

18th International Conference on **Intelligent Autonomous Systems**

July 4 - 7, 2023 • Suwon Korea

Call for Papers

www.ias-18.org July 4 - 7, 2023 • Suwon Korea • www.ias-18.org

Welcome to IAS18 - 2023

Intelligent Autonomous Systems are increasingly promising in industrial applications to professional service and household domains. New technologies and application domains push the need for research and development, resulting in new challenges to overcome to apply Intelligent Autonomous Systems in a reliable and user-independent way. Recent advances in Artificial Intelligence, Machine Learning, and Adaptive Control enable autonomous systems with improved robustness and flexibility.

The IAS conferences have been dedicated to intelligent and autonomous technologies since 1985. Our organizers are delighted to hold this conference again in Suwon 11 years after IAS-12 in Jeju Island. The 18th IAS conference will be held on July 4 - 7, 2023, with the theme of "Impact and Effect of Al on Intelligent Autonomous Systems." We invite you to submit papers and to discuss your recent research results in Suwon.

Conference Topics

Topics include, but are not limited to, theories, applications, and creative innovations in intelligent autonomous systems.

• Deadline of Special Session Proposals: December 31, 2022

• Notification of Acceptance: April 15, 2023

• Final Manuscript Submission Due: May 15, 2023

Important Dates

- Robotics
- Autonomous Vehicles
- Intelligent Agents
- Smart Factory
- Smart Sensors and Actuators Smart Haptics
- Human Machine Interaction
- Artificial Intelligence
- Metaverse, VR, AR, or MR
- Digital Twin Cyber Physical Systems
- Digital Health

Call for Special Sessions

We invite the valuable organizers of special sessions relating to the conference topics. Each session consists of at least five papers. As a professional in the field or region, the session organizer will solicit papers and organize the session. We will review invited papers in the same process as regular papers. The session proposal is due until December 31, 2022. We will prioritize the papers presented in the special sessions to contribute to a special issue of the Journal, "Robotics and Autonomous Systems," published by Elsevier

Paper Submissions

We are looking forward highly qualified papers for peer review. Papers of original contributions to all areas of intelligent autonomous systems are solicited for submission. Especially, IAS18 - 2023 is to extend its scope to cover those many applications of intelligent autonomous systems that have emerged as significant and innovative, with special sessions and tracks. All accepted papers will be published in the Conference Proceedings and the series, "Lecture Notes in Networks and Systems (LNNS)", Springer indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago.

Call for Workshops and Tutorials

Workshops and Tutorials aim at inviting workshop organizers and tutorial lecturers with IAS expertise and providing audience with experimental works and feasible solutions to challenging research problems. We are calling for proposals for workshops or tutorials to address in-depth research results or introduce emerging technologies related to IAS. W/T proposal is due until February 15, 2023. Prior to the conference, Workshops and Tutorials will have each 3 hour duration at the conference venue on Tuesday, July 4.

Organizing Committee

General Chair

Soon-Geul Lee, Kyung Hee U., KR Honorary Chair

Sukhan Lee, Sungkyunkwan U., KR **Advisory Committee Members** Marcelo H ANG Jr. NUS. SG

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• Deadline of Workshop & Tutorial Proposals: February 15, 2023 Joo Hvun Kim, New York U., US • Deadline of Paper Submission: January 31, 2023 Organizing Chair

> Hvun-Joon Chung, KIRO, KR **Special Session Chairs**

Seong Young Ko. Chonnam Nat'l U., KR Soon-Yong Park, Kyungpook Nat' U., KR Myunghee Kim, U. of Illinois, US

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Jae-Kwan Ryu, LIG Nex1. KR **Exhibition Chairs**

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Seong-Bae Park, Kyung Hee U, KR

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Donghan Kim, Kyung Hee U., KR Jaeheung Park, SNU, KR









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Call for Exhibitors and Sponsors

IAS18 - 2023 Organizers are pleased to offer sponsorship and exhibition opportunities to widely publicize the products or services through online and offline advertisements. Sponsors will have an exhibition to demonstrate the technologies and enhance product values. Besides, sponsors can enjoy plenty of time for in-depth discussing and networking with professionals from academia and industries in a free atmosphere. We hope many companies and institutes will participate in the IAS18 - 2023 as sponsors.

Exhibition Schedule

- Exhibit Hours: Wed to Fri. July 5 7. 9 am 6 pm
- Set up: Tuesday, July 4, 3 pm 6 pm
- Tear Down: Friday, July 7, 5 pm 9 pm

Exhibition Place 3F. Suwon Convention Center

Sponsorship Package Opportunities

Category	Benefits	Bronze ₩3,000K (US\$3,000)	Silver ₩5,000K (US\$5,000)	Gold ₩7,000K (US\$7,000)
Hybrid (On line + On site)	Company name and logo at the conference web-site with hyperlink to company website Company name and logo on the conference e-newsletters Advertise your company during live streaming	٧	٧	٧
On-site	Company name and logo on the banner	٧	٧	٧
E-Printing	Company name and logo on Program Booklet and Digital Proceedings	٧	٧	٧
No of Exhibit Booth	Exhibit booth by your preference	1	2	3
No of Registration	Full symposium registrations	1	2	3
Others	A promotional leaflet inserted in a registration kit			٧

Conference City, Suwon

Suwon is close to Seoul, located 28 km from Gangnam, Seoul. As the birthplace of "Samsung Electronics" and the leading edge of "K-Culture," Suwon is a dynamic, innovative industrial city full of unique cultural traditions and a contemporary young culture that lives on simultaneously. King Jeongjo, the 22nd ruler of the Joseon Dynasty of Korea, built Hwaseong (the old name of Suwon), intended to make it the capital city of the dynasty, in 1796. The Hwaseong Fortress, a fortified wall running around the entire city, was designated as a World Heritage site by UNESCO in 1997. The Conference Venue, Suwon Convention Center (SCC), has become the landmark of Suwon, harmonizing state-of-the-art technologies and nature based on a glorious history and tradition. Come to Suwon to enjoy the Korean cultural heritage and state-of-the-art technology.

IAS18 - 2023 Venue, Suwon Convention Center

140, Gwanggyojungang-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16514, Korea Website: www.scc.or.kr • Phone: +82 31-303-6030

How to Travel to the Venue

Suwon is easily accessible through affordable transportation from Incheon International Airport (ICN) by Airport limousine bus or Airport Express Train (AREX). It also has good connections with inter cities by Korea Train Express (KTX), It takes about 75 minutes from Incheon Airport and 30 minutes from Seoul Gangnam by subway. Get off Gwanggyo Jungang Station (Sinbundang Line), go out to exit #4, and walk for 10 minutes to Suwon Convention Center.





Call for Papers & Sponsors

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Paper Submission Deadline: January 31, 2023

Sponsored by

Intelligent Autonomous Systems (IAS) Society

Organized by

Institute of Control, Robotics and Systems (ICROS) Field Robot Society (FIROS)



















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Photo: Suwon Hwaseong Fortress