

IEEE IES Project Competition 2018

Theme: “Shaping our Smart Cities”

Objective:

The IEEE Industrial Electronics Society (IES) would call for participation into the IES Project Competition 2018 (IPC 2018). The aim is to foster advance knowledge and awareness through smart cities projects and innovations. IPC 2018 will nurture professionals and engineers to effectively apply and utilize the state-of-the-arts technologies to improve the quality of life.

Details:

The motivation of IPC 2018 is to build up a platform for talents/professionals/engineers from chapters from all over the world to share their valuable experiences on latest technologies and applications. Through this competition, national engineers and professionals, in particular young engineers, will gain project experience under the leadership of prestigious judges. The competition is intended to encourage and promote the innovative ideas or discoveries of the professionals, for example, hardware/software developers, researchers or educators.

Participants are required to submit their project discoveries in paper format. The competition is specifically organized for industry/academics to participate. Participants are required to submit their full paper of maximum 6 pages in IEEE format to explain deeply on their design, ideas or methodologies and key results. Best Award winners will receive cash awards and certificates which will be presented to winners during the Flagship Conference IECON 2018 at Washington DC in October 2018.

Eligibility:

A team of NO more than 5 industry/academic experts/professionals/engineers
At least one team member is a current IEEE Member/Senior Member/Fellow

Project areas includes but not limited to:

- Standards for smart cities
- Energy sustainability
- Energy storage
- Renewable energy sources
- Power electronics
- Data analytics (data mining, big data, data visualization, data streaming, etc.)
- Smart transportation
- Smart city ecosystems and innovation methodologies

- Benchmarks or metrics
- Internet of Things (IoT) and platforms for smart cities
- Civic engagement (government, healthcare, sports, etc.)

Competition format: Paper

Full paper of maximum 6 pages IEEE format with a minimum of 10 references.

General

- 1) Group size: No more than 5 members, with at least one team member a current IEEE Student Member or IEEE Member/Senior Member/Fellow.
- 2) Team members within same team must come from same organization (otherwise, please obtain approval).
- 3) Teams are required to follow the format of IEEE conference articles:
<https://www.ieee.org/conferences/publishing/templates.html>
and limit the size to a maximum of 6 pages in length. Papers not in the described format may be rejected.
- 4) During the competition, the submitted paper should not be submitted to elsewhere.
- 5) Papers submitted to this competition should not have been published in any other publications. If already published, then your paper will be DISQUALIFIED.
- 6) The paper should explain the significance of the presented work in a well-structured, concise and clear presentation of the subject matter including an introduction, the main body and the conclusion with supporting tables and figures, with minimum of 10 references.

Guidelines for submission

- **Author's Information:** Include all authors name and information including organization and email addresses
- **Declaration and Acknowledgement:** Participants must declare about the novelty of the work. IEEE plagiarism policy will be followed strictly. If the similar or same work has been presented elsewhere by the same participants, it must be clearly stated. Please try to make sure that no one else or no other organizations are deprived from their deserve credit regarding the similar innovation.
- **Submission:** Please send your paper (in both word and pdf format) to **ieee_ies_competition_2018@yahoo.com** by 5th August 23:59 USA eastern time.
- **Result Announcement:** Tentatively scheduled on 3rd September 2018.

Prizes/Awards:

- A certificate of “Champion in IEEE IES Competition 2018” along with \$1000 USD cash will be awarded to the champion team. The champion team is highly encouraged to attend IECON2018 for award presentation (no extra financial assistance will be offered).
- A certificate of “1st Runner-up in IEEE IES Competition 2018” along with \$500 USD cash will be awarded to the 1st Runner-up team.
- A certificate of “2nd Runner-up in IEEE IES Competition 2018” along with \$300 USD cash award to the 2nd Runner-up team.

Table I. Evaluation Criteria - Industry

Aspects	Weighting factor (%)
A. Originality (e.g. patent, paper...)	20%
B. Technological Methods	20%
C. Realization and Application	20%
D. Quality of Paper Presentation	20%
E. Commercialization	20%

An outstanding technical article needs to effectively deliver technological information in a rather easy-understanding and friendly way to readers. How authors organize the information would determine the quality of paper presentation as well as the knowledge transferal efficiency. For instance, a page of full text providing lots of useful information but it might not be visually attractive. A good article should include adequate figures, tables or block diagrams to facilitate the understanding of readers. Poor article neither provide useless context nor difficult to read. Therefore, the IEEE IES Competition 2018 includes the following evaluation criteria to exam the submitted paper.

A. Originality

Originality can be shown by, for example, patents or published paper. Also, based on the valuable experiences of our judges, it is believed that adequate marks will be given to those participants who have very leading and innovative idea using or applying technologies to improve our life quality. To point out the significance of presented method or idea, authors may consider explaining in detail on their innovative element along with figures/tables or even a comparison with other current using technologies or applications.

B. Technological Methods

Technological methods are another key benchmark to boost up the advanced

technologies to be applied in our daily life and encourage participants to put more effort on research work. Furthermore, participants are encouraged to utilize or apply the latest technologies or methodologies to solve the problems that people faced or facilitate the convenience of people's life.

C. Realization and Application

The goal of this competition is to bring benefits to our life quality. To do so, it is necessary to implement the ideas into a visible products or Apps to demonstrate the applicability of the final output. This benchmark would consider the how much technology is applied to output and the realization of the output. For example, if the mentioned technological method obviously does not relate to the output, then the realization may be considered as weak. Or, the applicability of the proposed work is limited to a small group of people or area only, and then the application of the proposed work may be considered as weak as well.

D. Quality of Paper Presentation

The criterion is judged based on how the whole article content is organized or, in simple words, the article whether is presented with a pleasant viewing experience. The use of good presentation elements such as colored figures, flow chart or tables can enhance the readability of the article. However, overuse of such elements may not good as it means less useful context is presented.

E. Commercialization

Commercialization is referring to cases where the presented output itself has its own favorable market. This can be justified, for example, by the amount of selling of product/no. of downloads from App/Google Store. This can directly indicate whether the proposed work is suits the requirement of current industry.