

Workshop on Cognitive and Computer Vision Assisted Systems for Energy Awareness and Behavior Analysis (C2VAS)

General Information

Along with the advances in real-time cognitive and computer vision systems, it becomes clear that future smart worlds will include a wide range of smart systems and applications for managing and/or saving energy towards a smarter and greener world. In this workshop, we focus particularly on smart cognitive systems and computer vision based human behavior analysis systems, with the ultimate goal to promote energy awareness towards energy savings and human behavior change, assisting to construct a better smart world of the future.

Starting from recent advances in cognitive and computer vision systems (e.g. occupancy detection, occupancy tracking, etc.) that can help humans to correlate, understand and analyze the energy consumption of their buildings/ assets along with human behavior, the workshop aims at discussing advances and novel technologies, recent trends and major challenges for the deployment of cognitive and computer vision systems in real environments, as well as future key applications that can be used to develop smart and green worlds of the future.

In this context, emphasis will be put on multiple research topics related to cognitive and computer vision systems, as well as energy analysis and human behavior change applications that operate in the domains of energy savings. A particular focus of the workshop will be also devoted to recent advances in the fields of human behavior understanding and to behavioral change towards energy savings and a smarter world, which unveil an extra, major dimension of future applications, dedicated to change the behavior of humans regarding energy use in public buildings or in general in spaces where they are not directly affected by the cost of the used energy.

In order to make happen such an extended reach and application of smart cognitive systems in real life environments (e.g. residential, commercial, public buildings, etc.), major challenges still need to be addressed, related to smart devices, IoT devices, edge computing, data correlation, semantic information, etc.

The C2VAS workshop provides a platform to disseminate recent research efforts that aim at addressing the above challenges, and help exchanging views and ideas that can further fertilize the field of smart cities aiming to construct future smart worlds.

Topics of interest

The workshop topics of interest include but not limited to:

- Smart cognitive systems
- Computer vision systems towards energy savings
- Computer vision systems towards energy awareness
- New trends and technologies in human behavior analysis towards energy savings
- Energy saving systems
- Energy management
- Energy production and storage
- Grid interactive systems
- Artificial intelligence and machine learning studies for energy savings and applications
- Smart grids and cognitive systems
- Smart devices towards energy savings
- Edge computing for energy savings
- Future challenges and directions

Submission Instructions

All papers should be of up to 10 pages including all figures, tables, and references at in the LNCS format. Up to 4 additional pages are allowed with an extra cost of 50 euros per additional page. The layout of the papers must be prepared according to the [Instructions for the Preparation of Camera-Ready Contributions to LNCS Proceedings](#). All accepted workshop papers will be included in the proceedings of ICVS 2019, which will be published by Springer in its "Lecture Notes in Computer Science" (LNCS) series. At least one of the authors of any accepted paper is required to attend the conference.

Submission & Deadlines

- Submission due: 10 June 2019
- Notification of acceptance: 1 July 2019
- Camera-ready papers due: 15 July 2019
- Conference: 23 - 25 September 2019

Workshops Organizers

- Dr. Stelios Krinidis, Centre for Research and Technology Hellas/ Information Technologies Institute (CERTH/ITI)
- Mr. Konstantinos Arvanitis, Watt & Volt

Contact

Dr. Stelios Krinidis, CERTH, Thessaloniki, Greece
e-mail: krinidis@iti.gr