
The January 2019 Issue

2019 is a special year for SIGCOMM as your SIG will celebrate its 50th birthday at SIGCOMM'19 in August. During the last half century, the networking field has evolved a lot and SIGCOMM Computer Communication Review (CCR) contributed to this evolution by timely disseminating technical papers. CCR will celebrate SIGCOMM's birthday with a special issue that will contain editorial notes that reflect on both the past and the future of your SIG. This special issue will be published in October 2019. Its detailed content is still being worked on, but we expect that you will find lots of interesting information in this issue. If you plan to submit papers to CCR, please note that the October 2019 issue will not publish any new technical paper. All the papers submitted between March 1st, 2019 and September 1st, 2019 will be considered for the January 2020 issue.

This January 2019 issue contains one technical paper and four editorial notes. In “*Parametrized Complexity of Virtual Network Embeddings: Dynamic & Linear Programming Approximations*”, Matthias Rost et al. analyse the problem of mapping a virtual network on a physical one. They propose both theoretical experimental results.

The first two editorial notes are position papers addressing different technical topics. In “*Network Telemetry: Towards A Top-Down Approach*”, Minlan Yu argues that we should view network telemetry from a different angle. Instead of using a bottom-up approach that relies on passively collecting data from various devices and then inferring the target network-wide information, she suggests a top-down approach and envisions the possibility of providing high-level declarative abstractions that would enable operators to define specific measurement queries. This editorial note could be of interest for many Internet measurement researchers. In “*Thoughts on Load*

Distribution and the Role of Programmable Switches”, James McCauley and his colleagues take a step back at some usages of programmable network switches. More precisely, they wonder which type of functionality should be migrated to switches and which functionality should not. This is a very interesting question that should be answered when writing the motivation for many papers on programmable switches.

The two other editorial notes were prepared at a recent Dagstuhl seminar that focused on the reproducibility of network research. In “*The Dagstuhl Beginners Guide to Reproducibility for Experimental Networking Research*”, Vaibhav Bajpai and his eight co-authors have assembled a very interesting and very useful guide filled with hints and recommendations for young researchers who begin to experiment with networks. This article will probably soon become a must read in many graduate schools. During the same seminar, another group of researchers lead by Alberto Dainotti brainstormed about our x pages two column papers. This format was interesting when articles were disseminated on real paper. Today, thirty years after the invention of the web, there are many other possibilities to disseminate scientific information. Many of these techniques are more collaborative and open than putting pdf files on web servers. “*Open Collaborative Hyperpapers: A Call to Action*” encourages the measurements community to collaborate on the preparation of *hyperpapers*. This editorial note explains the motivations for these *hyperpapers* and discusses some solvable technical challenges. An interesting point about this approach is that it could encourage both a faster dissemination of research results and a truly open model that encourages authors to collaborate. While brainstorming about the 50th birthday issue of SIGCOMM, we had an interesting teleconference with Vint Cerf who reminded us of

the role that SIGCOMM Computer Communication played in allowing a fast dissemination of recent research results. He compared CCR with publications such as the Journal of the ACM that had much longer publication delays.

The hyperpapers in the last editorial note of this issue could be a modern way of disseminating important research results. I would love to see researchers collaborating on *hyperpapers* in the coming months and submitting their work to CCR. Such a submission would violate the CCR submission

guidelines that still assume that authors provide pdf files. If such an *hyperpaper* gets submitted to CCR, we find a suitable reviewing process within the CCR Editorial board.

I hope that you will enjoy reading this new issue and welcome comments and suggestions on CCR Online (<https://ccronline.sigcomm.org>) or by email at `ccr-editor at sigcomm.org`.

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CCR Editor