

Technological Innovation for Resilient Systems

The 9th Advanced Doctoral Conference on Computing, Electrical and Industrial Systems (**DoCEIS 2018**) reflects the growing need for development and integration of **resilience** into technological systems, due to increased rate of disruptive events around the globe. Such events are due to a variety of causes – globalization, natural hazards and climate change, economic crisis, demographic shifts, fast technological evolution, terrorism and cyber-attacks, rise of nationalisms, to name a few – and challenge the way systems are designed, implemented, and managed. Furthermore, rapid advances in Smart Sensors, Actuators, Embedded Intelligence, and their seamless integration into multiple Systems Architecture and Platforms have revolutionized the technological world, and even the way we live. However, the pervasive nature and growing complexity of this technology has also subjected our world to high levels of vulnerabilities, which poses a big threat to human existence.

DoCEIS 2018 therefore seeks to present an international and professional platform where Doctoral Students, Researchers and Academicians whose scope of work entails the design, application and adaptation of Resilient Systems in relation to Collaborative Systems, Sensing Technologies, Computer Networks, Internet of Things / Cyber-Physical Systems (IoT/CPS), Industrial Systems, Energy Systems, Smart Objects and General Management of all aspects of Technology, that focus on Resilience, can meet to share, discuss, and merge ideas.

The objective of the conference is to share research findings and do brainstorming on the challenges and promising approaches for development of Resilient Systems, in order to curve a clear, distinctive and well defined pathway for future work.

Prospective contributors to **DoCEIS 2018** are challenged to identify in which ways their research topics can contribute to or benefit from the research theme.

Key activities

- 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 their 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. These sessions are designed to provide early feedback to PhD candidates in the initial phase of their studies. For PhD theses recently finished (during the last year), a special type of submissions is invited.

Regular papers on ongoing PhD theses (8 pages):

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

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 Resilient Systems (at least 1 page)

Posters: Check specific guidelines on the web site.

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

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Important Dates

10 Nov 2017
Submission of abstract

8 Dec 2017
Submission of full paper

13 Jan 2018
Notification of authors

2 Feb 2018
Submission of camera ready

Note: research paper selection will be based on full text, double blind review. However, prospective authors should submit a short abstract in advance, in order to check if the proposed topic fits within the conference scope.

Organisational Co-sponsors



Technical Co-sponsors (requested)

