# Technological Innovation for Industrial and Service Systems

The Advanced Doctoral Conference on Computing, Electrical and Industrial Systems is celebrating its **10th edition** (DoCEIS 2019) with a focus on Technological Innovation for Industrial and Service Systems. The industry and service sectors are going through profound transformation towards digitalization and integration of new levels of "smartness". The idea of a **4th industrial revolution**, represented by terms such as Industry 4.0, Smart Manufacturing and Economy 4.0 are an expression of such transformation. This movement is characterized by an increasing digitalization and interconnection of systems, products, value chains, and business models. The interconnection between the physical and the cyber worlds – Cyber-Physical Systems and Internet of Things – and the integration of the so-called "exponential technologies", are central features of this innovation trend.

DoCEIS 2019 provides an ideal venue for Doctoral Students, Researchers and Academicians from all over the world to meet, share, merge, and discuss their work and ideas in a multi-disciplinary context.

The conference aims at creating collaborative opportunities for young researchers through sharing their findings and experiences among their peers while also collecting valuable feedback from colleagues in a welcoming environment.

Prospective contributors to **DoCEIS 2019** are challenged to identify in which ways their research topics can contribute to or benefit from the conference theme and are encouraged to participate in this conference.

Key activities of the conference include:

- Presentation of research results by PhD students (co-authored by their supervisors).
- Tutorials by invited experts on scientific, methodological, or soft skills topics.
- Presentation and discussion of the base ideas of the theses plans.
- Discussion of the scientific and technical challenges in the Electrical and Computer Engineering areas.
- Sharing of experiences among PhD students from different geographical regions.
- Forum on practical aspects (e.g. Publications, job markets, careers, etc.).
- Creation of collaboration (social) networks.

Prospective authors are invited to submit research manuscripts reporting original work, in any of the scientific areas of the conference. Papers describing advanced prototypes, systems, tools and techniques, and general survey papers indicating future directions are also encouraged. Nevertheless, each paper must make a clear link to the main theme of the conference, including a section describing that link.

Proceedings are expected to be published by **Springer**, IFIP AICT series (indexed in **Web of Science**, **SCOPUS** and **DBLP**). Best papers will be considered for possible inclusion in a special journal issue.

There will also be poster discussion sessions regarding thesis plans, which will provide early feedback to PhD candidates in the initial phase of their studies.

For PhD theses recently finished (during the last year), extended overviews of the theses are invited.

#### Regular papers on ongoing PhD theses (8 pages):

- Clear formulation of the research question and motivations
- Relate the PhD work to the conference theme (1 page)
- State of the art / related literature
- Research contribution and innovation
- Discussion of results and critical view
- Conclusions and further work
- References

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#### Finished theses overview papers (16 pages):

- Extended overview of a PhD thesis finished during the last year, including research question, hypothesis, approach and main findings.
- Also include a section relating the PhD work to the conference theme (at least 1 page)

<u>Posters</u>: Check specific guidelines on the web site.

- Computational and Perceptional Systems
- Energy
- Enterprise Collaborative Networks
- Electronics
- Signal Processing
- Informatics in Electrical Systems
- Smart biotechnology
- Robotics and Integrated Manufacturing
- Industry Information Systems
- Telecommunications
- Biomedical Engineering

**Organisational Co-sponsors** 







Technical Co-sponsors (requested)









# **CONFERENCE CHAIRS**

# **Conference Chairman**

Prof. Luis M. Camarinha-Matos

#### **Organization Chairman**

Prof. Luis Gomes

### **Associated Activities Chairman**

Prof. Pedro Pereira

# **Financial Chairman**

Prof. João Goes

### **IMPORTANT DATES**

14 Nov 2018
Submission of abstract

15 Dec 2018

Submission of full paper

19 Jan 2019

9 Feb 2019

Submission of camera ready

Note: research paper selection will be based on full text, double blind review. Prospective authors should submit a short abstract in advance to check adequacy to conference scope.

**Notification of authors**