Cyber-Physical Systems enabled by Sensing/Network/AI and Photonics Conference 2023

Hybrid Conference

Date: 18 (Tue.) – 20 (Thu.) April 2023

Co-located with Optics and Photonics International Congress 2023

Conference Chair: **Ronald E. Freund**

Fraunhofer Heinrich Hertz Institute, Germany

Sponsored by The Graduate School for the Creation of New Photonics Industries

Scope:

In coming Society 5.0 era, the Cyber Physical System (CPS) which is interconnected between the real world and cyber spaces enables for enhancing the quality of life and helping to solve social issues such as aging population and energy crises, through big data analysis collected from all the devices connected to the network.

This CPS-related conference covers multiple aspects, including core technologies realizing CPS, applications and use cases, and photonic technologies. See the more details of the categories as follows.

The participants from various sectors over the world, including the industries and academia can expect to hear the cutting-edge technology of CPS as well as the novel use cases and exchange opinions on the CPS and related perspectives.

Category 1
Core Technologies for Sensing/Network/AI

- IoT sensors
- Cybernetic avatars
- IoT wired/wireless networks
- Beyond 5G/6G
- AI/machine learning
- Big data analytics/science
- Mobile edge computing
- Image processing
- Connected sensor systems
- Compressive sensing
- Others

Category 2
Applications and use cases

- Prevention and control for pandemics, COVID-19
- Healthcare and biomedical applications
- Smart city
- Smart mobility/MaaS
- Precision/smart agriculture
- Smart factory
- Smart civil engineering, construction and monitoring
- xR (VR/AR/MR) applications
- Robotics
- Field trial and social implementation
- Others

Category 3
Photonics Technologies

- Sensor/fiber sensor
- Imaging/image sensor
- Virus/biomedical sensor
- LiDAR
- Active and passive devices
- Integrated photonics
- Metasurface devices
- Terahertz
- Robot photonics
- Optical interconnect
- Visual light communications
- Underwater applications
- Others

Extended submission deadline: 27 January, 2023

http://cps-snap.opicon.jp/