

In conjunction with

the 14th International Conference on Ambient Systems, Networks and Technologies (ANT 2023)  
**March 15 - 17, 2023 Leuven, Belgium**

People are now more closely connected to the internet, sharing knowledge, working together, and producing & consuming vast amounts of data. These networks are powered by the fifth generation (5G) of the Internet, which federates numerous networks, including the regular Internet, the Internet of Things (IoT), smart cities, smart grids, and intelligent transportation systems. In fact, 5G is picking up steam as it expands the capabilities of the current Internet by enabling connections between a variety of "things" or actual physical objects, including electronic appliances, vehicles, thermostats, and other gadgets.

In this situation, software-defined networking (SDN), a more contemporary paradigm for communication that allows for the softwarization of the communication network, might be essential to overcoming these difficulties. It has a number of advantages that make it one of the main 5G cellular systems options. SDN networks separate the forwarding plane and the control plane of the communication networks to achieve great network flexibility and dependability. A single controller or a number of dispersed controllers may be deployed by the control plane. Network function virtualization is a different communication paradigm that may be implemented thanks to SDN (NFV).

The wide spectrum of research issues pertaining to SDN/NFV networks will be covered in this Special Issue. Researchers are invited to submit original contributions on any of the subjects present in *Table of Contents*, but not limited to those.

## TABLE OF CONTENTS

(but not limited to)

- Structure of SDN networks to assist 5G systems
- Controller to controller communication
- Intra- and inter-domain routing solutions based on SDN networks
- Controller placement and allocations problems
- Routing solutions based on the programmability of the control and/or data planes
- AI/ML-based routing algorithms
- SDN-based network monitoring
- Design and implementation of hybrid programmable data planes
- Advanced packet manipulation and scheduling in programmable data planes
- SDN-based control and management of multi-layer networks
- Intent-based SDN protocols and architectures
- Novel architectures for function placement and orchestration in SDN/NFV networks
- NFV/SDN to assist 5G network systems
- IoT Applications using SDN Networks
- AI algorithms for assisting SDN networks

## PROGRAM COMMITTEE (TENTATIVE)

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## SUBMISSION GUIDELINES

All accepted papers will be included in the ANT-2023 proceedings, which will be published by Elsevier Science in the open-access Procedia Computer Science series on-line (Scopus Indexed). The authors must follow Elsevier guidelines as given in ANT-2023 Website. The number of pages for workshop papers is limited to 6 pages, including all figures, tables and references. At least one author of each accepted paper is required to register and attend the conference to present the work.

**Conference website link:** [http://cs-conferences.acadiau.ca/ant-23/#workshop\\_approved](http://cs-conferences.acadiau.ca/ant-23/#workshop_approved)

**Submission easychair link:** <https://easychair.org/conferences/?conf=fna2023>

## IMPORTANT DATES

- Full paper submission : November 15, 2022
- Acceptance notification : December 12, 2022
- Camera Ready submission : January 9, 2023
- Conference Dates : March 15-17, 2023

## WORKSHOP ORGANIZERS

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