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Schedule

Special Session Proposals:
04 Jan 2019

Submission of full papers:
04 Mar 2019

Notification of acceptance:
06 May 2019

Camera-ready paper & author registration:
15 June 2019

Early registration deadline
28 June 2019

Call for Papers

The 5th IFAC Conference on Intelligent Control and Automation Sciences (ICONS 2019) will be held at Queen's University Belfast, Northern Ireland, 21-23 August 2019. ICONS serves as a platform for scientists, researchers, and practitioners to discuss their forefront research results and findings, to shape their future directions and development, and to exchange their knowledge and perspectives in the field of intelligent control, automation science, engineering, and its integration into industry and society. It constitutes the primary forum for cross-industry, multidisciplinary research, and provides an opportunity to have a unique and rich cultural experience with excellent technical and social programs.

ICONS 2019 will feature keynote addresses, tutorials, and peer reviewed technical presentations and special sessions, all of which will be included in the registration. Special session proposals and technical papers are solicited on all aspects of Intelligent Control and Automation Science, from theory to applications. Topics of interest include:

- Computational intelligence methods in modelling, systems identification and control
- Neural networks, evolutionary computing, fuzzy techniques
- Swarm Intelligence (ant colony, particle swarm, differential evolution, cultural algorithms)
- Training and adaptation algorithms, constructive algorithms, structures for computational intelligence, design methodologies
- Search methods and decision-making
- Machine learning and deep learning in modelling, prediction, control and automation
- Biologically plausible neural networks, computational neuroscience
- Neurodynamic optimization and adaptive dynamic programming
- Brain computer interfaces and cognitive architectures,
- Human-machine interaction, cobotics, and augmented reality systems
- Neuroinformatics and bioinformatics
- Hybrids of computational intelligence systems
- Intelligent systems and instrumentation: smart systems, sensors, actuators
- Hybrid and distributed systems
- Data fusion and data mining; knowledge processing and representation, cloud computing
- Intelligent agents, multi-agent systems, swarm robotics
- Cognitive robotics, autonomous systems
- Health monitoring and prognostics: fault detection and diagnosis, predictive maintenance
- Intelligent control and automation of cyber physical systems
- Nonlinear control and its applications
- Real-time aspects of intelligent control
- Architectures for real-time intelligent-control (special processors, parallel processing, FPGAs, etc.)

Application areas of interest include transport, medical and biomedical, biology, aerospace, automation, biotechnology, manufacturing, process control, industry 4.0, additive manufacturing/3D printing, mechatronics, robotics and autonomous systems, power electronics, power systems, smart grids, agriculture, environmental systems, economics and business systems, smart cites, assisted living technologies, healthcare, and emerging areas.

All accepted papers will appear in the proceedings of the meeting, will be hosted on-line on the IFACPapersOnLine.net website and will be indexed in SCOPUS.

Website: http://www.qub.ac.uk/icons2019   **Email**: icons2019@qub.ac.uk

INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

Submission Guidelines

The submission portal for ICONS 2019 will open on December 1st, 2018. All submissions must be made through the IFAC Conference Manuscript Management System website at http://ifac.papercept.net/. All papers presented will be recorded as an IFAC Publication. When preparing the paper manuscript the authors should adhere to the IFAC style files for conference paper. The procedure and guidelines for submitting special session proposals are provided on the conference website.

Contributions: All submitted papers must be written in English. Only regular papers are accepted at ICONS 2019, which can have a length of up to 8 pages at initial submission. Accepted papers are limited to 6 pages in the conference proceedings at no extra charge; up to two extra pages are allowed for an additional charge.
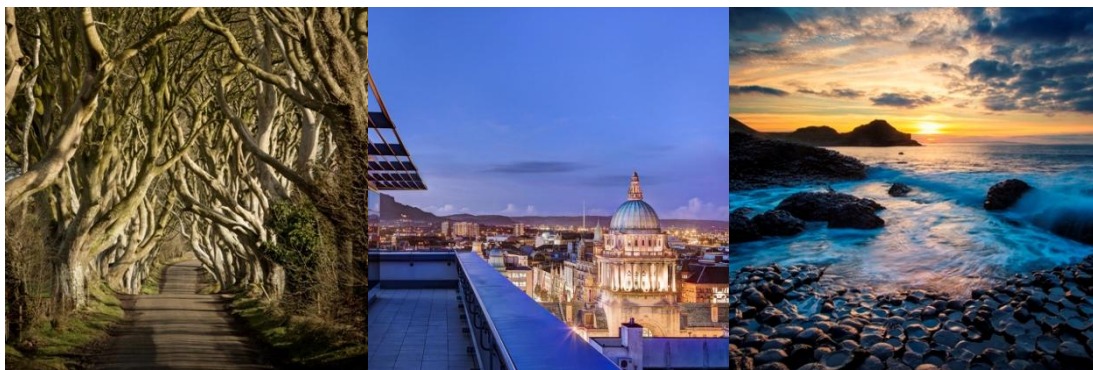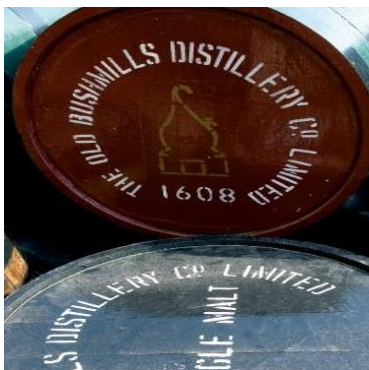
Support for Authors: Author's kits with style (.cls) files for LaTeX and templates (.dot) for MS-Word are available from the submission website. Go to http://ifac.papercept.net/ and select "Support" for these files and example files, or directly go to the support page. Please do not change the formatting in any way.

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All publication material submitted for presentation at ICONS2019 must be original and hence cannot be already published, nor can it be under review elsewhere. The authors take responsibility for the material that has been submitted. IFAC-sponsored conferences will abide by the highest standard of ethical behaviour in the review process as explained on the Elsevier webpage (https://www.elsevier.com/authors/journal-authors/policies-and-ethics), and the authors will abide by the IFAC publication ethics guidelines (http://www.ifac-control.org/events/organizers-guide/PublicationEthicsGuidelines.pdf).

Accepted papers that have been presented at an IFAC meeting will be published in the proceedings of the event using the open-access IFAC-PapersOnLine series hosted on ScienceDirect (www.sciencedirect.com). To this end, the author(s) must confer the copyright to IFAC when they submit the final version of the paper through the paper submission process. The author(s) retain the right to use a copy of the paper for personal use, internal institutional use at the author(s)' institution, or scholarly posting at an open web site operated by the author(s) or their institution, limited to non-commercial use. Any other use of the paper requires approval by IFAC.

Visit Northern Ireland

Belfast (www.visitbelfast.com) is the capital of Northern Ireland (www.discovernorthernireland.com), famous for being the birth place of the Titanic and more recently the location of The Game of Thrones film studios. The region is famous for its stunning coastal scenery and attractions such as the Giant's Causeway and Dunluce Castle, all easily accessible from Belfast. It has been rated as the number one region in the world to visit in 2018 by Lonely Planet.

Some notable attractions

✓ Giant's Causeway - 60 million years of history
✓ The Titanic Museum
✓ Carrick-a-rede Rope Bridge
✓ Bushmills Distillery (1608) – the world's oldest distillery
✓ The landscapes that have been used as the backdrop for HBO's Game of Thrones TV series
✓ Famous locals – Seamus Heaney, C.S Lewis, Van Morrison, George Best, Rory McElroy
✓ Dunluce Castle - once owned by Winston Churchill
✓ The Crown Bar – a Victorian gin palace dating back to 1826
✓ Marble Arch Caves Global Geopark – UNESCO World Heritage site

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