

Call for Papers for IEEE Digital Twins 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, Ningbo, and Online. The conference aims to brings 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 (4-6 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 submitted to Manuscript Central under the "DTPI 2022" issue. The papers will also recive consideration for direct publication in *IEEE Journal on RFID*. Authors of accepted papers, are expected to present their work at one of the DTPI Conference venues (author's choice: Boston, Ningbo, Online).

Special Sessions (by invitation), consisting of contributions to fill a two-hour session on DTPI topics of interest. Session proposals must be submitted electronically via e-mail (nedam@gatech.edu). A total of six accepted proposals will be invited to submit special session contributions. Please refer to the Special Sessions Proposal Guide for details.

Extended Abstracts (1-2 pages), consisting of a lightly reviewed, 1-2 pages abstracts on DTPI topics of interest to be presented in a poster presentation format at the conference.

Industrial Forum & Exhibitions (IF&E), we additionally accept submissions of proposals for tutorials, demonstrations, posters, workshops and talks targeting cutting-edge, industrycentric 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 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.

IEEE DTPI 2022 Organizing Committee

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

TPC Neda Madi (*Georgia Tech*) - Boston **Chairs:** Fangle Chang (*Ningbo Research Inst.*) - Ningbo

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

DTPI Applications in Vertical Areas

- Smart Cities
- Smart Infrastructure Systems
- Transportation
- Power & Energy Systems
- Autonomous Vehicles
- Oceanic Systems
- Blockchain and Distributed Systems
- · Ecology Digital Twins
- Cyber-Physical Social Systems
- Decision Support Systems
- Healthcare
- Robotics
- Manufacture Systems

Industrial Practices of DTPI

Emerging DT Standards & Practices

Important Dates

Full Technical Papers: 19 26 July 2022
Acceptance Notification: 13 Sep 2002

Extended Abstracts: 18 Sep 2022 Special Session Proposals: 1 June 2022

IF&E Proposals: 16 July 2022

Camera-Ready Uploads: 4 Oct 2022