

CARNEGIE MELLON UNIVERSITY AFRICA

Minutes of the CSSR4Africa Team Meeting

Date and Time: 28th April 2025, at 9:00 am
Venue: Room No. F305.
Status: Draft.

Participants

Adedayo Akinade
Birhanu Shimelis Girma
Muhirwa Richard
Yohannes Haile
Muhammed Danso
Tsegazeab Tefferi
Professor David Vernon (Chairman)

Apologies

Clifford Onyonka, Ibrahim Jimoh, and Eyerusalem Birhan

Prof. David Vernon welcomed the participants to the meeting and remarked that:
We had two weeks of work before he left, and he wished to see the live demo before leaving.

The Committee members discussed all the items on the meeting agenda. These discussions are summarized below.

1. Approval of the minutes of the last meeting

The participants reviewed the minutes of the previous meeting held on 21st April 2025 and approved them as a true and accurate record of the meeting.

2. Matters arising from the minutes

Agenda item 2: Send an email explaining the current flaw of how the speech class is designed in the behavior controller, and the proposed changes.

Action: Completed.

Agenda item 4: Adding a temporary configuration parameter to rest the pose for the navigation node

Action: Completed.

Agenda item 6: Adding a ROS service to the behavior controller to enable/disable ASR

Action: Completed.

Agenda item 7: Adding a ROS service to the speech event to enable/disable ASR

Action: Completed.

Agenda item 8: Use shorter phrases in the TTS and add alternative prompts for yes and no.

Action: Completed.

Agenda item 9: Change the cultural knowledge base to remove the long phrase.

Action: This action was handed over to Tsegazeab and he completed it.

3. Review of progress reports

Team members discussed the issues and suggestions provided by Mohammed Danso in his weekly progress report. All the issues he raised were resolved by the respective team members, and the suggestion to enable the animate behavior only once was agreed upon.

The team also discussed the issue of the Kinyarwanda Text-to-Speech being out of sync with the gesture execution. Prof. David Vernon suggested that this can be set aside for now, as long as the English Text-to-Speech works well with the gesture execution, which is what we will be using for the time being. The team will investigate possible solutions to the delay issue in the Kinyarwanda Text-to-Speech at a later stage.

4. Status of submission of software.

The team discussed the remaining software. Regarding D5.4.2 Robot Mission Language since it contains the explicit components of the behavior controller, it will be submitted once D5.4.3 Robot Mission Interpreter is complete. Tsegazeab stated that he will submit his software for integration as soon as he can, but it will not exceed 2nd May.

5. Status of interim and final demonstrations.

Prof D. Vernon suggested that we get rid of Interim demonstration animate as the person who was in charge of it is no longer available and he suggested that we proceed with Danso and Birhanu demonstrations.

6. Setting robot pose before navigation.

From the team discussions, it became clear that using the keyword "reset_pose" might cause confusion in its interpretation. Therefore, Prof. D. Vernon suggested that we should use the keyword "set_pose" instead. The team also discussed various potential issues that may have caused the robot to fail to navigate as intended. These issues included the robot poses that were in non-navigable area, the handling of negative angles and the assumption that the robot was at the correct initial position. This assumption was based on the idea that the robot's starting position is (0, 0, 0) and that it would obtain its actual position from the localization pose topic. Given the current situation, the team agreed to create a new service named "set_pose". This service will be used to externally initialize the pose of the robot. Eventually, proper initialization will be handled by the absolute localization node. For now, the service will be called by the behavior controller.

7. Afretec Network Principal Investigators Meeting.

Prof. David Vernon sent an email regarding the Afretec Network and the updated poster on *Culturally-Sensitive Social Robotics for Africa* to Prof. Pravesh Ranchod from the University of the Witwatersrand for review. However, he did not receive a response and mentioned that he would send a follow-up email to inform him that he will proceed with submitting the poster anyway.

8. Failure handling.

Tsegazeab explained the current status of the Failure Handling. He stated he finished the discussion with each node owner about possible failure points, and he is currently working on a compilation of the report that will be sent to the team.

9. Any Other Business

Prof. David Vernon recommended that if any team member has already finished their task and is waiting for feedback from Adedayo, they should use the time to review the deliverables of other team members instead of remaining idle.

10. Date and time of next meeting

The next meeting will be held on 5th May 2025 at 12:00 p.m.

End of the Meeting

There being no other business, the Chairman thanked the participants for their contributions and closed the meeting.

Action items following the meeting of the CSSR4Africa project

Action	Action description	Responsible	Completion date
1	Update the task allocation by removing Interim demonstration animate.	D. Vernon	2 nd May 2025
2	Updating the behavior controller to include the service call for set_pose.	T. Tefferi	2 nd May 2025
3	Send the new updated alpha version of the behavior controller to the team members.	T. Tefferi	2 nd May 2025
4	Sending the updated version of Deliverable D6.1 and new updated .xml file of behavior controller.	T. Tefferi	2 nd May 2025
5	Failure Handling Report.	T. Tefferi	2 nd May 2025
6	Creating the set_pose service in the localization codes that is being used for interim demonstrations.	S. Birhanu	2 nd May 2025
7	Creating the set_pose service in Robot localization node.	I. Jimoh	2 nd May 2025
8	Updating the Robot tour specifications	M. Richard	2 nd May 2025
9	Failure Handling Report.	T. Tefferi	2 nd May 2025
10	Contact Igor regarding the air conditioning malfunction in the AI and Robotics lab.	D. Vernon	Unspecified

Table 1: Action Items