Call for Papers for IEEE Digital Twin and Parallel Intelligence 2022

IEEE DTPI 2022 will present the cutting-edge research and technical progress of the rapidly evolving field of digital twinning. The 2022 Conference will follow a distributed hybrid model with physical meetings and presentations in Boston, Guangzhou, and online. The conference aims to bring together scholars and industrial practitioners to share scientific and technological advances as well as to gain a deeper understanding of generating digital twins and deriving parallel intelligence. DTPI’s particular topics also include standards, theory, practice, and various vertical applications of DTPI, including smart cities, transportation, energy, robotics, manufacturing, healthcare, spectrum management, etc.

Submissions are invited in the following categories:

**Full technical papers** (4 pages), original contributions addressing relevant DTPI topics of interest listed in this CFP. Review, Tutorial and Vision papers are also welcome. Full technical papers will be peer-reviewed. Authors of accepted papers, are expected to present their work at one of the DTPI Conference venues (author’s choice: Boston, Guangzhou, online).

**Special session papers** (4 pages, by invitation), consisting of papers to fill a two-hour session on DTPI topics of interest. Session proposals must be submitted electronically via e-mail (xx@xx). A total of six accepted proposals will be invited to submit special session papers.

**Extended abstracts** (single page) consisting of a lightly reviewed, single-paged abstract on DTPI topics of interest to be presented in a poster presentation format at the conference.

**Industrial forum & exhibition** (IF&E) proposals, we additionally accept submissions of proposals for tutorials, demonstrations, posters, workshops and talks targeting cutting-edge, industry-centric topics. Trade space is available for discussions and demonstrations.

The main technical program will only include papers of the highest standard as selected by the TPC, in accordance with the IEEE guidelines. Final manuscripts should be accompanied by a full registration of at least one author before uploading the camera-ready version. Accepted manuscripts will be presented either in oral or poster format.

**Authors of Published Papers** receive peer reviews by top technology leaders from the multi-disciplinary IEEE DTPI and Council on RFID community and are enrolled in the IEEE DTPI 2022 Best Paper Competition. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore’s scope and quality requirements.

**Topics of interest include, but not limited to:**

- **Theory of Development for DTPI**
- **Information Infrastructure for DTPI**
- **Data Analytics and Artificial Intelligence R&D for DTPI**
- **Applications in Vertical Areas**
  - Smart Cities
  - Smart Infrastructure Systems
  - Transportation
  - Power & Energy Systems
  - Autonomous Vehicles
  - Oceanic Systems
  - Blockchain & Distributed Systems
  - Ecology Digital Twins
  - Cyber-Physical Social Systems
  - Decision Support Systems
  - Healthcare
  - Robotics
  - Manufacture Systems

**Industrial Practices of DTPI**

**Emerging DT Standards & Practices**

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**IEEE DTPI 2022 Organizing Committee**

**Executive Chairs:**
- Vartan Piroumian (VP Consulting)
- Jin Li (Guangzhou University)
- Fangle Chang (Ningbo Research Inst.)

**TPC Co-Chairs:**
- Neda Madi (Georgia Tech)
- Witold Pedrycz (University of Alberta)
- Kongyang Chen (Guangzhou University)

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**Important Dates**

- **Full Technical Papers:** 19 July 2022
- **Acceptance Notification:** 13 Sep 2022
- **Poster Abstracts:** 18 Sep 2022
- **Special Session Proposals:** 1 June 2022
- **IF&E Proposals:** 16 July 2022
- **Camera-Ready Uploads:** 4 Oct 2022
- **Physical Conference:** 26-28 Oct 2022