

IEEE International Workshop on Time-sensitive and Deterministic Networking

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General Co-chairs

Victor C. M. Leung

TPC Co-chairs

F. Richard Yu
Tao Huang
Renchao Xie
Shuo Wang

Main contact

[vleung@ece.ubc.ca](mailto: vleung@ece.ubc.ca)
[richard.yu@carleton.ca](mailto: richard.yu@carleton.ca)
[htaο@bupt.edu.cn](mailto: htao@bupt.edu.cn)
[Renchao.Xie@bupt.edu.cn](mailto: Renchao.Xie@bupt.edu.cn)
[shuowang@bupt.edu.cn](mailto: shuowang@bupt.edu.cn)

Important Dates

- ❖ Paper submission deadline:
January 20, 2021
- ❖ Notification of acceptance:
February 20, 2021
- ❖ Camera-ready papers:
March 1, 2021

Submission link

<https://edas.info/N27513>

Webpage link

<https://icc2021.ieee-icc.org/workshop/ws-2-workshop-time-sensitive-and-deterministic-networking>

Scope

Traditional network's "best-effort" forwarding gradually fails to meet the needs of booming real-time applications, such as industrial internet, vehicle networking and artificial intelligence, etc. Time-sensitive and deterministic networking has become a promising technology to achieve strict QoS guarantees, such as bounded end-to-end latency and jitter, and higher reliability. However, as the massive deployment of time-sensitive and deterministic networking, it also brings many challenges, such as synchronous and asynchronous scheduling and shaping mechanisms and so on. Thus the Workshop on "Time-sensitive and Deterministic Networking" gives the opportunity to gather the researchers from the academia and industry in order to investigate the challenges and identify the further directions for the ultra-reliable and low latency communication.

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Deterministic networks for industrial control and automation
- New key technologies for time-sensitive networking (TSN) and deterministic networking (DetNet)
- SDN-based architecture for TSN and DetNet
- Deterministic networks for vehicle and self-driving
- Deterministic networks for datacenter and edge computing
- Edge Computing for Industry 4.0 applications with TSN
- Time-triggered Ethernet and Time-sensitive networks
- Network slice, deterministic bandwidth guarantee technology
- Deterministic delay and delay variation guarantee technology
- Queueing control, scheduling, admission control policies
- Deterministic and low latency technology for physical layer and optical layer
- Cross-layer optimization for TSN and DetNet
- 5G, WiFi, and wireless deterministic networks
- Network calculus for deterministic networks
- Simulation tools, frameworks for deterministic networks
- Performance evaluation and mechanism verification for deterministic networks
- Hardware development platform and prototype design for TSN and DetNet
- Machine learning for deterministic networking
- Performance/complexity/cost tradeoff

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2021 official website: <https://icc2021.ieee-icc.org/authors>