

ICAART 2022

SCOPE

The purpose of the International Conference on Agents and Artificial Intelligence is to bring together researchers, engineers and practitioners interested in the theory and applications in the areas of Agents and Artificial Intelligence. Two simultaneous related tracks will be held, covering both applications and current research work. One track focuses on Agents, Multi-Agent Systems and Software Platforms, Distributed Problem Solving and Distributed AI in general. The other track focuses mainly on Artificial Intelligence, Knowledge Representation, Planning, Learning, Scheduling, Perception Reactive AI Systems, and Evolutionary Computing and other topics related to Intelligent Systems and Computational Intelligence.

A substantial amount of research work is ongoing in these knowledge areas, in an attempt to discover appropriate theories and paradigms to use in real-world applications. Much of this important work is therefore theoretical in nature. However there is nothing as practical as a good theory, as Boltzman said many years ago, and some theories have indeed made their way into practice. Informatics applications are pervasive in many areas of Artificial Intelligence and Distributed AI, including Agents and Multi-Agent Systems; This conference intends to emphasize this connection, therefore, authors are invited to highlight the benefits of Information Technology (IT) in these areas. Ideas on how to solve problems using agents and artificial intelligence, both in R&D and industrial applications, are welcome. Papers describing advanced prototypes, systems, tools and techniques and general survey papers indicating future directions are also encouraged. Papers describing original work are invited in any of the areas listed below. Accepted papers, presented at the conference by one of the authors, will be published in the Proceedings of ICAART with an ISBN. Acceptance will be based on quality, relevance and originality. Both full research reports and work-in-progress reports are welcome. There will be both oral and poster sessions.

Special sessions, dedicated to case-studies and commercial presentations, as well as tutorials dedicated to technical/scientific topics are also envisaged: companies interested in presenting their products/methodologies or researchers interested in holding a tutorial are invited to contact the conference secretariat. Additional information can be found at <http://www.icaart.org/>.

CONFERENCE AREAS

Each of these topic areas is expanded below but the sub-topics list is not exhaustive. Papers may address one or more of the listed sub-topics, although authors should not feel limited by them. Unlisted but related sub-topics are also acceptable, provided they fit in one of the following main topic areas:

1. AGENTS

2. ARTIFICIAL INTELLIGENCE

AREA 1: AGENTS

Agent Communication and Languages
Agent Models and Architectures
Agent Oriented Software Engineering
Autonomous Systems
Cognitive Robotics
Conversational Agents
Distributed Problem Solving
Economic Agent Models
Emotional Intelligence
Group Decision Making (with cooperation, coordination, negotiation, interaction protocols)
Intelligent Auctions and Markets
Mobile Agents
Multi-Agent Systems
Privacy, Safety, Security, and Ethical Issues
Programming Environments and Agent Platforms
Robot and Multi-Robot Systems
Self Organizing Systems
Simulation
Swarm Intelligence and Collective Intelligence
Task Planning and Execution
Web Intelligence and Semantic Web

AREA 2: ARTIFICIAL INTELLIGENCE

AI and Creativity
Ambient Intelligence
Bayesian Networks
Big Data
Case-Based Reasoning
Cognitive Systems
Constraint Satisfaction
Data Mining
Data Science
Deep Learning
e-Discovery
Evolutionary Computing
Explainable Artificial Intelligence
Fuzzy Systems
Hybrid Intelligent Systems
Industrial Applications of AI
Intelligence and Cybersecurity
Intelligent User Interfaces

Knowledge Representation and Reasoning
Knowledge-Based Systems
Legal Technologies
Machine Learning
Model-Based Reasoning
Natural Language Processing
Neural Networks
Ontologies
Planning and Scheduling
Quantum Artificial Intelligence
Social Network Analysis
Soft Computing
State Space Search
Uncertainty in AI
Vision and Perception
Visualization

KEYNOTE SPEAKER

Michael Beetz, University of Bremen, Germany

PAPER SUBMISSION

Authors can submit their work in the form of a complete paper or an abstract, but please note that accepted abstracts are presented but not published in the proceedings of the conference. Complete papers can be submitted as a Regular Paper, representing completed and validated research, or as a Position Paper, portraying a short report of work in progress or an arguable opinion about an issue discussing ideas, facts, situations, methods, procedures or results of scientific research focused on one of the conference topic areas.

Authors should submit a paper in English, carefully checked for correct grammar and spelling, addressing one or several of the conference areas or topics. Each paper should clearly indicate the nature of its technical/scientific contribution, and the problems, domains or environments to which it is applicable. To facilitate the double-blind paper evaluation method, authors are kindly requested to produce and provide the paper WITHOUT any reference to any of the authors, including the authors' personal details, the acknowledgments section of the paper and any other reference that may disclose the authors' identity.

When submitting a complete paper please note that only original papers should be submitted. Authors are advised to read INSTICC's ethical norms regarding plagiarism and self-plagiarism thoroughly before submitting and must make sure that their submissions do not substantially overlap work which has been published elsewhere or simultaneously submitted to a journal or another conference with proceedings. Papers that contain any form of plagiarism will be rejected without reviews.

All papers must be submitted through the online submission platform PRIMORIS and should follow the instructions and templates that can be found under Guidelines and Templates. After the paper submission has been successfully completed, authors will receive an automatic confirmation e-mail.

PUBLICATIONS

All accepted complete papers will be published in the conference proceedings, under an ISBN reference, on paper and on digital support.

SCITEPRESS is a member of CrossRef (<http://www.crossref.org/>) and every paper on our digital library is given a DOI (Digital Object Identifier).

The proceedings will be submitted for indexation by SCOPUS, Google Scholar, The DBLP Computer Science Bibliography, Semantic Scholar, Microsoft Academic, Engineering Index (EI) and Web of Science / Conference Proceedings Citation Index.

IMPORTANT DATES

Conference Date: **3 - 5 February, 2022**

Regular Papers

Paper Submission: **September 14, 2021**

Authors Notification: **November 15, 2021**

Camera Ready and Registration: **November 29, 2021**

Position Papers

Paper Submission: **October 29, 2021**

Authors Notification: **December 7, 2021**

Camera Ready and Registration: **December 21, 2021**

Workshops

Workshop Proposal: **September 22, 2021**

Doctoral Consortium

Paper Submission: **December 9, 2021**

Authors Notification: **December 22, 2021**

Camera Ready and Registration: **January 4, 2022**

Special Sessions

Special Session Proposal: **September 22, 2021**

Paper Submission: **November 26, 2021**

Authors Notification: **December 14, 2021**

Camera Ready and Registration: **December 22, 2021**

Tutorials

Tutorial Proposal: **December 17, 2021**

Demos

Demo Proposal: **December 17, 2021**

Panels

Panel Proposal: **December 17, 2021**

Abstracts

Abstract Submission: **December 9, 2021**

Authors Notification: **December 22, 2021**

Camera Ready and Registration: **January 4, 2022**

SECRETARIAT

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VENUE

Available soon.

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