Call for Participation, Papers and Submissions for the 2nd IEEE IoT Vertical and Topical Summit January 20th -21st, 2019 as part of RWW2019

A Multi-Society Initiative

Organized by
IEEE IoT Initiative and the IEEE MTT Society

"The Internet of Things (IoT) meets the Internet of Space (IoS)"

Instructions for Submissions can be found below

During the last decade the Internet of Things (IoT) has seen tremendous investments and accelerating adoption. The Multi-Society IEEE IoT Initiative has worked with each of the 20 sponsoring Societies and Councils to develop deep dive events that bring together industry, the public sector, and the research community, focused on a specific subject. This year the IEEE IoT Summit in conjunction with RWW2019 in Orlando will be exploring the synergies between IoT and IoS. The Summit is a day and a half event beginning on Sunday January 20th and concluding on Monday January 21st, 2019. We urge you to join us and participate if you have an interest in either IoS or IoT. Please register through: https://www.radiowirelessweek.org/

The Internet of Things, in any application, consists of a cycle that includes: the use of sensors; the collection of data from many sources; the exploitation of massive connectivity; the application of data driven analysis techniques for modeling and understanding; methods in artificial intelligence and machine learning for decision making; and finally taking actions to conclude the "IoT control loop". The driving factor is the deep digitization of products, services, and processes to deliver new knowledge, functionality and economic value.

The Internet of Space (IoS), in broad terms, is about creating the space and ground-based infrastructure for sensing and for communications driven by the revolution and re-invigoration of the space enterprise. Specifically, the mixture of highly capable Small Satellites, large LEO and MEO constellations, as well as GEO Satellites with high bandwidth capabilities, and the improved economics of manufacturing and launch to orbit, has opened exciting new possibilities for:

- Satellite based sensor systems working in many modalities:
  - Providing high resolution naturally or synthetically
  - Frequent revisit times
  - Effective area coverage
  - On board processing

- o Relevance to many applications

- Space based communication services and capabilities for:
  - o Collection and transmission of sensor and payload data
  - o Satellite to satellite links for coordination and cooperation
  - o Almost ubiquitous area coverage
  - o Critical requirements
  - o Emerging Broadband needs

- Ground based infrastructure used for:
  - o Collecting, storing, and distributing data
  - o Cloud, Edge, and Fog computational processing
  - o Aggregation and routing of communications
  - o Interconnection with terrestrial communication systems

The IoS promises many capabilities for IoT Architectures and Capabilities that are either unique or would otherwise not be economically feasible. The program for the Summit will explore where IoT meets IoS. We expect that most of the speakers will be selected by invitation and represent a balance from industry, government, and academia. We have an exciting program that can be found on the RWW2019 website at: http://rww2019.iot.ieee.org/.

The draft program below is an outline of what the Summit will cover.

Sunday January 20th	Program
01:30pm-03:30pm	• Overview of IoT and IoS – Synergies and Unique Aspects • Small Sat, LEO, and MEO for Communications an Operators Perspective • Small Sat, LEO, and MEO Sensors for IoT an Operators Perspective • Interactive Panel Discussion
03:30pm-04:00pm	Coffee Break
04:00pm-06:00pm	• IoT/IoS for Automotive, Transportation, and Logistics a User's Perspective • IoT/IoS for Connected Aircraft and UAVs a User's Perspective • IoT/IoS for Applications in Rural and Sparsely Populated Areas a User's Perspective • Interactive Panel Discussion

Monday January 21st	Program
08:00am-10:00am	• **Keynote**: Space Based Architecture, Components and Design • **Keynote**: Ground Based Architecture, Components and Design • Interactive Panel Discussion
10:00am-10:30am	Coffee Break
10:30am-12:30pm	• Small Satellite Based Communications and Services • Small Satellite Based Sensor Systems and Services • LEO and MEO Communications and Sensor Systems and Services • Interactive Panel Discussion
12:30pm-01:30pm	Box Lunch with Invited Speaker
01:30pm-3:30pm	• Small Satellite Based IoT Global Communications Services an Application View

	• Small Satellite Based Sensor Systems and Sensor Services an Application View • Integrated Ground and Space Services for IoT • Interactive Panel Discussion
03:30pm-04:00pm	Coffee Break
04:30pm-06:00pm	• Advanced Communications Systems and Components for Small Satellites • Advanced Sensor Systems and Components for Small Satellites • Experience with Small Satellites • Results from Small Satellites, LEOs, and MEOs, and Demonstrations • Wrap-up and Summary Discussion

The majority of the presentations for the Summit are chosen by invitation and address current issues important to IoT and the theme of the Summit. In this call for submissions, we are seeking the following items:

- Suggestions for speakers to present on the subjects identified above.
- Suggestions for assisting in organizing panels or round-tables on specific subtopics and in identifying panel participants.
- Suggestions for other formats that will help the Summit be more interactive and meaningful to the audience.
- Submission of papers to accompany presentations at the Summit. These will be fully peer reviewed as indicated in the instructions below. The choice of presenters will be made by the Summit Chairs, based on relevance to the Summit. Selection of a presenter does not guarantee the acceptance of papers for publication.

The majority of the presentations are by invitation. However, we will also accommodate a limited number of original and novel submitted papers. These will be fully peer reviewed, and the accepted papers will be published in IEEE Xplore. If you wish to submit a paper, please follow the instructions below. The deadline for submission is September 30th, 2018. Please note that we may ask you to participate as a presenter if we conclude that the material is highly relevant to the summit, but your paper was not accepted for publication. We expect that all the presentations will be posted on the Summit Website after the event. The program and presentations from last year can be found at: http://sites.ieee.org/rww-2018/program/

Instructions for Submission:

How to Submit a Proposal - Each idea for proposals must include the following and should be a maximum of no more than five pages:

- Designation of subject that the Submission Addresses
- A summary of the suggestion or idea. If you are suggesting a panel, a round-table, or an alternate format session – each of these should be no longer than 2 Hours (120 minutes) in length. If it can be accommodated as part of one of a Summit's two-hour Session please indicate the duration.

- Names, main contact, and a short bios (200 words) of the organizers, a brief description of the session including a short abstract, scope and timeliness.
- A description of the planned program for the panel, round-table, or alternate format session.
- Any other relevant information
- Proposals must be marked and submitted electronically:
  https://edas.info/newPaper.php?c=24734
    - If you do not already have an EDAS account, you need to create one as the first step in the submission process.
    - Once you create an account and login, scroll down to the row:
      TWIOS 2019   IoT/IoS Summit Invited Papers
    - Then, click on the link 'IoT/IoS Summit Invited Papers' and follow the directions to submit your proposal.

Important Dates for Proposal Submissions

Ideas and suggestion submissions for the V&T Tracks: **September 30, 2018**

Proposal acceptance notification: **October 14, 2018**

Papers accompanying Presentations

The 2nd IoT Vertical and Topical Summit at IEEE RWW2019 solicits papers accompanying submissions for presentations. The Papers must address one of the selected Vertical or Topical subjects identified above. The content of the papers must also address significant results dealing with experiences in actual IoT deployments, related among others, to results, performance, architectures, products, services, methods and techniques, processes, policies, standards, . Suggested size is four pages; papers up to six pages will be accepted. Extended versions of selected papers may be considered for publication in the IEEE IoT Magazine:
https://iot.ieee.org/iot-magazine.html

How to Submit a Paper:

- All papers must be submitted in PDF and US letter format. Submitted papers must conform to the IEEE formatting guidelines as specified in these Word and LaTeX templates. The submission must clearly identify the specific Vertical or topical area it is related to.
- All submitted technical papers will be peer reviewed by an international Technical Program Committee (TPC). If the paper is accepted and presented, it will be included in the conference proceedings and be submitted to the Xplore Digital Library. IEEE takes the protection of intellectual property very seriously. All submissions will be screened for plagiarism using CrossCheck. All submitted papers are subject to the IEEE ComSoc plagiarism policy, see: https://www.comsoc.org/conferences/plagiarism-policy
- Papers must be marked and submitted electronically:
  https://edas.info/newPaper.php?c=24734

- If you do not already have an EDAS account, you need to create one as the first step in the submission process.
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- Then, click on the link 'IoT/IoS Summit Invited Papers' and follow the directions to submit your paper.

Important Dates for Paper Submissions

Paper Submission Due Date: **September 30th, 2018**

Acceptance Notification: **October 14th, 2018**

Camera-ready Submission: **October 28th, 2018**

Contacts for Vertical & Topical Proposals and Papers

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