Collecting, Managing and Utilizing Data through Embodies Robots (http://iros2024ws-data.site/)

Workshop date: October 14th 2024, 9:00~13:00

In recent years, embodied robots have been increasingly playing a significant role in real-world scenarios such as daily tasks, healthcare, caregiving, and agriculture, and interacting with humans and environments. Nevertheless, the collection and application of sensorimotor data in real-world settings pose challenges, given the associated high costs, inherent random noise, requisite tailored processing, and potential inclusion of personal data. This workshop would provide a platform to discuss efficient data collection, high-quality data assurance, sophisticated processing and utilization, and ethical considerations.

We invite researchers and developers to submit short papers presenting preliminary results, and ongoing works relevant to the topic of the workshop. We welcome contributors from academia, industries and professionals.

The videos and papers will be single-blinded reviewed by the organizers and acceptance will be based on the quality of the contribution, originality, and relevance to the topics of interest of the workshop. Accepted abstracts will be posted on the workshop website and OpenReview, and will not appear in the official IEEE proceedings.

All accepted contributions will be presented with posters and lightning talks during the interactive sessions.

TOPICS OF INTEREST

- 1. How can we collect high-quality data efficiently?
 - Sim-to-real / Hardware-in-the-loop
 - Teleoperation / Human skill transfer / Shared autonomy
 - Biodegradable sensors
 - Energy harvesting technologies
- 2. How can we process and utilize data?
 - Large-scale data / big data
 - Multimodal perception / representation / generation
 - Generative AI
- 3. How to secure the data?
 - Human-centered AI
 - Responsible AI
 - Security and Ownership

IMPORTANT DATE

1st round

- Submission deadline: September 1st 2024
- Notification: September 10th 2024

2nd round

- Submission deadline: September 15th 2024
- Notification: September 20th 2024

SUBMISSION PROCEDURE

Please submit all the material to OpenReview (https://openreview.net/group?id=IEEE.org/IROS/2024/Workshop/Data Through Embodies Robots)

Paper format:

- Page: 1, excluding references
- 2 columns. Template and format guidelines given by the <u>IEEE Robotics and Automation Society</u> (https://ras.papercept.net/conferences/support/support.php).

Video format (Option):

- File size: up to 100MB
- Format (only one of the following should be used): mp4, mov
- Maximum duration: 180 sec.
- Minimum height: 480
- Minimum frame rate (fps): 20
- Scan type: Progressive

A poster has to be brought on the workshop day. The format will be announced later.

CONTACT

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