The 1st International Workshop on Decentralized Physical Infrastructure Networks (DePIN 2023)

October 12-27 2023
Aveiro Congress Center, Portugal

In conjunction with IEEE WF-IoT 2023

Workshop Theme: Build a Decentralized Future Together

Organizing Chairs:

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Important dates:
Paper submission: **July 30, 2023**
Notification of acceptance: **August 21, 2023**
Camera-ready submission: **September 29, 2023**
Presentation submission: **October 2, 2023**

Description:
Decentralized physical infrastructure network (DePIN) is an emerging research area in Web3 and IoT domains, which leverage blockchain, IoT and tokenomics to incentivize communities to build physical infrastructure networks and machine economy from the ground up. DePINs are expected to disrupt existing IoT business models and enable developers to build machine-driven and decentralized IoT applications. A lot of research challenges need to be addressed to fully realize the ultimate vision of DePIN - giving back control of devices and data to users.

Topics of Interest:
The workshop welcomes contributions describing design challenges, methodologies, implementations, use cases, and tokenomics of building DePIN. Topics of particular interest include, but are not limited to:

- System architectures and implementations of DePIN
- Layer 2 solutions and cross-chain protocols for DePIN
- Off-chain computing and blockchain oracles for DePIN
- Experimental evaluations and performance analysis of DePIN
- Testbeds and simulators for DePIN
- Hardware and firmware design for DePIN
- Device identity and management for DePIN
- Security and privacy of DePIN
- Disruptive and sustainable business models for DePIN
- Tokenomics of DePIN
- Governance protocols for DePIN
- Use cases of DePIN in industrial and consumer environments

Paper Submission:
All papers must be submitted through eWorks. You must choose the workshop track (**Work-01**) when submitting your paper in order to be considered for this workshop. 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.

The paper can be prepared using the template available through the Authors / Proposers tab from the WF-IoT conference website main page at: https://wfiot2023.iot.ieee.org.

An alternative 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/.

Authors of accepted papers will need to provide a final version of your paper in PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.

More information on the workshop:
https://wfiot2023.iot.ieee.org/1st-international-workshop-decentralized-physical-infrastructure-networks-depin-2023