## **CARNEGIE MELLON UNIVERSITY AFRICA**

## Minutes of the CSSR4Africa Team Meeting

Date and Time: March 17, 2025

Venue: Zoom. Status: Draft.

#### **Participants**

Adedayo Akinade Birhanu Shimelis Girma Clifford Onyonka

David Vernon, Chairman Eyerusalem Birhan Ibrahim Jimoh Muhammed Danso Muhirwa Richard Tsegazeab Tefferi Yohannes Haile

Professor David Vernon welcomed the participants to the meeting and the Committee members then discussed all the items of 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 March 10, 2025 and approved them as a true and accurate record of the meeting.

### 2. Matters arising from the minutes

Agenda item 1: Send updated helper classes software to Tsegazeab Tefferi and cc everyone.

**Action:** Although in working order, there is going to be an additional update to the Environmental Knowledge Base helper class. There is no way of specifying cultural knowledge in the current configuration, most importantly a symbolic respectful greeting gesture. See action item 1.

**Agenda item 2:** Update table 10 in D5.4.1 to add English language.

Action: Done.

**Agenda item 3:** Update Environment knowledge base in D5.4.2 deliverable document.

Action: Done.

Agenda item 4: Environment knowledge base helper class

Action: Done, apart from what's indicated on item number 1 above.

Agenda item 5: Update D2.1 by removing Person detection from the scenarios.

Action: Done.

Agenda item 6: Update GitHub directory structure by removing utilities and add dashboard.

**Action:** Done. Professor Vernon indicated that the 'utilities' folder that currently exists is a container of the ROS package that contains the helper classes and not a distinct piece of software that exists in the main GitHub structure.

Agenda item 7: Removing utilities from D3.3 and D3.2

Action: Done.

Agenda item 8: Updating D5.3 Attention Subsystem

Action: Done.

Agenda item 9: Adding service request to change the language in D4.3.2

Action: Done.

Agenda item 10: Adding service request to change the language in D5.5.2.1, D5.5.2.3, D5.5.2.4

**Action:** Not finished. To a query from Professor Vernon, Richard indicated that only D5.5.2.4 has a service request implemented and thus the only one that needs to be updated. The task isn't completed and has been added to Action Item 2.

**Agenda item 11:** Send a Kinyarwanda translation of the example messages included in D5.4.2, Table 3. **Action:** Done.

#### 3. Remaining deliverables.

The following deliverable documents have been found to be outstanding.

- **D5.4.2 Robot Mission Language:** Completed. Sent for review.
- D5.4.3 Robot Mission Interpreter: Needs to be updated with information regarding the Knowledge Bases.
- D5.5.2.4 Integrated Text to Speech Conversion: Still outstanding but in fairly good shape.
- D5.5.3 Environment Map Generation: Still outstanding

### 4. Status report on all software

Every team member was asked about the status of the software deliverable that they are responsible for. The following is a summary of the response provided.

Task	Person Responsible	Status	
D1.2 Rwandan Cultural Knowledge	E.Birhan	Completed and Accepted for	
		integration.	
D4.2.1 Person Detection and Localization	Y.Haile	Incomplete	
D4.2.2 Face and Eye Detection and Localization	Y.Haile	Incomplete	
D4.2.3 Sound Detection and Localization	Y.Haile	Incomplete	
D4.2.4 Robot Localization	I.Jimoh	Incomplete	
D4.3.2 Speech Event	C.Onyonka	Incomplete	
D5.4.1 Cultural Knowledge Ontology &	D.Vernon	Completed	
Knowledge Base			
D5.4.2 Robot Mission Language	D.Vernon	Completed	
D5.4.3 Robot Mission Interpreter	T.Tefferi	Incomplete	
D5.5.2.4 Integrated Text to Speech Conversion	R.Muhirwa	Incomplete	
D5.5.3 Environment Map Generation	B.Shimelis	Incomplete	
D5.5.4 Robot Navigation	B.Shimelis	Completed but not sent for	
		integration.	

Most of the software deliverables remain incomplete. At Adedayo's request, Professor Vernon asked everyone to provide an estimate of the time needed to complete them (see Action Item 3).

#### 5. Milestones.

Professor Vernon indicated that the timeline for the milestones so far has not been met, and by Wednesday the 19th, we will be three weeks behind schedule. Although the timeline for software integration has not yet passed, completing it all in one week is not realistic and must be phased. He suggested amending the milestones by shifting all deadlines forward by two weeks to provide a buffer. The most immediate of these is the that of the deliverables which is for Friday the 21st. The new milestones are available on the CSSR4Africa website.

## 6. Cultural Robotics Workshop paper vs. IEEE RA-P paper.

**IEEE RA-P** paper will focus on software useful for the community while the **Cultural Robotics Workshop paper** will discuss on what has been done since the last paper submitted.

But the decision on which one to go for wasn't made.

### 7. Failure handling

Although important, it's not mission critical and discussion regarding it has been carried forward in light of other high priority tasks.

### 10. Any Other Business

# CSSR4Africa Software Test on a Pepper Robot outside of the lab at CMU-Africa

Adedayo successfully ran components of the CSSR4Africa software on a Pepper robot at Monash University. Although he has not yet acquired all the hardware used in the CMU-Africa robotics lab, specifically the Nvidia Jetson, he believes he has sufficient equipment on site to test the software components. While Mohammed is the one tasked with completing the final physical integration, this can serve as another impartial perspective.

### Date and time of next meeting

The next meeting will be held on Monday March 24, 2025 in C210 at 12PM.

## **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 Environmental Knowledge Base helper class to accommodate cultural knowledge	D. Vernon	21st March, 2025
2	Adding service request to change the language in D5.5.2.4	R. Muhirwa	21st March, 2025
3	Send A.Akinade and D.Vernon an estimate of the date for completion of the software deliverable	Everyone	21 <sup>st</sup> March, 2025

Table 1: Action Items