Special Session on Computational Intelligence for Smart Cities

IEEE SSCI 2017 - Symposium Series on Computational Intelligence November 27 to December 1, 2017, Honolulu, Hawaii

The constant evolution of cities has been guided by the footsteps of human beings.

Combined with the advancement of machines, cities are evolving into a new paradigm, known as Smart Cities. This evolution, closely related to devices equipped with high-performance computing skills, is happening in urban and rural areas.



New york city in the future. Extracted from eVolo Magazine 2016 Skyscraper Competition, Mohammad, Zhao & Zhu (2016). http://www.evolo.us/competition/the-hive-drone-skyscraper/

Besides promoting a decentralization of the current system, the new cities open doors for different autonomous agents to optimize their own interests. In this context, combinatorial optimization plays a fundamental role for more precise, efficient and balanced decision making. In addition, interaction with citizens is not overlooked, new tools contribute to society by promoting a more participatory economy and development.

On the other hand, such advance must take place in a sustainable manner, since new ideas and ways of harnessing existing resources are being studied. This universe of possibilities opens doors for researchers to see distinct environments of complex and multicriteria decisions.

This call invites researchers to submit papers related to the following topics (but not exclusively):

- Computational Intelligence (CI) applied for urban planning and engineering solutions;
- CI applied for the insertion of renewable energy resources with microgrids;
- CI for Smart Cities (SC) and Smart Grids (SG);
- CI applied for SC logistics;
- SC and Internet of Things;
- CI for Smart/Green Homes;
- CI for decentralized environments;
- CI and citizens;
- Green Computing and Green Operations Research;
- High performance computing and SC;
- City of Things and CI testbed for SC;

• Reviews, trends and state-of-the-art ideas for SC and: combinatorial optimization problems, artificial and computational intelligence, citizens, IoT, SG, renewable resources, among others.

Important dates and guidelines:

For paper submissions and formatting guidelines please visit SSCI IEEE 2017 submissions. Please, remember to, when submitting a paper, select the track for this special session. <u>http://www.ele.uri.edu/ieee-ssci2017/ImportantDates.htm</u>

Event:

CIES 2017 (IEEE Symposium on Computational Intelligence for Engineering Solutions), as part of the IEEE SSCI 2017 (IEEE Symposium Series on Computational Intelligence) that will be held in Honolulu, Hawaii, USA from Nov. 27 to Dec 1, 2017. Conference website: <u>http://www.ele.uri.edu/ieee-ssci2017/index.html</u> Section website: <u>http://www.ele.uri.edu/ieee-ssci2017/CIES.htm</u>

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List of potential contributors:

Organizers will widely disseminate it so that people from different fields of research, from academia and industry, will submit papers.

Contributors and contributions from all over the globe are going to be welcomed!