



Call for Papers: EUROSIM 2016

Dear friends and partners,

It is our great pleasure to invite you to join us at the 9th EUROSIM 2016 Congress which will take place on 12 – 16 September 2016 in Oulu, Finland. The congress is organized by the Scandinavian Simulation Society (SIMS), the Finnish Society of Automation and University of Oulu. The Oulu City Theatre serves as the main venue.

The EUROSIM 2016 Congress provides a forum where automation professionals from industry and science exchange knowledge, experiences and strengthen multidisciplinary network. On the stage visions are presented and shared with old and new colleagues. The EUROSIM 2016 is expected to attract around 500 participants around the Europe in the field of simulation. The programme of the congress has a multi-conference structure with several special topics related to methodologies and application areas. The programme includes invited talks, parallel, special and poster sessions, exhibition and versatile technical and social tours.

We are inviting you to submit your contribution to the high standard international simulation congress.

Please visit <http://eurosim2016.automaatioseura.fi> for further information.

We look forward to meeting you in Oulu 2016!

Esko Juuso, EUROSIM President,

Erik Dahlquist, President of SIMS and

Kauko Leiviskä, EUROSIM 2016 Chair and Editor



Save the dates

Minisymposia and Thematic sessions

Proposals with scope	March 18, 2016
Notification of acceptance	March 24, 2016

Full Contributions Extended

Full draft paper submission	May 20, 2016
Notification of acceptance	June 10, 2016
Final camera-ready papers	June 30, 2016
Author registration	June 30, 2016

Discussion and Student Contributions Extended

Extended abstracts	May 30, 2016
Notification of acceptance	June 13, 2016
Final camera-ready short papers	June 30, 2016
Author registration	June 30, 2016

EUROSIM Congress September 12 - 16, 2016

Co-sponsors:

IEEE Finland Section

The International Federation of Automatic Control Technical Committees on TC 3.2, TC 6.1, TC 6.2, TC 6.3 and TC 6.4
University of Oulu

Organizer: Finnish Automation Support Ltd

Committee Chairs

Erik Dahlquist, Mälardalen University, IPC Chair

Bernt Lie, Telemark University, IPC Co-Chair

Lasse Eriksson, Cargotec Corporation, IPC Vice-Chair, Industry

Kauko Leiviskä, University of Oulu, NOC Chair

Esko Juuso, University of Oulu, NOC Co-Chair

Timo Ahola, Outokumpu Stainless, NOC Vice-Chair, Industry

Pekka Tervonen, University of Oulu, Exhibition & Tutorial, Chair

Peter Ylén, VTT, Publication Chair

Lars Eriksson, Linköping University, Publication Co-Chair

EUROSIM 2016 Secretariat

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Areas of interest

Methodologies

M1 Computational intelligence

- Evolutionary computation
- Fuzzy systems
- Knowledge-based systems
- Machine intelligence
- Natural language processing
- Nature inspired systems
- Neural and neurofuzzy systems
- Pattern analysis

M2 Concentrated parameter systems

- Ordinary differential equations
- Differential algebraic equations
- Stochastic systems

M3 Conceptual modelling

M4 Complex systems

M5 Data analysis

- Fractional differentiation
- Reinforcement learning
- Semantic mining
- Statistical analysis

M6 Discrete event simulation

M7 Distributed parameter systems

- Computational fluid dynamics
- Partial differential equations
- Stochastic systems

M8 Operations research

M9 Parallel and distributed interactive systems

M10 Simulation tools and platforms

- Domain-specific tools
- Simulation software
- Hardware in the loop
- Verification and validation

M11 Other Methodologies

Functionalities

F1 Control and optimization

- Adaptation
- Computers in control
- Intelligent analysers
- Model-based control

F2 Communication and security

- Internet and cloud computing
- Mobile and wireless systems
- Security

F3 Education and training, e-Learning

F4 Fault detection & fault tolerant systems

- Condition monitoring
- Maintenance

F5 Human-Machine interaction

F6 Mechatronics and robotics

F7 Performance and risk analysis

F8 Planning and scheduling

F9 Sensing

- Image, speech and signal processing
- Sensor networks
- Circuits, sensors and devices

F10 Virtual reality and visualization

- Computer art
- Serious games
- Visualization

F11 Other Functionalities

Application domains

A1 Bio- and ecological systems

- Agriculture
- Bioinformatics and bioengineering
- Biological and medical systems
- Circular economy
- Environmental modelling
- Health care
- Hydrological models
- Pollution and waste

A2 Building and construction

- Building automation
- Built environment
- Construction engineering
- Energy and health

A3 Business and management processes

A4 Economic and social systems

- Computational finance and economics
- Control education

A5 Energy

- Energy networks for electricity, heat and gas
- Geothermal energy
- Hydropower
- Power plants
- Smart grids for heat and electricity
- Solar energy
- Wind energy

A6 Industrial processes

- Chemical industry
- Forest industry
- Manufacturing industry
- Metal industry
- Mining and mineral processing
- Pharmaceutical industry

A7 Security and military

A8 Transportation and vehicle systems

- Aerospace
- Automotive applications
- Autonomous systems and vehicles
- Harbour, shipping and marine
- Logistics
- Vehicle systems

A9 Water and wastewater

- Treatment plants
- Water and wastewater networks

A10 Weather and climate

- Air quality models
- Atmospheric modelling
- Climate modelling
- Northern lights
- Polar meteorology
- Weather models

A11 Other Application Domains

Paper submission

Paper submissions have two categories: full and short. The congress is partly organized as minisymposia, which consist of one or more sessions of coordinated presentations on a single topic of substantial current interest and importance. Thematic session is based upon an explicit problem statement or question and the contributions help to formulate answers. The proposal of a minisymposium or a thematic session must contain the expected number of contributions and a short description of aims and scope. The list of contributions is needed before the review.

Full contributions to the minisymposia as well as thematic and regular sessions must be submitted as draft papers (6 pages, two column). The full papers are peer reviewed for the proceedings. Discussion and student papers are submitted as short papers (2 pages, two column). High quality short papers will be included in the proceedings. The category may change in the review. Minisymposia and thematic sessions can include both full and discussion papers. With acceptance of the organisers, these sessions can be extended by other regular or short submissions. Final papers have to fully comply with author instructions to be included in the proceedings.

Eurosim 2016 is using the EDAS Paper Submission System for submission, paper processing and registration. Submissions will only be accepted through the EDAS system and papers must be in PDF form. Submissions as e-mail attachments will not be accepted. Papers can be registered first and then uploaded at any time up to the paper submission deadline. Submissions must be in IEEE two-column format and must not exceed the page limits, including figures, tables and references. The cover page should contain title, author names, affiliations, and email addresses. Please indicate clearly the corresponding author. Include up to five keywords from the specified list and an abstract of no more than 200 words.

The proceedings will be published by the prestigious Conference Publishing Services (CPS) and submitted to the CSDL and Xplore. The congress and proceedings meets IEEE's quality standards. All of the author papers in the publication will have a Digital Object Identification Number (DOI), allowing for easy searches and protection against plagiarism.

The proceedings published by CPS are submitted for indexing through INSPEC, EI's Engineering Information Index, Compendex, and ISI Thomson's Scientific and Technical Proceedings, ISTP/ISI Proceedings, and Current Contents on Diskette. IEEE conference publications may also be indexed into specialized indexing services based on their content topic.

Selected papers will be considered for the revised publication in peer reviewed journals. An additional review is done by the journals according to their own scope and requirements.

The topics are organised as four groups of tracks:

- Modelling and simulation methodologies (M1-M11)
- Functionalities (F1-F11)
- Application domains (A1-A11)
- Minisymposia (S1-Sn)

Paper submission: the EDAS system <http://edas.info> and IEEE templates for conference proceedings http://www.ieee.org/conferences_events/conferences/publishing/templates.html The paper size is A4.

In the EDAS paper submission system, the paper is submitted to one Track (see Topics). For the review and the programme, a combination of active tracks is needed. The information of other tracks, preferably one track from each group (M, F, A), should be included in the keywords as indices (Mm, Ff, Aa). The tracks should be chosen in the order of preference. These additional keywords are not needed in the manuscripts. The minisymposia are special tracks where an acceptance of the organizer is needed. Contact information is given in minisymposium information. Additional information on related tracks should be given for these submissions as well.

Copyright

All publication material submitted for presentation at the congress 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. The publication follows the IEEE Policy on Electronic Dissemination.

Exhibition and tutorials

Exhibition area is available for presenting products and services. The program includes vendor sessions to give short presentations for wide audience. Tutorials provide an additional option for longer presentations.

Please visit <http://eurosim2016.automaatioseura.fi> for further information and registration for exhibition and tutorials.

Technical visits and social tours

Technical visits, including industries, power plants and a smart residential area, will be organized by Finnish Automation Support Ltd: registration at <http://eurosim2016.automaatioseura.fi>. Links will be provided for social tours arranged by service providers.

Registration fee

An early registration fee by June 30, 2016 for members of the EUROSIM societies or IEEE is EUR 590, non-members EUR 740 and students EUR 290. After June 30, the fees are EUR 650 for members, EUR 815 for non-members and 340 for students. The minisymposia and thematic session organizers get a reduction of EUR 60. Registration for accompanying persons is EUR 120. A complete pre-payment by one of the authors is required before

uploading the final paper. A second paper may be submitted by a registered author for an administrative fee of EUR 100.

The registration fee includes one paper submission, admission to all the sessions during three days, conference proceedings, lunches, coffees, a get-together party, the conference dinner and 24% VAT. Students are entitled to the conference dinner on extra fee.

Venue

EUROSIM 2016 Conference will be organized in the heart of the Oulu City at the main venue of Oulu City Theatre. Oulu, the capital of northern Scandinavia is located on the coast of the Gulf of Bothnia 220 kilometers south of the Arctic Circle and Lapland. Oulu offers the combination of a charming small city, urban Centre and dynamic university with 16 000 students. Oulu has been awarded as the most intelligent community in Europe 2012. The city provides free wireless Internet access to all its visitors.

Finnish heritage of the ice age in Rokua Geopark, history of thousands of years in the Kierikki Stone Age Centre and numerous Bird Watching centers are nearby. Pre and Post Congress tours to Arctic Circle, Santa Claus village and the hiking in Oulanka National Park will be offered by service providers.

Oulu information: <http://www.visitoulu.fi/en/home/>

How to get

There are good flight connections to Oulu from all over the world via Helsinki. Numerous only one hour flights per day between Oulu and Helsinki are operated by Finnair www.finnair.com and Norwegian <http://www.norwegian.com/en/>. Several Finnair flights are also available as codeshare flights with several partners of Oneworld Alliance and Air France. Arctic Airlink connects Oulu with Luleå and Tromsø <http://www.arcticairlink.fi/>.

Oulu has frequent Pendolino and InterCity train connections with Helsinki and Tampere <https://www.vr.fi/cs/vr/en/frontpage>.

Traveling information: <http://www.visitoulu.fi/en/traveling/>



Website: <http://eurosim2016.automaatioseura.fi/>