Foreword

The 4th International Workshop on Systems and Network Telemetry and Analytics (SNTA 2021), a full-day virtual meeting at the HPDC 2021 conference in Stockholm, Sweden, aims at bridging the systems and network telemetry and the latest advances in machine learning and data science technologies, to advance the performance and reliability of HPC and distributed systems.

The tasks of systems and network telemetry are a key element for effective operations and management of HPC and distributed computing systems, by offering comprehensive monitoring and analysis capabilities to provide the visibility into what is occurring at any time. The tasks will be significantly complicated with the greater complexity of computing systems, increasing network speed, and the newly introduced mobile and IoT devices. Such changes and advances in technology will require more scalable telemetry and analysis techniques for data-driven diagnostics and deeper data analysis. In addition to the quantitative and qualitative challenges, data pressure in systems and networks also comes from various sources such as end systems, switches, firewalls, intrusion sensors, and the newly emerging network elements speaking with different syntax and semantics, which makes organizing and incorporating the generated data difficult for extensive analysis. This workshop aims at bridging the systems and network telemetry and the latest advances in machine learning and data science technologies, to advance the performance and reliability of HPC and distributed systems, and sharing visions of investigating new approaches and methods at the intersection of HPC systems and data sciences from the diverse angles of systems/network performance, availability, and security.

This year, the conference meeting was held virtually again due to the COVID-19 pandemic. Putting together SNTA2021 was very hard, but with the team effort, we expect another successful organization of the full-day workshop. The workshop has about 87.5% of acceptance rate, after a rigorous review process. We would like to thank all authors who submitted to the workshop. The diverse submission and selection assure interesting discussions and most importantly out-of-the-box thinking and generation of new ideas during the workshop. We'd also like to thank the keynote speakers who gave excellent presentations on very interesting and relevant topics to the workshop. We are grateful to the program committee, who worked very hard in reviewing papers and providing feedback for authors in such a difficult situation.

SNTA'21 Workshop Co-Chairs
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