

ICxS 2022

Special Session on Intelligent and Contextual Systems

at the 14th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2022)

Almaty, Kazakhstan, June 6-9, 2022

Conference website: <http://www.aciids.pwr.edu.pl>

ICxS Special Session website: <http://www.icxs.pwr.edu.pl>

Special Session Organizers

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Objectives and topic

Context based methods have gained great attention of scientific community over the last several years. Multiple context based and awareness related models have been theoretically and empirically shown to provide significantly better capabilities and performance than their context-free versions. Context aware algorithms have found their application in solutions of various real world problems ranging from robots control, person identity and activity recognition, through medical diagnosis to text classification and financial forecasting. The ICxS 2022 Special Session at the 14th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2022) is devoted to the context based methods addressing classification, ontology processing, context awareness, selective attention and computational awareness problems as well as their use in benchmark and real life applications - especially adaptable, distributed and mobile systems. We want to offer an opportunity for researchers and practitioners to discuss the role of context in different fields, identify and exchange new promising research directions as well as to publish recent advances in this area. The scope of the ICxS 2022 includes, but is not limited to the following topics:

- Context-based machine learning methods,
- Implementations of context-aware algorithms, hybrid and distributed contextual systems,
- Neural networks for aware and contextual systems,
- Intelligent environments and sensor networks,
- Theoretical models and frameworks for contextual methods,
- Ontology based context modeling,
- Computational awareness theory,
- Using context and awareness in robots, transportation, assistive and medical systems,
- Data mining with awareness and contextual methods,
- Recognition and control of the context during communication (e.g. web chatter bots),
- Context sensitive image and scene processing,
- Selective attention, perception and tasks scheduling,
- Context aware reasoning and languages (rule-based, markup-based, other),
- Analyzing, tracking and understanding context of text and multimedia sources,
- Context aware services and computing (personalized, web based, mobile, wearable, other),
- Application of context-aware methods and systems in medicine, engineering, society, business, science, etc.

Important dates

Submission of papers: **15 January 2022**
Notification of acceptance: **1 March 2022**
Camera-ready papers: **15 March 2022**
Registration & payment: **15 March 2022**
Conference date: **6-9 June 2022**

Program Committee (to be invited)

Adriana Albu, Polytechnic University of Timisoara, Romania
Basabi Chakraborty, Iwate Prefectural University, Japan
Chao-Chun Chen, National Cheng Kung University, Taiwan
Dariusz Frejlichowski, West Pomeranian University of Technology Szczecin, Poland
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Takako Hashimoto, Chiba University of Commerce, Japan
Tetsuji Kuboyama, Gakushuin University, Japan
Thai-Nghe Nguyen, Can Tho University, Vietnam

Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: **ICxS 2022: Special Session on Intelligent and Contextual Systems**.

<https://easychair.org/conferences/?conf=aciids2022>

Authors are invited to submit original previously unpublished research papers written in English, of up to 13 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at [Springer's web site](#). Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the ICxS 2022 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.). The ICxS 2022 Program Committee will additionally confer the "ICxS 2022 Best Paper Award" for the outstanding contribution to research in contextual processing. ICxS 2022 is technically sponsored by IEEE Technical Committee on Hyper-Intelligence.