

The modern digitized world has led to the emergence of a new paradigm on global information networks and infrastructures known as Cyberspace and the studies of Cybernetics, which bring seamless integration of physical, social and mental spaces. Cyberspace is becoming an integral part of our daily life from learning and entertainment to business and cultural activities. As expected, this whole concept of Cybernetics brings new challenges that need to be tackled.

To address these emerging challenges, there is a need to establish new science and research portfolios that incorporate cyber-physical, cyber-social and cyber-mental technologies together in a coherent manner to deliver the vision of Cyberspace. This is the aim of the 2017 IEEE Cyber Science and Technology Congress (CyberSciTech 2017) to offer a common platform for scientists, researchers and engineers to share their latest ideas and to exchange the latest developments and outcomes in their research and technologies, with a broad scope of cyber-related science, technology and application topics. CyberSciTech 2017 covers four main research tracks including but not limited the following areas or topics.

## Track 1: Cyber Science and Fundamentals

Cyberspace Structure & Property, Cyber-world Constituents & Evolution, Cyberspace & Cyber-world Modeling, Cyber-enabled Hyper-connection, Cyber Visualization, Web Science, Internet Science, Data Science, Cyber Physical Science, Cyber Social Science, Cyber Human Science, Cyber Life Science, Cyber Physics, Cyber Biology, Cyber Ecology, Cyber Dynamics, Cyber Security

### Track 2: Cyber Physical Computing and Systems

Cyber-Physical Systems, Cyber-Physical Interface, Cyber-Physical Hybrid Intelligence, Ambient Intelligence, Intelligent Transportation Systems, Networked Robots, Virtual Reality, Augmented Reality, Wearable/Bearable Computing, Cyborg, Internet of Things (IoT), Smart Object, Smart Sensor, Smart Environment, Smart City, Smart Agriculture, Smart Manufacture, Smart Healthcare, Smart Service, Smart Cloud, Smart World

#### Track 3: Cyber Social Networks and Computing

Cyber-Social Networks, Cyber-Socialogy, Cyber-Culture, Cyber-Economy, Cyber-Social Evolution, Cyber-Social, Cyber-Social Simulation, Cyber-Behavior Analytics, Cyber-Crowdsourcing, Cyber-Trust/Privacy, Cyber-Rights, Cyber-Crime, Cyber-Law, Cyber-Telepathy, Anticipatory Computing

## Track 4: Cyber Life, Intelligence and Mental Computing

Cyber-Brain, Cyber-Individual, Cyber-Life, Cyber/Digital Clone, Cyber-Human Evolution, Cyber-Psychology, Cyber-Cognition, Cyber-Affordance, Cyber-Human Analytics, Cyber-based Learning, Cyber-Thinking, Cyber-Creation, Affective Computing, Emotional Computing, Mental Computing, Sentiment Analysis

## Workshops (http://cyber-science.org/2017/workshop.html)

- (1) The 2nd International Workshop on Emerging Dependable Computing System Technologies and Applications (EDCSTA 2017)
- (2) The 2017 Workshop on Social Networks and Intelligence in Cyberspace (SNIC-2017)

#### Special Sessions (http://cyber-science.org/2017/special-session.html)

- (1) Virtual Reality under Cyber (VRC)
- (2) Cyber-Enabled Smart Environment and Healthcare (Cyber-ESEH)
- (3) Cyber-enabled Intelligent Sensing and Smart Computing (Cyber-ISSC)
- (4) Special Session on Cyber Social Computing and Cyber-Enabled Applications (CSC&CEA)
- (5) Cyber Technology for Connected and Automated Transportation Systems (CCATS)
- (6) Computing and Applications for Cyber Internet of Things (Cyber-IoT)

# **Important Dates**

**Regular Papers:** 

Paper Submission Due: July 10, 2017 Author Notification: July 10, 2017 August 20, 2017

**Workshop and Special Session Papers:** 

Paper Submission Due: August 15, 2017 Author Notification: August 31, 2017 **Work-in-Progress (WiP) and Poster Papers:** 

Paper Submission Due: August 15, 2017 Author Notification: August 31, 2017

**All Papers:** 

Author Registration Due: September 17, 2017 Camera-Ready Manuscript Due: September 21, 2017

#### **Submission and Publication**

Authors are invited to submit their original work. Submitted papers need to abide by IEEE Computer Society formats, and must be formatted accordingly (see "IEEE Manuscript Templates") and submitted via EDAS <a href="https://edas.info/newPaper.php?c=23118">https://edas.info/newPaper.php?c=23118</a>.

A regular paper is between 6-8 pages. A WiP, workshop, or special session paper should be between 4-6 pages and a poster paper should be between 2-4 pages. Detailed submission requirements are given in the CyberSciTech 2017 website <a href="http://cyber-science.org/2017/">http://cyber-science.org/2017/</a>.

All accepted papers in the regular, work-in-progress, workshops, special sessions and posters will be published in an IEEE Computer Society proceedings (EI indexed, in IEEE DL). Extended versions of selected excellent papers will be published in special issues of prestige journals including *IEEE Cloud Computing*, *Scalable Computing and Communications*, *Future Generation Computer Systems*, *Elsevier Ad Hoc Networks* (http://cyber-science.org/2017/si.html).