The 9th IEEE World Forum on the Internet of Things (IoT)

12–27 October 2023 // Aveiro, Portugal

Aveiro Congress Center

Hybrid: In-Person and Virtual

The Blue Planet: A Marriage of Sea and Space
Sponsored by the IEEE IoT Technical Community

IEEE World Forum
on Internet of Things

INSTRUCTIONS FOR PEER REVIEWED PAPER SUBMISSIONS

1. Considerations

1.1 The 9th IEEE World Forum on the Internet of Things (WF-IoT2023) seeks submissions for original, novel, and relevant technical papers. The papers should address the Internet of Things (IoT), its theoretical and technological building blocks, the applications that drive the growth and evolution of IoT, operational considerations, experimentation, experiences from deployments, and the impacts of IoT on consumers, the public sector, and industrial verticals. The theme for the World Forum is "The IoT contribution towards a Blue Planet: The marriage of Sea and Space". In recognition of the rapid growth of IoT across the world and adoption across almost all verticals we also encourage the submission of multi-disciplinary content. Each submission should identify with a Track as designated below. The listing of subjects associated with each track is not comprehensive – please pick the Track that is most compatible with your area of interest.

Track	Topics and Subjects Important to IoT and the World Forum Theme
Tech-01	**Applications and Use Cases** Aquaculture, Agriculture, Fisheries control, Sea ports, Space, Tourism, Entertainment, Energy, Healthcare, Industry & Manufacturing, Smart Cities, Smart Buildings, Vehicular, Sustainability, Unmanned Aerial Vehicles, Deep sea marine services, Natural Resource Management, Transportation, Construction, Critical Infrastructure Protection, and other applications.
Tech-02	**Big Data** Algorithms, Hardware and Software for Big data, Artificial Intelligence and Machine Learning Technologies, Data Monetization, Federated Learning.
Tech-03	**Computing** Cloud, Fog, Edge and Embedded Computing, High Performance Computing, Data Storage, Operating Systems, Hypervisors, Orchestration, Space-based platforms, Data caching, Content delivery, Software platforms, Localization techniques.
Tech-04	**Connectivity** IoT Communication Protocols, Wireless Communications, Internet, Mobility, Software Defined Networking, Network Virtualization, Wireless Sensor Networking, Drone assisted communications, Deep Space Communications, Satellite Communications, Maritime Communications, Underwater Communications, Terahertz Communications, Ultra-reliability and Low latency, IoT in Fifth and Sixth generation networks, Network intelligence, Internet of Nano Bio Things.
Tech-05	**Components** Circuits, Devices, Electronic Systems, Signal processing.
Tech-06	**Sensors and Remote Detection** Sensors, Radar, Video Analytics, Lidar, Medical Imaging, Tactile Sensing, Thermal Sensing, mmWave and Terahertz sensors, Space Based Sensor Systems, Chemical Sensors, Multisensory systems.
Tech-07	**Human-machine interfaces**

		Metaverse, Virtual Reality, Augmented Reality, Extended Reality, Voice interfaces, Tactile and Touch based Interfaces, Quality of Experience (QoE).
Tech-08	**Operation technologies**	Digital twins, Robotics, Control systems, Platforms, Automation, Sea ports logistics, Supply Chains.
Tech-09	**Energy efficiency**	Energy harvesting techniques, Energy-efficient communication protocols, Energy efficiency and QoS tradeoff, Energy-efficient space communication technologies, Energy Storage.
Tech-10	**Security and Privacy**	IoT Cybersecurity, Privacy and Trust, Blockchains, Encryption Methods, Homomorphic Systems, Implementations, Smart contracts, Vulnerability and Attack Vector Analysis, Secure network protocols, Space cyber security.
Tech-11	**Standards and Regulation**	IoT Standards for Space-air-ground-underwater communications and Multi-access edge computing. IoT Policy and regulatory aspects.
Tech-12	**Impact**	IoT impact on the Sustainable Development Goals (SDGs), IoT impact on the Society, IoT impact on the Engineering Profession (Education, Metrics, Training).

1.2 Every submitted manuscript must:

- Provide a clear statement of the problem or issue that the paper is addressing and the proposed solution or conclusion.
- Clearly explain the significance and impact of the contribution to the area of research that the paper addresses.
- State the novelty and distinction of the current manuscript relative to previously published studies and the relevance of the work to either the theoretical foundation of the subject or to the practical implementation of the solution or conclusion.
- Provide relevant and recent citations from the most closely related work in the field.
- Make sure that the submission conforms to editorial standards and is correct for: spelling, grammar, punctuation, conciseness, and vocabulary.

1.3 Papers submitted must be original. All papers will be checked for similarity and plagiarism using CrossCheck. CrossCheck compares submitted articles against a database of millions of published scholarly papers, and billions of web pages, and provides a detailed report that highlights any similarity to previously published content within the submission.

1.4 Once the paper you submitted has been reviewed and accepted you will be notified about uploading a final version of the paper for publication in the Proceedings and IEEE Xplore.

1.5 All accepted papers will be assigned to a Technical Track Session. We expect that the presenters for each accepted paper will be present for the duration of their assigned Sessions. Each Session consists of 10-minute presentations of the synopsis of the accepted papers, using Power Point or PDF formats, and a moderated discussion with Q&A from the Session audience. It is one of the goals of the conference to provide a high level of interaction among the participants. You, or one of your co-authors, must be present for the duration of your assigned Technical Track Session for your paper to be published. **The Technical Track Sessions are scheduled for the week starting on 16 October 2023.**

1.6 In addition to the paper, you will also be expected to provide and upload a full copy of your full presentation ahead of the conference, as well as a recording of the presentation, and the synopsis

presentation. The recording of the full presentation is limited to 30 minutes in length. The full presentation and synopsis presentation material and recordings will be made available ahead of the conference in **WHOVA**.

1.7 At least one of the authors must register at the full conference rate (in-person or virtual) for the paper to be included in the proceedings and IEEE Xplore. A single full conference rate registration allows the registrant up to two (2) papers.

1.8 The participation in the conference and the presentation of a paper in a Technical Track Session can be done in person in Aveiro, Portugal, or virtually live online.

2. *Instructions*

2.1 These instructions apply to all technical peer reviewed paper submissions in response to the General Call for Papers submitted through **eWorks**. **The deadline for all paper submissions is 18 June 2023, with the notification of acceptance on 16 July 2023. All final paper submissions must be completed and uploaded by 6 August 2023. The accompanying presentation and recording must be uploaded by 25 September 2023.**

2.2 Please be prepared with all the material that you will need to make the paper submission. That includes information about you as the lead author as well as information about the other authors of the paper.

2.3 The information about you consists of: (1) Name and Salutation; (2) Institutional Affiliation; (3) Location; (4) Contact Information; (5) Your IEEE Membership Number if you are a member and your ORCID Number if you have one.

2.4 The information about your co-authors also consists of: (1) Name and Salutation; (2) Institutional Affiliation; (3) Location; (4) Contact Information; (5) Their IEEE Membership Number if they are a member and their ORCID Number if applicable.

2.5 You must choose the Track (Tech-01, Tech-02, ……Tech-12) that best describes the topic of your paper using the table in the section above if you are submitting a Technical Peer Reviewed Paper.

2.6 In addition, we request that you also provide: (1) the title for the paper; (2) an abstract of 250 words or less; (3) key words that are indicative of the content of the paper; and (4) upload a draft version of the paper in Word Format (.docx) or Latex(.tex) using the template available through the Authors/Proposers tab from the conference website main page at: https://wfiot2023.iot.ieee.org. An alternate is to use the IEEE Word or Latex tools that can be found through: https://conferences.ieeeauthorcenter.ieee.org/write-your-paper/authoring-tools-and-templates/ . Please follow the link under the **Write** heading which will allow you to download and access both Word and Latex Conference templates for creating your paper.

2.7 The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

2.8 When you submit your paper you will be given a unique **Paper ID** number (**PID**). Please keep a record of the PID. You will need to use the PID to upload required updates to your paper, changes in any author information, and for accompanying presentations and recordings. The **Paper ID** number will also be used to identify your paper in the main conference tool, **WHOVA,** that will be your online access to the schedule and conference events.

Following Paper Acceptance

2.9 You will need to provide a final version of your paper in PDF format and upload it by the **6 August deadline** and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, it is required that you please register for WFIOT2023 by this deadline. Please use the checklist below to make sure that your final version complies with all requirements for publication.

Checklist for Final Submission	
Paper Size: US Letter (8.5" x 11") or A4 (210mm X 297mm)	Fonts: Embed ALL fonts in your PDF file. Avoid the use of Type 3 fonts.
File Format: Adobe PDF (.pdf)	Do NOT page number your paper
Do NOT apply security settings to your PDF file	Allowed File Size: 20.0 MB
• *Note: Deviations from the above paper specifications could impede the review of your paper and result in rejection.*	

2.10 Once you have uploaded the final version of your paper, registered for the conference, and are attending in person, you will be issued a visa letter if you require one. Please make sure that you check this option during the registration process.

2.11 Please upload a copy of your full presentation in PPTX or PDF format with a 16x9 aspect ratio by the **25 September 2023, deadline**. The **deadline** for your synopsis presentation is **25 September 2023.** If you have an accepted peer reviewed technical paper, the full presentation is limited to 30 minutes in length, and the paper synopsis presentation for your Technical Track Session should be 10 minutes in length. If you are presenting in a Workshop, Special Session, Industry Forum, or the Ph.D./Masters Forum please follow the instructions for the length of the presentation from the organizers. **Please limit the size of your full presentation file to 50MB**.

2.12 The deadline for uploading a recorded video of the presentation that accompanies your paper is **6 August 2023.** The recorded file must be in MP4 Format and should be no longer than 30 minutes in duration. The time allocated for your full presentation is longer than the 10 minutes you will have for the synoptic presentation during your assigned Technical Track Session.

Audio/Video File Requirements

- 1mbps bitrate: To check the bit rate, right click on the file name, click on properties, go to the details tab, and look for total bitrate.
- Resolution = maximum 720p HD.
- The length of the presentation must comply with the specification of your session.
- Please use the following naming convention: PID.pptx, PID.pdf, PID.mp4, where PID is your Paper ID, the code that was assigned to your paper when you received your acceptance email.

Audio/Video File Tools

There are several video conferencing tools available to easily record a presentation. In this method, you can show your face via webcam (if you would like) and display your slides as you talk. You can use any meeting software if you get a good quality recording, and your final file is in the MP4 format.

Here are some links to instructions on recording a meeting on common platforms:

- WebEx: Video Conferencing – Record a Cisco Webex Meeting
- Skype: Skype for Business: Recording a Meeting | Information Technology Services | Bemidji State University
- Google Meet: Record a video meeting – Meet Help
- Zoom: Local Recording – Zoom Help Center
- Gotomeeting: How to Record a GoToMeeting Session | Techwalla and How to Convert and Open the GoToMeeting Recordings
- Microsoft Teams: Record a meeting in Teams – Office Support
- You can also use the two-step method covered below:
    - Create Voice Over Power point and convert to MP4

Audio/Video File Recording Tips

- Use as quite an area as possible.
- Avoid areas that have echo.
- Rooms should be small.
- Sound dampening with carpeting, curtains, furniture.
- Strong Wi-Fi connection.
- Good headset with microphone close to mouth BUT away from direct line of mouth to reduce "pops". Avoid using default built-in microphone on computer.
- Do a test recording of a couple of minutes and review the sound and picture quality, MP4 format, and bit rate before recording the entire presentation. Adjust if needed.

2.13 If you have an accepted technical peer reviewed paper, you or one of your c-authors will also need to attend the discussion of your paper in a Technical Track Session as scheduled in the program during the week of 16 October 2023. **If you or one of your co-authors does not attend the assigned track session, your paper will not be published.**

If you need any further clarification or information, please contact one of the Technical Committee Chairs:

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