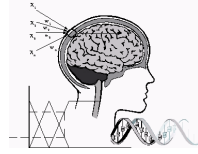




International

*Innovation in Knowledge Based and Intelligent
Engineering Systems*



Invited Session IS30 on “Robust Intelligent Services in Critical Systems”

KES-2019 - 23rd International Conference on Knowledge-Based and Intelligent
Information & Engineering Systems

September 4-6, 2019, Budapest, Hungary

<http://kes2019.kesinternational.org/index.php>

Aim of the session:

Artificial intelligence based methods (e.g., machine learning, automated reasoning, data intelligence) are used more and more often in critical systems like autonomous vehicles, service robots, IT processes and infrastructures. However, the application of AI methods raises several concerns related to their robustness, trustworthiness, reliability and safety. New techniques are needed to increase reliance that can be put on the intelligent services, including architectural solutions, design-time and run-time verification, testing and validation. The aim of the session is the presentation and discussion of new achievements and ideas in this area.

Topics include (but are not limited to):

- Threats to robustness and dependability of AI based services
- Architectural solutions in critical intelligent systems
- Enhancing robustness of AI based methods
- Provable and explainable AI
- Assessing trustworthiness of AI based methods
- Verification of data-driven intelligent services
- Testing techniques for AI based systems
- Monitoring and run-time verification of intelligent services
- Hazard and safety analysis for intelligent services
- Security in critical intelligent systems
- Robustness of data intelligence and data analysis techniques

Deadlines:

- **Submission of papers:** **26 April, 2019**
- Notification of acceptance: 20 May, 2019
- Final papers to be received: 3 June, 2019
- Authors registration: 3 June, 2019

Submission of papers

- Papers must be written in English and should be no longer than 10 pages, following formatting guidelines published on the conference web site:
<http://kes2019.kesinternational.org/submission.php>
- Submissions must be made as complete papers in PDF format through the PROSE online submission and review system (select the invited session IS30 from the drop-down box):
<http://kes2019is.prosemanager.com/submitpaper.asp>

Session chairs with contact addresses:

Prof. András Pataricza, Budapest University of Technology and Economics, Budapest, Hungary,
pataric@mit.bme.hu

Co-chaired by: István Majzik, majzik@mit.bme.hu, Zoltán Micskei, micskeiz@mit.bme.hu, Budapest University of Technology and Economics, Budapest, Hungary