

# CALL FOR PAPERS



## The 1<sup>st</sup> Workshop on Intelligent Offloading for Internet of Things (IOIoT 2020)

August 6, 2020, *Honolulu, Hawaii, USA*

<http://intelligentoffloading.com/ioiot/>

(In conjunction with [ICCCN 2020](http://www.icccn.org/icccn20/), August 3-6, 2020, Honolulu, Hawaii, USA, <http://www.icccn.org/icccn20/>)

### Scope:

Due to the ever-increasing growth of Internet of Things (IoT) devices with resource-hungry applications and the unprecedented demands of computing capabilities, edge servers with limited resources cannot efficiently satisfy the requirements of the IoT applications and Deep Neural Networks (DNNs) computing. Task offloading technology can break through the resource limitations of IoT devices, reduce the computing load and improve the task processing efficiency. Optimizing DNNs through task offloading has become a new direction in edge intelligence research. Deep learning driven approaches can facilitate offloading decision making, dynamic resource allocation and content caching, benefit in coping with the growth in volumes of communication and computation for emerging IoT applications. However, how to customize deep learning techniques for task offloading in IoTs is still under discussion. Learning algorithms in edge computing are still immature and inefficient.

The goal of the **IOIoT** Workshop is devoted to the most recent developments of intelligent offloading technologies for IoT and edge computing. Industry experience reports and empirical studies are also welcome. We aim to bring together researchers and practitioners to discuss the latest advancements and identify further challenges for task offloading in IoTs that must be overcome. Topics of interest include, but are not limited to, the following:

- **Computing Paradigm Frontiers:** Edge Computing, Fog Computing, Cloud Computing assisted with AI
- **Learning-based Approaches:** Intelligent decision making for task offloading, resource allocation, profiling, modelling, content caching, cyber-security, and privacy in IoTs
- **Design, Development and Architecture:** AI-based theories, scenarios and architectures of application placement, computation offloading or data offloading in IoTs
- **Performance Modelling and Evaluation:** Deep learning driven latency and energy consumption model of task offloading
- **Optimization Algorithms:** Joint communication and computation optimization for emerging IoT applications
- **Sustainable and Green Computing:** Intelligent resource management and task scheduling; DNN-based applications partitioning in IoTs

### Instructions for Authors:

Submitted manuscripts must be formatted in standard IEEE camera-ready format (double-column, 10-pt font) and must be submitted via EasyChair (<https://easychair.org/conferences/?conf=icccn2020>) as PDF files (formatted for 8.5x11-inch paper). The manuscripts should be no longer than 6 pages. Two additional pages are permitted if the authors are willing to pay an over-length charge at the time of publication (manuscripts should not exceed 8 pages). Submitted papers cannot have been previously published in or be under consideration for publication in another journal or conference. The workshop Program Committee reserves the right to not review papers that either exceeds the length specification or have been submitted or published elsewhere. Submissions must include a title, abstract, keywords, author(s) and affiliation(s) with postal and e-mail address(es).

### Review and Publication of Manuscripts:

Submitted papers will be reviewed by the workshop Program Committee and judged on originality, technical correctness, relevance, and quality of presentation. An accepted paper must be presented at the **ICCCN 2020** venue by one of the authors registered at the full registration rate. Each workshop registration covers up to two workshop papers by an author. Accepted and presented papers will be published in the ICCCN proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. IEEE reserves the right to exclude a paper from distribution after the conference, including IEEE Xplore® Digital Library if the paper is **not presented** by the author at the conference.

### Important Dates:

Papers submission: **March 29, 2020 (Anywhere on the earth)**  
Notification of acceptance: **April 27, 2020**  
Camera-ready paper due: **May 11, 2020**  
Workshop date: **August 6, 2020**

Please refer to "**Author Information**" posted at the conference website for more info on paper submission and related rules/policies.

### General Chairs:

Huaming Wu, Tianjin University, China ([whming@tju.edu.cn](mailto:whming@tju.edu.cn))  
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### TPC Chairs

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