Conference

The ACM Special Interest Group (SIG) on Data Communication provides a forum for computing professionals involved in the vital field of data communication. SIGCOMM is also a community resource for those interested in network research, network standards, network history, and the educational aspects of networking. SIGCOMM and IEEE co-sponsor the "ACM/IEEE Transactions on Networking" journal.

Notas:

- Para uniformizar os ensaios escritos/resumos é obrigatório o uso do template LNCS (Lecture Notes in Computer Science, Springer, (disponível para .tex ou .docx), não excedendo 3 páginas (em .pt ou .uk).
- A apresentação e discussão do tema do projeto terá lugar nas respetivas aulas PL. A ordem das apresentações será aleatória, bem como a escolha do grupo designado para colocar uma questão.
- Cada apresentação terá uma duração máxima de 15 minutos, sendo o formato livre.
- Tempo previsto para conclusão: 2 aulas de preparação + 2 aulas de apresentação.
- A ser concluído até às 23:59 do dia 1 de Março.