## **RiTA** 2024

#### The 12th International Conference on Robot Intelligence Technology and Applications

https://2024.icrita.org

UNIST, Ulsan, South Korea • December 4 - 7, 2024

### **Call for Papers**

Welcome to the 12th International Conference on Robot Intelligence Technology and Applications (RiTA 2024), which will be held at Ulsan National Institute of Science & Technology (UNIST), Ulsan, Korea, from December 4th to 7th, 2024. This Conference is organized by the Robot Intelligence Technology and Applications (RiTA) Association, a non-profit organization established to foster community solidarity among roboticists in 2021, even though RiTA was initially initiated by KAIST in 2012. Today, AI's capabilities exceed human limitations. As AI generates texts, images, and videos, the boundaries between virtual reality and the physical world are vague. We are entering a new era in which AI agents can act on our behalf. With this trend of strengthening AI agent systems, our conference theme is "Generative Thinking, Generative Action," aiming to facilitate in-depth discussions in the field of robot intelligence technology. We seek the latest research results, theories, or experimental developments, which will feature a high quality conference.

#### **Conference Topics**

- Machine learning
- Artificial intelligence
- Decision making
- Reasoning and inference
- Perception
- Navigation and SLAM
- Optimization in robotics
  HW/SW for robot computing

• Dynamics and control

Manipulation

• Human-robot interaction

Sensors Technology

• Swarm and multi-robot systems

# Important Dates August 10 Deadline of Special Session Proposals Sep 3 → Sep 16 Deadline of Paper Submission October 15 Notification of Acceptance October 31 Final Manuscript Submission due

#### Organizing Committee

Advisory Committee Jong-Hwan Kim, KAIST, KR Hyun Myung, KAIST, KR Jun Jo, Griffith University, AU **General Chairs** Hae-Won Park, KAIST, KR Hyondong Oh, UNIST, KR **Program Chairs** Daehyung Park, KAIST, KR Cunjia Liu, Loughborough Univ., UK **Organizing Chairs** Jeong hwan Jeon, UNIST, KR Pawel Ladosz, Univ. of Manchester, UK **Special Session Chairs** Myun Joong Hwang, Univ. of Seoul, KR Youngwoon Lee, Yonsei Univ., KR

**Publications Chairs** Dae-Young Lee, KAIST, KR Min Jun Kim, KAIST, KR **Plenary Session Chairs** Hyo-Sang Shin, KAIST/Cranfield U., KR/UK Inmo Jang, Korea Aerospace U., KR Beomjoon Kim, KAIST, KR **Publicity Chairs** Kyuman Lee, Kyungpook National U., KR Sehoon Ha, Georgia Tech, US Donghyun Kim, U. of Massachusetts, Amherst, US Kyunam Kim, Sungkyunkwan Univ., KR Dongheui Lee, TU Wien, AT Shaoming He, Bejing Institute of Tech. CN Antonios Tsourdos, Cranfield Univ., UK Yuanchang Liu, Univ. College London, UK Anwar PP Abdul Majeed, Sunway, MY Joao Sequeira, Instituto Superior Técn, PT

#### Award Chairs

Seungkeun Kim, Chungnam National U. KR Donggun Lee, North Carolina State U., US Hae-In Lee, Cranfield Univ., UK Industry Chair Seunghan Lim, Pablo Air, KR

Local Arrangements Chairs Hyemin Ahn, UNIST, KR Cheolhyeon Kwon, UNIST, KR Finance Chair Han-Lim Choi, KAIST, KR Secretariat

Hyangmi Kim, C-Agency, KR

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#### Travel Support

To promote diversity and inclusion, the RiTA organizing committee are pleased to announce financial support for diverse candidates to make travel to RiTA more affordable. The support takes the form of partially or in full waiving the registration fee for the conference.



#### Visit Gyeongju

Gyeongju is located 30 km north of Ulsan. Gyeongju was the capital of the ancient kingdom of Silla (57 BC – 935 AD). Among its historical treasures, Seokguram Grotto, Bulguksa Temple, Gyeongju Historic Areas, and Yangdong Folk Village are designated as World Heritage Sites by UNESCO. The numerous major historical sites have helped Gyeongju become one of the most popular tourist destinations in South Korea.

#### Technical Tour - Hyundai Motor Company

KAIST UINIST

The Ulsan Plant of Hyundai Motor Company is the world's single largest automobile plant and serves as a location for export shipment docks. It produces an average of 6,000 vehicles per day, comprising five car assembly plants, engine, and transmission factories. We are excited to offer a technical tour of the Ulsan Plant on the first day of the conference. Please note that the tour is subject to change depending on the availability of the company.





