

# The ROS Embodied AI Working Group

This living document facilitates meetings of the Embodied AI Community. It also includes our meeting agendas and minutes for easy reference.

**Meeting link** (10 September 2025 16:00 UTC)

[Embodied AI Community Group meeting \(Google Meet\)](#), [calendar invite](#)

## Lead

Adam Dąbrowski, [adam.dabrowski@robotec.ai](mailto:adam.dabrowski@robotec.ai).

## Mission

The group unites the open source community developing Generative AI frameworks, tools and applications for ROS ecosystem. It serves to align developments and as a platform to share experiences with novel technology, learning from other projects and applications, and collaborating towards common goals, new features, and integrations. We are also looking forward towards standardization efforts as the technology and projects mature.

## Projects

The following project leads are participating:

- [RAI](#)
- [ROSA](#)
- [ros2ai](#)
- [Llama ROS](#) (and other packages)
- [stretch\\_ai](#)

## Meeting Invitation

If you'd like to participate in our working group meetings, please also join the [Embodied AI Working Group](#).

## How we operate

We are meeting virtually each month on a one hour call. The time is set to best match registered participants (who filled in their preferred time zone).

Feel free to add topics you'd like to discuss to the meeting agenda. After the meeting, you're welcome to add key points that were discussed.

For communication we use discord: <https://discord.gg/3PGHgTaJSB>

## Access rights

All members of the [Embodied AI Working Group](#) are encouraged to suggest changes. If you attend regularly and are interested in assisting with managing the group, we can grant you editing permissions.

## Recordings

We are recording the meetings, especially for those who couldn't attend due to inconvenient time. They can be found in the [youtube playlist](#).

## Moderation

It seems that many people will attend, and thus we will follow rules for larger meetings:

- All participants will be muted by default - please use the “raise your hand” button if you would like to speak. Moderator will give you the permission to unmute your microphone.
- Please consider turning on your video when speaking (optional), but also for discussion and introductions. Consider turning it off when someone is presenting. These are guidelines not strict requirements.
- Please make sure your presentation is delivered in allocated time. Group lead or moderator might ask you to wrap it up if time runs out.

## Index

Click on a date to access the corresponding meeting details

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## Meeting notes

### 10 September 25, 16:00 UTC (Meeting 11)




Agenda:

- Group updates (5 minutes), Adam Dąbrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.

- Welcoming new members.
- Presentations:
  - recent Embodied AI Papers
  - RAI Updates and recap from first month of RAI Community Dev Meetings
- Free discussion
  - Pi0.5 open weights

## 13 August 25, 16:00 UTC (Meeting 10)

### Agenda:


- Group updates (5 minutes), Adam Dąbrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - Welcoming new members.
- RAI Project update + Weekly dev meeting announcement
- Relevant literature review (5-10 minutes)
  - Paper presentation and discussion (5-10 minutes), Jorge Pena Queralta
    - We are working on a survey that focuses more on technical aspects / community projects / agentic frameworks (vs previous surveys focused on VLAs for example). We just published an early draft on arxiv and would love feedback from the community. We are also very open to having more people onboard as we keep working on the final, longer version  
<https://arxiv.org/abs/2508.05294>
- Group update, Adam Dąbrowski
  -  Embodied\_AI\_intro\_10.pdf
- RAI Update, Maciej Majek
  -  rai\_update.pdf
- Papers review, Kajetan Rachwał
  -  Embodied\_AI\_papers\_meet10.pdf
- Free discussion
  - Should we look into MCP servers like Bagel?  
Or MCP in general for agentic applications.  
<https://discourse.openrobotics.org/t/what-if-your-rosbags-could-talk-meet-bagel-the-open-source-tool-we-just-released/49376>
  - Robotec LeRobot Hackaton repo:  
<https://github.com/RobotecAI/lerobot-hackathon-2025>






Meeting Recording: <https://youtu.be/zDOtPoUzYQg?si=VJCtZ-s1FvDHeHcy>

## 9 July 25, 16:00 UTC (Meeting 9)

### Agenda:

- Group updates (5 minutes), Adam Dąbrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - Welcoming new members.
- OSRA Technical Governance Committee Special Interest Group on Physical AI (5 minutes), Adam Dąbrowski

 Embodied\_AI\_intro\_9.pdf (both bullet-points above)

- LeRobot framework: what is it and how to use it with ROS and integrate with Agentic AI (10 minutes), Kacper Dąbrowski
  -  EAI LeRobot 09.07.2025.pdf
  -  Slide\_4\_video.mp4
  -  Slide\_6\_video.mp4
- Agentic AI literature review (5 minutes), Bartłomiej Boczek, Kajetan Rachwał
  -  EAI Papers 09.07.2025.pdf
- Quick RAI update (3 minutes), Bartłomiej Boczek
  -  EAI RAI 09.07.2025.pdf
- Free discussion

Meeting Recording: <https://youtu.be/devKzBX7nAg?si=NWIJ1kTcfmbgxgot>


Google Meet Chat snapshot: [link](#)

## 11 June 25, 16:00 UTC (Meeting 8)

### Agenda:

- Group updates (5 minutes), Maciej Majek (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - Welcoming new members.
- Relevant literature review (5 minutes)
- Technical details of RAI 2.0 (20 minutes)
  - Quick introduction: what and why?
  - RAI's abstractions
  - Getting started- overview of basic code snippets
  - Quick overview of built in Speech to Speech
  - Quick overview of simulation and benchmarking suite
- Free discussion
  - [LeRobot hackathon](#)
  - [Real-Time Action Chunking with Large Models](#)

Meeting minute:  EMBODIED AI COMMUNITY GROUP — MEETING 8 MINUTES

Presentation:  EAI\_11\_06\_2025.pdf

Meeting recording: <https://youtu.be/Hr7UNz5yRSw?si=dY0evlsl0plbGsNy>

## 14 May 25, 16:00 UTC (Meeting 7)


Agenda:


- Group updates (5 minutes), Adam Dabrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - List of projects to use / contribute to.
  - Recap of group activity so far.
  - Welcoming new members.
- RAI Update - Overview of new features and future directions for RAI, the open-source AI Agent framework for ROS.
  - RAI 2.0 incoming release
- Community Discussion
  - Recent highlights for Embodied AI.
    - Pi 0.5
    - ...
  - LeRobot hackathon
    - ROS integrations in progress.
  - Sharing experience with technologies.

Meeting recording: <https://youtu.be/Dig59o2aUdQ?si=oeJXbNgT2oUfwRbH>

## 9 April 25, 16:00 UTC (Meeting 6)

1. Community update, Adam Dabrowski, (5 minutes)
  - a. Recording.
  - b. Stats and group updates.
  - c. List of projects to use / contribute to.
  - d. Recap of group activity so far.
  - e. Welcoming new members.
2. Sharing experience in running compact (7-8B) foundation models with RAI framework (Agentic AI) - TBD. (10 minutes)
  - a. Benchmarking several models.
  - b. Which tasks are achievable, what are the limitations.
  - c. Looking for a reliable core.
- ~~3. Tips and tricks for robotics simulations for embodied AI (Title TBD), Mustafa Mohammadi (10 minutes)~~
  - a. Postponed to the next group meeting
4. Discussions.

Meeting minute:  Meeting 6 - Minutes - The ROS Embodied AI Community Group

RAI with compact models:  RAI\_smaller\_llms.pdf

Presentations:  6th\_meeting\_files



Meeting recording: [https://youtu.be/AbzFDMFF0II?si=WkO\\_3-9UPBvUx9aT](https://youtu.be/AbzFDMFF0II?si=WkO_3-9UPBvUx9aT)

## 12 March 25, 16:00 UTC (Meeting 5)

### Agenda:

- Group updates (5 minutes), Adam Dabrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - List of projects to use / contribute to.
  - Recap of group activity so far.
  - Welcoming new members.
- RAI Update - Overview of new features and future directions for RAI, the open-source AI Agent framework for ROS.
- Community Discussion
  - Recent highlights for Embodied AI in the open source.
  - Sharing experience with technologies.

### Presentations:

- Adam Dąbrowski group update:  Emoddied\_AI\_Meeting\_5TH\_RAI\_Slides.pdf
- Adam Dąbrowski & Maciej Majek RAI development update:  
 Adam\_D\_Maciej\_M\_Emoddied\_AI\_Meeting\_5TH\_RAI\_Slides.pdf

Meeting minute:  Meeting 5 - Minutes - The ROS Embodied AI Working Group

Transcription:  Embodied AI Community Group 5th meeting transcription.pdf

Recording: <https://youtu.be/CeEinTmaPIQ?si=-GuMtl2B4L4lczpg>

## 12 February 25, 16:00 UTC (Meeting 4)

### Agenda:


- Group updates (5 minutes), Adam Dabrowski (Robotec.ai)
  - Recording.
  - Stats and group updates.
  - List of projects to use / contribute to.
  - Recap of group activity so far.
  - Welcoming new members.
- Olga Perepelkina, Intel: Computer vision with Intel Geti and applications in robotics (15 minutes)
  - Intel Geti and open source libraries for computer vision
  - Bothoven - sharing a cool personal project
- Maciej Majek, Robotec.AI (7 minutes)
  - RAI 2.0 development update
  - Spatiotemporal memory system for embodied AI
- Community Discussion (25-30 minutes between topics)
  - Sharing experience with recent projects in space.
    - OpenPi <https://github.com/Physical-Intelligence/openpi>

#### ■ Deepseek R1

- VLA vs Classic Approach for manipulators.
- Free form discussion on embodied AI.

#### Presentations:

- Adam Dąbrowski group update:  Embodied\_AI\_intro\_4.pdf
- Olga Perepelkina CV and Intel Geti:  Computer vision with Intel Geti.pdf
- Maciej Majek RAI update:  EAI-12.02.2025\_RAI\_update.pdf

Meeting minute:  Meeting 4 - Minutes - The ROS Embodied AI Working Group

Recording: No recording.

## 08 January 25, 16:00 UTC (Meeting 3)

#### Agenda:


- Group updates (5 minutes), Adam Dabrowski (Robotec.ai)
  - Recording.
  - Stats and activity.
  - Recap of projects presented so far.
  - Welcoming new members.
- AI integration in ROS 2 (10-15 minutes), Miguel Á. González-Santamarta
  - yolo\_ros [https://github.com/mgonzs13/yolo\\_ros](https://github.com/mgonzs13/yolo_ros)
  - llama\_ros [https://github.com/mgonzs13/llama\\_ros](https://github.com/mgonzs13/llama_ros)
  - whisper\_ros [https://github.com/mgonzs13/whisper\\_ros](https://github.com/mgonzs13/whisper_ros)
  - piper\_ros [https://github.com/mgonzs13/piper\\_ros](https://github.com/mgonzs13/piper_ros)
- Invitation/Call for submissions to IEEE ICDL in September in Prague. (5 mins) (Shubhan Patni)
  - Website: <https://icdl2025.fel.cvut.cz/>
  - Included Topic “embodied learning in biological systems and robotics” - different perspective
  - Potential workshop proposal introducing VLAs, maybe demos
- Community feedback on embodied AI frameworks & projects (3-10 minutes)
  - Feel welcome to share what are you working on currently
- Community discussion on recent developments in embodied AI (20 min)
  - Genesis simulator (<https://github.com/Genesis-Embodied-AI/Genesis>)
  - Reimplementation of Open PI: <https://github.com/allenzren/open-pi-zero>
  - NVIDIA Cosmos: <https://github.com/NVIDIA/Cosmos>
  - Other developments (community guided)
- Free discussion

#### Presentations:

- Intro slides (group update): [Embodied AI intro 3](#)
- AI Tools with ROS 2: <https://zenodo.org/records/14617004>

Participation: 22

Recording: No recording.

Meeting minute:  Meeting 3 - Minutes - The ROS Embodied AI Working Group

## 11 December 24, 16:00 UTC (Meeting 2)

### Agenda:

- Group updates (5 minutes), Adam Dabrowski (Robotec.ai)
  - Recording meetings.
  - Stats and activity.
  - [awesome-embodied-ai-ros](#).
  - Welcoming new members.
- Overview of recent research and developments, Kajetan Rachwał (Robotec.ai) (5 minutes)
  - 3 selected papers (arbitrary selection by author).
- How to contribute to Open Source Embodied AI, RAI project (10-15 minutes).
  - The process of contributing.
  - All the relevant resources.
  - Overview and discussion on interesting topics and research areas.
  - Q&A about RAI (does it fit my project / research needs).
- Stretch AI project presentation by Chris Paxton (Hello Robot Inc)
  - [https://github.com/hello-robot/stretch\\_ai/](https://github.com/hello-robot/stretch_ai/)
- Cloud-based development for AI agents and simulation, Tomasz Stos (5-10 minutes)
  - Overcoming hardware limitations with a virtual desktop environment.
  - Links from the demo:  
<https://mikelikesrobots.github.io/blog/simulation-in-cloud/>  
<https://ubuntu.com/blog/launch-ubuntu-desktop-on-google-cloud>
- Discussions.

### Presentations:

- [Embodied\\_AI\\_intro\\_2.pptx](#)
- [Embodied\\_AI\\_news\\_and\\_papers.pptx](#)
- [Embodied\\_AI\\_RAI\\_2.pptx](#)

Recording: <https://youtu.be/XafrJmaOgjc?si=e803QH3DbDSEnpAP>

Participation: ~25 people.

## 12 November 24, 16:00 UTC (Kick-off)

### Agenda:

- Short introduction of the group and its members. The moderator will go through the list to help with order. Please also share why you are here. (10 minutes)
  - If > 25 people attend, we need to be really efficient here and will ask you to raise your hand if you would like to introduce yourself and your project or contribution idea in 2-3 sentences max. The moderator will help.
  - There will be free discussion time allocated at the end so please be quick.
- Intro presentation (10 minutes)



- Brief introduction of group charter (independence of company, multi-project, AI vendor, open-source nature, everyone is welcome).
- Quick overview of embodied AI challenges and open-source, ROS integrated projects in space.
- Initiatives and links:
  - Doodle for the next group meeting - please fill in.
  - Who would like to present at the next meeting? Suggest on Agenda.
  - *awesome-embodied-ai-ros* catalog repo under the group. Submit PRs. <https://github.com/ros-wg-embodied-ai/awesome-embodied-ai-ros>
  - possibly a catalog of similar, non-ROS projects important in space.
  - GitHub Pages for relevant links and resources: <https://ros-wg-embodied-ai.github.io/resources>
- Adam Dabrowski & Maciej Majek (Robotec.ai): a 10 minutes presentation on RAI, focusing on roadmap and collaborations.
  - If you would like to contribute to RAI, please:
    - Navigate to RAI repo: <https://github.com/RobotecAI/rai>.
    - Check out RAI ROSCon reel, presenting pretty demos: <https://vimeo.com/1023325961/73a201937b>.
    - Read the Contribution Guide.
    - Look at the issue list first.
    - It is recommended that you comment on the issue and communicate on RAI Discord channel to best sync.
    - If there are enough group members interested, we may organize a RAI workshop. Indicate interest here.
- Rob Royce (NASA JPL): a 10 minute presentation on ROSA
  - check out the repo: <https://github.com/nasa-jpl/rosa>
- Free discussion: finding connections, applications, sharing experiences (10 minutes)
- ROS 2 Embodied AI group meeting #2 time questionnaire: <https://forms.office.com/e/WTLqdfS7T5>
- RAI Workshop questionnaire: <https://forms.office.com/e/WgvWFWtndE>

Question about O3DE simulation: here's the link to a 2023 talk - <https://vimeo.com/879001753>.

Participation: 28 people.

Presentations today:

- [Embodied AI intro.pptx](#)
- [Embodied AI RAI.pptx](#)

Meeting minutes:  Meeting 1 - Minutes - The ROS Embodied AI Working Group

Recording: No recording.

## 21 October 24 ROSCon community meeting

Some of us met face-to-face during ROSCon 2024, at the Birds of Feather session on the first day (the workshops day).