HSI2019 will continue the discussion of the shift from human-computer interaction to human-systems integration which was started during HCI-Aero 2016 in Paris, France. We also invite papers on visionary and transformational ideas and “out-of-the-box” thinking that can move industrial operations in new directions. “Integrate and Interact” will be the primary focus of HSI2019. Therefore, we encourage the dialogue between industrial sectors that includes aeronautics, space, medicine, automotive, oil and gas, defense as well as other fields.

HSI2019 will bring together manufacturers, operators, government, research centers and academia to focus on improving industrial teams of teams. The current economic environment puts additional pressure on all of us to make industrial operations more efficient and affordable. We invite you to submit innovative methods, techniques, tools and technology that can lead the way. This includes laboratory research and field investigations, industrial developments and perspectives. While the primary focus is on HSI, we will consider papers on a wide range of topics including design, evaluation, certification and rule-making, training, maintenance, in-service experience and incident/accident investigation.

HSI2019 is organized in cooperation with ACM, IEA and Air & Space Academy.

Guy André Boy, INCOSE
General Chair of HSI2019

www.incose.org/hsi2019

Deadlines

28 Jan 2019 Full research papers
28 Jan 2019 Industry papers; Early stage researcher papers
28 Jan 2019 Panels, Posters, Demos, Workshops
29 Mar 2019 Acceptance notification
31 May 2019 Camera-ready
11-13 Sept 2019 HSI2019 in Biarritz

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A scientific and industrial event

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Avigdor Zonnenshain, Technion, Israel

Organization
Michel Grillet, ESTIA, France
Benoît Gigaret, ESTIA, France
Nicole Ann Hutchison, INCOSE, SERC, USA
KMD Events, USA, USA
NC Lab, France

Themes
HSI principles, methods and tools
Tools & methods for human-systems integration
Ethnographic studies, Human error, Fatigue
Situation awareness, decision-making, workload
Emerging operational issues in complex systems
Concepts of operations, scenario-based design
Role of HSI in accident investigations
Experience feedback & reporting systems
Digital Human modeling

Organizational issues and solutions
Teams of teams vs. systems of systems
Next generation OPS & technical documentation
Automation across systems
Supervision, mediation, cooperation, competition
Multi-agent modeling
Tangible interactive systems
Change management, lean management
Organization design and management
Maintenance resource management / CRM
Human-centered model-based systems engineering
Modeling and simulation, human-in-the-loop simulation

HSI, safety and infrastructures
Agents-infrastructure integration
Safety management system (SMS)
Influence of national and organizational cultures
Integration and global coordination
HSI, safety and infrastructures
Responding to infrastructure collapse

Legal and Regulatory
Standards and specific regulations
Regulatory compliance
Criminalization of accidents, Legal issues
Regulating autonomous vehicles
HSI means of compliance
HSI evaluations for design and certification

Submissions
Submissions must be written in English and present unpublished work. They will be peer-reviewed by at least 3 reviewers. Acceptance will be based primarily on originality and high-quality contributions. They should have a cover page including title, author's names, postal and electronic addresses, keywords and abstract, and be sent in PDF format. For information on presentation format consult HSI2019 website. All accepted submissions will be presented at HSI 2019 and appear in the Conference Proceedings. Selected full papers will be accessible to INCOSE members and in-cooperation associations (to be announced later). Easy chair submission will open soon.

Research Track
Deadline: January 28, 2019
(Up to 8 pages including diagrams and references)
Research Papers present significant contributions to research, development and practice in the field of human-systems integration. Submissions should present new approaches to HSI, emphasizing the interest and originality of the approach and provide complete and substantial support for its results and conclusions. Only unpublished papers will be accepted.

Industry Track
Deadline: January 28, 2019
(From 4 to 6 pages including diagrams)
We solicit papers with practical implications or tied to actual implementation in industry and the operational world. These papers will be presented either in special sessions or combined with related research papers. This track is dedicated to practitioners to share the recent evolution of industrial innovations.

Early Stage Research Track
Deadline: January 28, 2019
(Up to 4 pages including diagrams and references)
Early stage research has not yet been completed, or may be in the phase of developing research questions and approach, results, or practical work. This track encourages the active participation of emerging researchers and professionals to support their work and to involve them in the HSI community.

Early stage researchers may be assisted by an experienced mentor in their area of research. All submissions should include a brief description of the researchers' experience.

Panels, Workshops, Posters Demos
Deadline: January 28, 2019
(Up to 2 pages including diagrams and references)
Panels must explore a range of perspectives as well as controversial and burning issues. Panelists should include different backgrounds; i.e., practitioners/researcher, cultural backgrounds, and disciplines.

Workshops are discussion forums of work in progress, which are managed by a chair and a committee, and organized around a specific theme. All accepted workshops are held on a half-day or full-day period.

Posters present research in progress or recently developed industrial devices and innovative methods.

Demos must show ground-breaking innovative products and prototypes.

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