

The 13th IEEE International Conference on Cyber, Physical and Social Computing (CPSSCom-2020)

Nov. 2-6, 2020, Rhodes Island, Greece

IMPORTANT DATES

Special Session Proposal: Feb. 15, 2020
Submission Deadline: Jul. 15, 2020
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Cyber-Physical-Social Systems

Cyber-Physical Systems (CPS) and Cyber-Social Systems (CSS) are emerging cross-disciplinary research areas that feature the combination of computational and physical elements. CSS is rapidly evolving due to the popularity of online social networking. With the advent of ubiquitous sensing and networking, future social networks involve cyber-physical interactions among associated social attributes. Cyber-Physical-Social Systems (CPSS) are known as the intergration between CPS and CSS.

The 2020 IEEE International Conference on Cyber Physical and Social Computing (CPSSCom-2020) will provide a high-profile leading-edge forum for researchers, engineers, and practitioners to present state-of-art advances and innovations. We seek submissions of papers addressing new techniques, introducing innovative methodologies, and proposing new CPS, CSS, and CPSS research directions.

IEEE CPSSCom-2020 Tracks and Topics

Track 1: System & Design

- ✧ Architectures for CPSS
- ✧ Low power and energy harvesting
- ✧ Real-time systems
- ✧ Wearable devices management
- ✧ System-level design methodology
- ✧ Embedded hardware and software
- ✧ Hyper-connected smart devices
- ✧ Embedded middleware design

Track 2: Data & Services

- ✧ CPSS data processing and AI
- ✧ Data-driven services in CPSS
- ✧ Data mining platforms for CPSS
- ✧ Cloud-fog-edge computing
- ✧ Industrial Internet of Things (IIoT)
- ✧ Distributed computing of big data
- ✧ Smart services platform
- ✧ Incremental computing of big data
- ✧ Tensor computing in CPSS
- ✧ Multi-attributes matching in CPSS

Track 3: Networks & Communications

- ✧ Wireless sensor networks
- ✧ Radio frequency identification
- ✧ Sensor network and communications
- ✧ 5G Communications
- ✧ Communications in edge computing
- ✧ Machine-to-machine communications
- ✧ Energy efficient in wireless networks
- ✧ Green communication

Track 4: Technologies & Applications

- ✧ Internet-of-Things
- ✧ E-health in CPSS
- ✧ Tensor Computing with Application
- ✧ Smart city and smart world
- ✧ Privacy and privacy-preserving systems
- ✧ Safety critical CPSS
- ✧ Adaptive and intelligent systems
- ✧ Deep learning in CPSS
- ✧ Blockchain-based applications in CPSS
- ✧ Biological information processing

1. Journal of Cloud Computing SI on Security and Privacy Issues for AI in edge-Cloud Computing:
<https://journalofcloudcomputing.springeropen.com/securityprivacyaiedgecloud?from=singlemessage>
2. MDPI Electronics special issue on Blockchain-based Technology for Mobile Application
https://www.mdpi.com/journal/electronics/special_issues/BTMA
3. Software: Practice and Experience SI on Software and Hardware Co-Design for Sustainable Cyber-Physical Systems
https://onlinelibrary.wiley.com/pb-assets/assets/page/journal/1097024x/SI_softandhard.pdf
4. IEEE/CAA Journal of Automatic Sinica SI on Blockchain for Internet-of-Things and Cyber-Physical Systems: Emerging Trends, Issues and Challenges
http://www.ieee-jas.org/news/news_en/9248195c-6d90-4868-9962-263cd9ba12f3_en.htm
5. Future Generation Computer Systems SI on Artificial Intelligence for Cyber Defence and Smart Policing
<https://www.journals.elsevier.com/future-generation-computer-systems/call-for-papers/artificial-intelligence-for-cyber-defence-and-smart-policing>
6. Information Fusion SI on Data Fusion for Trust Evaluation
<https://www.journals.elsevier.com/information-fusion/call-for-papers/special-issue-on-data-fusion-for-trust-evaluation>
7. IEEE Transactions on Industrial Informatics SI on Digital Twinning: Integration AI-ML and Big Data Analytics for Virtual Representation
http://www.ieee-ies.org/images/files/tii/ss/2020/Digital_Twinning_Integrating_AI-ML_and_Big_Data_Analytics_for_Virtual_Representation_2020-4-30.pdf
8. Information Fusion SI on Fusion from Big Data to Smart Data
9. IEEE Transactions on Network Science and Engineering SI on Computing and Networking for Cyber-Physical-Social Systems
<https://www.comsoc.org/publications/journals/ieee-tNSE/cfp/computing-and-networking-cyber-physical-social-systems>

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