

Virtual AICAS 2021

Call for Papers

3rd IEEE International Conference on Artificial Intelligence Circuits and Systems
March 28-30, 2021

Conference Scope

Artificial Intelligence is driving a new revolution in domains ranging from manufacturing, automotive, healthcare, robotics, entertainment, and many others. New computing platforms are required to support the emerging AI algorithms and applications, from cloud servers to edge devices, from system level to circuit level.

The IEEE International Conference on Artificial Intelligence Circuits and Systems facilitates research, innovation and development activities at the frontiers of circuits and systems for Artificial Intelligence. It allows academia to meet industry from the international community to exchange experiences, demonstrate their studies and further advance AI technologies. AICAS is the major conference for AI that stands between theory, applications, and ASICs. AICAS2021 brings together members of AI and CAS communities to broaden their knowledge and create synergies between applications and their supporting hardware.

Paper Submission

Submissions should be full-length papers of up to four pages (PDF format, double-column, US letter size, using the IEEE Conference format). Submissions must be anonymous (i.e., double-blind review process). Submissions exceeding 4 pages will be rejected. Submitted papers must describe original work that has not been published/accepted or is currently under review by another journal, conference, or symposium.

Exemplary topics of interest

The topics covered include (but are not limited to):

- Circuits and systems for AI
- Deep learning/machine learning/AI algorithms
- Tools/Platforms for AI
- Architectures for AI computing
- Neuromorphic circuits, processors and systems and their applications
- Hardware/software co-design and design automation for AI systems
- Advanced neural network design
- Emerging applications: Internet-of-Things, healthcare, autonomous vehicles, environment
- Emerging devices and materials for AI

Proceedings

IEEE proceedings will be published containing all accepted papers. Accepted papers will be available in both IEEE Xplore Digital Library.

IEEE JETCAS Special Issue

A Special Issue on AICAS 2021 is planned in the IEEE JETCAS. Authors of accepted papers will be eligible to submit an extended version of their work to the special issue of this high-impact journal.

Special Session/Tutorial/Demo

Proposal Submission:

November 1, 2020

Paper Submission:

November 15, 2020

Author Notification:

January 11, 2021

Camera-ready Version:

January 31, 2021

Author Registration Deadline:

February 28, 2021

Conference (Virtual):

March 28-30, 2021

Call for Demos

AICAS 2021 invites proposals for Live Demonstrations, showing interactive and tangible form of presentation of working systems that will be directly experienced by conference attendees. With Live Demonstrations, presenters have the opportunity to show direct proof of their working systems and to create a lasting impression in a session that is very well attended.

Prospective presenters should submit a one-page description of the demonstration using the same page formatting as for regular AICAS papers, selecting “Live Demo” as track. Each Live Demonstration must be based either on already published work or on a paper submitted to AICAS 2021. It is mandatory to include a reference to at least one earlier publicly accessible publication of the work, or the ID of the submitted paper.

Call for Tutorials

The objective of the AICAS 2021 Tutorial Program is to provide participants with an inspiring and in-formative selection of tutorials that reflect current topics in AI circuits and systems related research and development. Tutorials will cover a one to three-hour period with ten minutes at the end for questions. They will be held in the morning before the technical sessions.

Prospective organizers of tutorial program should submit proposals to the Tutorial Chair indicating: Title and Area of the tutorial (refer to the above topics), Presenter(s) and their CV, Target audience and prerequisite knowledge of audience, 300 words abstract (for inclusion on webpage and in registration materials), Full description (1-2 pages to be used for evaluation), Keywords, Detailed contact information of all presenters (and indication of the main contact person).

Call for Special Sessions

The Special Sessions objective is to complement the regular program with new or emerging topics of particular interest at specific or cross levels-of-abstraction including algorithms, system, microarchitectures, technologies and circuits, particularly promising in solving the current challenges of artificial intelligence in circuits and systems.

Each session is expected to have minimum three, up to six speakers, including the organizer who provides an overview of the topic area. Prospective organizers of special sessions should submit proposals to the special session chairs indicating: Title of the session, Short biography of the organizers, Pro-posed topics and speakers: Please provide a list of all topics, speakers and co-authors, contact information of the corresponding author, and an abstract of each contribution.

After receiving proposal acceptance notification, authors of invited papers are asked to submit their manuscripts and follow the regular conference paper submission and review procedure.