

Santa Maria Key, Villa Clara, Cuba June 28 – 30, 2019

Organized by: Universidad Central de Las Villas, Cuba (http://www.uclv.edu.cu)

Aim and Scope

This workshop is part of the II International Conference on Information Processing "CIPI 2019, acronym in Spanish". The IoT-AI2019 workshop includes key lectures, tutorial courses, discussion panels and the presentation of original papers.

The Internet of Things (IoT) refers to the network of connected physical devices, objects and sensors to provide value-added services. These objects are connected through information and communication building blocks. With advancements in computations and sensing methods, data can be extracted and evaluated for decision making purposes. This will enable data-driven decision making and shape organizational policies and in turn, will accelerate the emergence of smart cities. An IoT-based system provides an intelligent framework with sensing capability, contextual awareness, and device autonomy.

The IoT is a very popular term nowadays. This includes very complex and unstructured problems and allows gathering a huge quantity of data; for this reason, Artificial Intelligence and Data Science are required to develop IoT-aware systems. A major goal behind IoT is to make the environment around us smarter by giving it the information it needs, through real-time and historical data feeds, and apply Computational Intelligence techniques to make smart decisions automatically.

Since IoT will be among the greatest sources of new data, data science will make a great contribution to make IoT applications more intelligent. Data science is the combination of

different fields of sciences that uses data mining, machine learning and other techniques to find patterns and new insights from data.

Complex information systems represent the term to sum up the fusion between Cloud, IoT, Big Data, Artificial Intelligence and Machine Learning together.

The applications include the areas of smart home, smart environment, smart energy management and smart grids, smart agriculture, e-health, and smart traffic management, etc.

Submission Topics

Submissions of original and previously unpublished work on intelligent systems and data sciences techniques used in the context of Internet of thing (IoT); and applications are encouraged, including but not limited to the following topics:

- Computational models of IoT.
- Smart data.
- Intelligent functionality of IoT devices.
- Mining patterns in IoT.
- Modeling and optimization of Big Data.
- IoT-based big data analytics and Deep learning.
- Wireless sensor networks.
- IoT-based health prescription.
- Security of IoT complex and challenging.
- Applications on Agriculture of precision, Energy, Smart cities, Sport training, etc.
- Industry 4.0.
- Ethic aspects of IoT.
- Artificial Intelligence for Digital Twin

Conference Proceedings

All accepted papers will be published in Springer's Lecture Notes in Networks and Systems (LNNS) series as a post-proceeding. The papers must have a maximum of eight (8) pages. All papers must be formatted according to the guidelines using the electronic templates of Lecture Notes (LaTeX and Microsoft Word).

Lecture Notes templates: https://www.springer.com/gp/computer-science/lncs/conferenceproceedings-guidelines The authors interesting in publishing a short version of the paper in the Convention UCLV 2019 proceedings can send this short version to the email of workshop with no more than 3 pages (with extension pdf). The proceedings will have an ISBN and will be produced by UCLV's publishing house. Authors must adhere to the guidelines for authors of the Convention using either Microsoft Word templates.

Important Dates

Paper submission deadline: January 23th, 2019.

Acceptance notification: February 23th, 2019.

Camera-ready version: March 23th, 2019.

Submission guidelines

Paper submission will be available from December 1st, 2018 via EasyChair. Please use this link to submit your paper: <u>https://easychair.org/conferences/?conf=iotai2019</u>

All submissions will be reviewed by at least three (3) Technical Program Committee members. Submissions must be identified as either <u>research</u> or <u>application</u> papers and will be reviewed using appropriate criteria. Review criteria for research papers will include <u>scientific significance</u>, <u>originality</u>, <u>technical quality</u>, and <u>clarity</u>. Review criteria for application papers will include <u>practical or economic significance</u>, <u>adoption potential</u>, <u>technical quality</u>, and clarity.

Official Language

Official language is English.

Steering Committee

Rafael Bello, Universidad Central de Las Villas, Cuba

Jose Rolim, University of Geneva, Switzerland

Rafael Falcon, Shopify Inc. / University of Ottawa, Canada

Nathalie Mitton, Inria Lille, France

Enrico Natalizio, Université de Technologie de Compiègne, France

Chyon Hae Kim, Iwate University, Japan

Francisco Herrera Triguero, Universidad de Granada, Spain

Ann Nowe, Vrije Universiteit Brussel (VUB), Belgium Kris Steenhaut, Vrije Universiteit Brussel (VUB), Belgium José Luis Verdegay, Universidad de Granada, Spain Luis Diago, Interlocus Inc. & Meiji University, Japan

Confirmed Keynote Speakers

Jose Rolim, University of Geneva, Switzerland

Mérouane Debbah, Director R&D, Huawei France

Francisco Herrera Triguero, Universidad de Granada, Spain

For registration and consulting the Convention packages:

http://www.convencionuclv.com/

*For more details about packages of payment please consult the document attached on this call: <u>"Oferta Convención UCLV Grand Memories VF"</u>

Email and contact person:

Lázaro Pérez Lugo, iotai@uclv.cu

Web Site: https://1569754.site123.me/