# CALL FOR PAPERS



**FRUGALTHINGS 2020**: 1st Workshop on Experiences with the Design and Implementation of Frugal Smart Objects

http://www.grc.upv.es/frugalthings2020

In conjunction with ACM MobiCom 2020 – The 26th Annual International Conference on Mobile Computing and Networking, 21-25 Sep, London, United Kingdom Online, due to the COVID-19 pandemic – the Frugal Things Workshop will be held online on September 21<sup>st</sup> 2020.

# **MOTIVATION AND RATIONALE:**

This research-oriented workshop is related to the broader topic of technology issues for developing regions and it focuses on the adoption of frugal innovations.

Frugal innovations aim to minimize the cost and complexity of novel solutions and are particularly oriented toward low-income population groups in any part of the world. Ideally, these solutions have to be scalable, durable and environmentally sustainable, while using state-of-the-art technologies and knowhow.

The FRUGALTHINGS workshop focuses on frugal innovations and the application of its goals for the design, implementation, deployment, operation, and evaluation of novel approaches and systems for smart objects in the emerging cooperative environments. We are therefore seeking original, previously unpublished papers empirically addressing key issues and challenges in the frugal innovation arena.

# **TOPICS:**

- \* App concepts and technologies for different mobile platforms
- \* Applications of Fog/Edge Computing
- \* Communication between mobile devices and cars
- \* Communication for drone coordination
- \* Human-drone interaction
- \* Content Distribution
- \* Data collection, organization and dissemination methods
- \* Data replication protocols in network partitions
- \* Delay-tolerant networks and ferrying approaches
- \* Deployment and field testing
- \* Experimental results of aerial communication testbeds
- \* Game, entertainment, and multimedia applications
- \* Human-object interaction
- \* Innovative services and applications for mobile devices in vehicles
- \* Location- and track-based services
- \* Middleware for Fog/Edge infrastructures
- \* Fog/Edge Computing applications
- \* Mobile service architectures and frameworks

- \* Applications for social good
- \* Mobility and handover management
- \* New application scenarios for vehicular communications
- \* Pervasive and ubiquitous services in cloud and IoT
- \* Platforms and frameworks for mobile devices
- \* Privacy issues and solutions
- \* Protocol design, testing, and verification
- \* Rural areas connectivity solutions
- \* Security issues, architectures and solutions
- \* Sensors & Data Collection
- \* Solutions for sparse and dense fleets of drones/UAVs
- \* Swarm movement, coordination, and behavior
- \* Wireless in-vehicle networks

## **IMPORTANT DATES:**

- Workshop FIRM Paper Submissions Deadline: June 5th 2020
- Workshop Paper Notification: July 1st, 2020
- Camera-ready Workshop Papers Due: July. 31st, 2020

## PAPER SUBMISSION:

Submission web page: <a href="http://www.grc.upv.es/frugalthings2020/authors">http://www.grc.upv.es/frugalthings2020/authors</a>

## **ACCEPTED PAPER PUBLICATION:**

Accepted workshop papers will be included with the MobiCom proceedings and published in the ACM Digital Library.

Authors of selected papers will be invited to submit an extended version to the:

- Special Issue on "<u>Sustainable Human-Computer Interaction Development</u>" of the <u>MDPI Sustainability Journal (Impact Factor: 2.592)</u>
- Special Issue on "AI for IoT" of the MDPI Sensors Journal (Impact Factor: 3.031)

# **ORGANIZING COMMITTEE:**

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