

# “CAS leading post-pandemic AI” AICAS 2022

IEEE International Conference on Artificial Intelligence Circuits and Systems

June 13-15, 2022

Songdo Convensia, Incheon, Korea

www.aicas2022.org

## About AICAS

Artificial Intelligence (AI) is driving the new revolution of not only the information technology but also all other industries. New algorithms and application systems are introduced with the power of AI. 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. Facing this new challenge and opportunity, the AICAS conference is established to facilitate the state-of-the-art research, innovation, and development activities at the frontiers of artificial intelligence circuits and systems. It serves as the best platform allowing scholars, technological researchers, and industry from both domestic and international communities to exchange experiences, and demonstrate their studies and further advance AI technologies on circuits and systems.

This conference brings together members of our communities to broaden their knowledge in emerging areas of research at the field of artificial intelligence and the circuits and systems. The three-day program for AICAS 2022 is multidisciplinary in topics including but not limited to:

## Topics of Interest

- Circuits and systems for AI
- Deep learning/machine learning/AI algorithms
- Tools/platforms for AI
- Architecture for AI computing
- Hardware/software co-design and design automation for AI systems
- Advanced neural network design
- Neuromorphic circuits, processors, and systems and their applications
- Emerging applications: Internet-of-things, healthcare, smart factories, environment
- Emerging devices and materials for AI
- Computer vision algorithms and architectures
- Recommendation system, language/text processing
- Autonomous/unmanned vehicles and drone
- Robotics and automation
- Metaverse and AR/VR
- Deep learning/machine learning for Future Wireless Communications

## Important Dates

- Submission of Special Session Proposal and Tutorial Proposal  
~~December 17, 2021~~ **December 24, 2021**
- Notification of Acceptance of Special Session Proposal  
~~December 23, 2021~~ **December 31, 2021**
- Submission of Regular Session Live Demo and Special Session Full Papers  
~~February 4, 2022~~ **February 11, 2022**
- Notification of Acceptance of Tutorial Proposal  
**January 14, 2022**
- Notification of Paper Acceptance  
**March 25, 2022**
- Camera-ready Submission  
**April 22, 2022**
- Author & Early bird Registration  
**April 22, 2022**

## Organizing Committee

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- Chae Eun Rhee, Inha University, Korea

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- Soojung Ryu, SK Telecom, Korea
- Soo Youn Kim, Dongguk University, Korea
- SoYoung Kim, Sungkyunkwan University, Korea



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## Paper Submission

Full-length papers complying with a maximum length of 4 pages (PDF format with the IEEE Conference style) must be submitted anonymously. Submitted papers must describe original work that has not been published/accepted/submitted to other Journals or conferences.

## Extended Submission

Authors of selected best papers will be invited to submit extended versions of their work for publication in IEEE TCAS-I, and TBioCAS special issues.

## Proceedings

The proceedings will be submitted to the IEEE Xplore® digital library.

## Call for Special Sessions

The AICAS 2022 organizing committee invites proposals for special sessions. The special sessions will complement the regular program with new or emerging topics of particular interest at specific or cross levels-of-abstraction, including algorithms, systems, microarchitectures, circuits, and technologies, particularly promising in solving the current challenges of artificial intelligence in circuits and systems.

A special session is expected to have a minimum of three, up to six speakers, including the organizers, who provides an overview of the topic area. Prospective organizers of special sessions should submit proposals to the special session chairs indicating: title and abstract of the session, organizers, a list of topics (please provide a list of all talks, speakers and their short biographies, co-authors, the contact information of the corresponding author, and an abstract of each contribution).

Important aspects in evaluating special session proposals will be the timeliness of the topic, quality/track record of the proposers and speakers, coherence of the session, and expected value added to the overall technical program. Notifications of acceptance will be provided by December 23, 2021. Authors of invited papers will be asked to submit their manuscripts and follow the regular conference paper submission and review procedure.

## Call for Tutorials

The AICAS 2022 organizing committee invites proposals for tutorials. The objective of the tutorial program is to provide participants with an inspiring and informative 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.

Prospective organizers of tutorial program should submit proposals to the tutorial chair indicating: title of the tutorial, presenter(s) and their short biographies, 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, the detailed contact information of all presenters (and indication of the main contact person).

## Call for Demos

The AICAS 2022 organizing committee invites proposals for live demonstrations, showing an 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 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 2022. 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.

## Venue : Songdo Convensia



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## Secretariat

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