IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD)
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CALL FOR PAPERS

Special Session on **"Stream Processing and Network Programming"**

Scope

Since the advent of the Software Defined Networking (SDN), the concepts of network softwarization and network programmability have gained more and more popularity. This shifting paradigm is changing the design principles of network processing toward a model in which applications run on the SDN control plane, but an increasing number of functions are delegated to network nodes to be performed on the data plane. This is made it possible through the large availability of high-performance multi-core platforms and programmable hardware, together with the the adoption of programming abstractions and languages for data plane programming, such as Openflow, P4, eBPF. However, data plane operations have stringent requirements in terms of performance and scalability, that need data to be analyzed in place, as they arrive, according to efficient approaches such as Data Stream processing.

This Special Session aims at exploring the area of network application programming at large, soliciting the submission of original researches from a broad variety of aspects on both the control and data planes.

Topics of Interest

In this Special Session, we welcome submissions of papers presenting original work. Submissions must not overlap with works that have been published or that are simultaneously considered for publication elsewhere. Specifically, we encourage researchers and industry experts to submit original contributions in the following major areas (indicative list, other related topics will also be considered):

- Data plane programming languages
- API and programming abstractions for network application
- Network monitoring and profiling
- Network measurements
- Network metrology and network telemetry applications
- SDN based cybersecurity applications
- SDN controlled network analytics
- In-network processing in SDN networks
- eBPF based network applications
- Software accelerated traffic capture
- Decomposition of network functions
- Data Stream Processing for network applications
- AI and Machine Learning for network applications
- Applications for diagnosis and correlation of events
- Network troubleshooting
- Real world testbed experiences

Important Dates

Paper submission deadline	May 20, 2020
Paper acceptance notification	July 05, 2020
Camera-ready paper	July 31, 2020
Conference date	September 14-16, 2020

Paper Submissions Guidelines

Prospective authors are invited to submit a full paper of not more than six (6) IEEE style pages including results, figures and references. Papers should be submitted via EDAS. Papers submitted to the conference, must describe unpublished work that has not been submitted for publication elsewhere. All submitted papers will be reviewed by at least three TPC members, while submission implies that at least one of the authors will register and present the paper at the conference. Electronic submission will be carried out through the EDAS web site at the following link: https://edas.info/newPaper.php?c=27371&track=101985

All accepted papers will be included in the conference proceedings and IEEE digital library (http://ieeexplore.ieee.org/).

Special Session Organizers

- Gregorio Procissi, *Università di Pisa, Italy*