excellence in design

DESIGN
2018

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15th INTERNATIONAL
DESIGN CONFERENCE

MAY, 21-24 2018 DUBROVNIK, CROATIA

INVITATION

By tradition DESIGN Conference is a forum for discussion and further development of all aspects of design knowledge from cognition and philosophy to methods and tools, from research theory to practice.

The DESIGN Conference programme offers broad exchange possibilities to researchers and practitioners, strategic decision makers, managers, design and engineering professionals, national or regional agencies or governmental bodies.

The goal of DESIGN Conference is to bring together researchers and practitioners who have worked on or thought about engineering and industrial design from a variety of perspectives, disciplines, and fields: engineering, aesthetics, ergonomics, psychology, sociology and the like.

We invite high-quality submissions for DESIGN 2018 covering substantial, original and previously unpublished research. Improvements in the engineering design process have been supported by theories and methods developed by research groups around the world. There is a constant need to harmonise the findings and to ensure that these findings are built upon and developed so that they can be transferred into engineering practice.

How this influences engineering design methodologies and tools in practice? How to improve design projects and processes?

How to improve the development of products and services? Which competencies, information and communication technologies are needed? What is the impact on the everyday design work? What social and legal issues should be considered? What are the new advances in design theory and research?

Those are the key questions DESIGN 2018 papers should focus on.

Applied, theoretical and results oriented papers from both academia and industry, based on thorough analysis or argumentation, will all be considered for the conference programme.

The submitted papers should fit into one of the proposed conference topics. It is expected that these specific topics are extensive and non exhaustive. A list of examples is added for illustrating the core topics. It is required explicitly from all contributors to show how they are contributing to the overall research within these areas.

Detailed description of topics and instructions for online submission are available at www.designconference.org

PROGRAMME

The DESIGN Conference provides an interactive environment where participants proactively create opportunities to share design knowledge and new cross-disciplinary research that leads to innovation.

PLENARY SESSIONS

Will host invited keynote speakers presenting the leading thoughts, new ideas and visions.

TOPIC ORIENTED SESSIONS

Will host papers selected around common research questions in order to foster discussion.

WORKSHOPS

DESIGN 2018 workshops will promote integration of different views, approaches and methods. Workshop coordinators could invite selected presentations and demonstrations in order to stimulate the debate as well as to propose any format of delivery that inspires interaction. The workshops will be organised on the 21st of May.

PHD STUDENTS' FORUM

The forum will be a unique opportunity for younger researchers and PhD students to discuss their research questions and ideas with experienced researchers, practitioners and R&D managers in order to facilitate their research efforts.

THE DESIGN DEBATE

The purpose of the design debate is to investigate in a forensic manner some key topics that affect the engineering design research community. Two opponents and the debate moderator will be distinguished key players in the community presenting evidence for or against a particular topic.

INDUSTRIAL FORUM

The industrial forum will be an opportunity to discuss industrial views, needs and expectations of design research, tracing emerging trends in industrial innovation and the right strategies for a sustainable future. The forum will offer a platform for debate among decision makers, practitioners and academics about the future of design research, needs and expectations.

DESIGN 2018

THEORY AND RESEARCH METHODS

Empirical studies of design
and design support
New approaches to the design theories
Design science research methods
Design theory

DESIGN PROCESSES

Configuration and modularisation
Modelling and management
of engineering processes
Product development
models and strategies
Conceptual design cognition
Design for product life cycle
Resilient processes

INFORMATION & KNOWLEDGE

Design knowledge and collaboration
Collaborative systems
Representations of design information
Decision making and decision support
Knowledge intensive design
Artificial intelligence in design
Data driven design

DESIGN INNOVATION

Creativity and ideation
Innovation methods and tools
Open innovation
Social innovation

SYSTEMS ENGINEERING

Defining a systems approach
Managing structural complexity
Simulation within complex systems
Complex systems design
Interdependencies in complex systems
Model-based systems engineering (MBSE)
Cyber-physical systems design

ENGINEERING DESIGN PRACTICE

Geometrical modelling,
simulation and tolerancing
Simulation based design
Optimisation
Visualisation and virtualisation

DESIGN METHODS

Requirements Engineering
Design for X
Ecodesign implementation
Design for additive manufacturing
Product service engineering
Computational design synthesis
Engineering design in mechatronics
Change management

ORGANISATION & MANAGEMENT

Organisational understanding
of product development
Multi-product development
Life cycle management
Market and business implications
Global product development
Globalisation, legislation,
remanufacturing

DESIGN SUPPORT TOOLS

Tools for DfX and product development
IT in product development
Usage and integration of
supportive technologies
Virtual product development
PDM/PLM

HUMAN BEHAVIOUR

Cooperation and collaboration
Designer's attitudes and skills
Human thinking
Emotional engineering

SOCIOTECHNICAL ISSUES

Approaches to socio-technical
systems design
Human factors in design
Socially responsible design
Technology and sustainable
development
Life science and design for healthcare

INDUSTRIAL DESIGN

User-centred design
Aesthetics and visual impressions
User interaction design

DESIGN EDUCATION

Design education strategy
Tools and environments
for design education
Project-based education

REVIEWING POLICY

The papers will be accepted on the double blind review basis
made by the members of the Scientific Advisory Board.

The review criteria will be the novelty and level of
contribution, validity of conclusions, industrial or application
perspective and formal qualities of the contribution.

Selected papers will be recomended for publication in
international journals.

Additional information available at:
www.designconference.org/reviewing-policy

1 Full paper submission deadline
December, 11 2017

2 Final acceptance of papers
February, 23 2018

3 Publish-ready papers
March, 19 2018

4 Final Conference programme
April, 2018

5 DESIGN 2018 Conference
May, 21-24 2018

CONFERENCE VENUE

Hotel Dubrovnik Palace
Masarykov Put 20
Dubrovnik, Croatia

PROGRAMME CHAIRS

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the **Design Society**
a worldwide community

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