Network Neutrality and Its Impact on Innovation
(November/December 2018)

Final submissions due: 1 February 2018

Please email the guest editors a brief description of the article you plan to submit by 31 December 2017. Guest Editors: Schahram Dustdar and Elias P. Duarte Jr. (ic6-2018@computer.org)

Network neutrality (NN) has been discussed for more than a decade. However, only recently have laws and rules regarding NN been implemented in several places around the globe. No precise definition exists for NN, but a common definition extracted from current regulations is that NN is the principle by which all traffic on the Internet must be treated equally. Therefore, an ISP can’t slow down, prioritize, or block any type of specific traffic, regardless of its origin, destination, and/or content. This means that traffic differentiation (TD) practices aren’t allowed. Without such regulations in place, ISPs might employ TD to deal with congestion, or because of commercial agreements, or even to benefit their own services.

Such discrimination between different types of traffic threatens innovation, fair competition, and the consumer’s freedom of choice on the Internet. Thus, NN is essential for ensuring a level playing field for the development of new applications and services on the Internet. Cloud services, over-the-top (OTT) services, and Internet of Things (IoT) devices and software are examples of applications and services that need NN to adequately flourish in the future.

With this in mind, this special issue seeks contributions from the research and industrial communities addressing various topics within this area, including

- NN measurement;
- TD on the Internet;
- counteracting TD;
- NN for the IoT;
- statistical models for NN;
- streaming analytics for NN;
- data mining for NN;
- open source and open Internet initiatives for NN;
- NN for the Future Internet;
- evaluation frameworks for NN solutions; and
- innovation case studies connected to NN.

All submissions must be original manuscripts of fewer than 5,000 words, focused on Internet technologies and implementations. Please note that each figure counts as 250 words, as part of the word count. All manuscripts are subject to peer review on both technical merit and relevance to IC’s international readership — primarily practicing engineers and academics who are looking for material that introduces new technology and broadens familiarity with current topics. We do not accept white papers, and we discourage strictly theoretical or mathematical papers. To submit a manuscript, please log on to ScholarOne (https://mc.manuscriptcentral.com:443/ic-cs) to create or access an account, which you can use to log on to IC’s Author Center and upload your submission.