GVLAB

Work Progress Report

Project Period: 2015/02/16 ∼ 2015/08/18

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Title

Developing an experimental platform for Human Robot Interaction based on human motions

1 2015/06/01-2015/06/07

Date	Content	Problems/Remarks
2015/06/01	 • Conference paper discussion and correction • Crated new gestures needed for therapy experiment • Modified the gesture recognition module to support new gestures.	-
2015/06/02	 • Approach behavior modification (test with simulator a dummy walk) • World frame support added in order to find the relative orientation of Nao and human.	
2015/06/03	 • Worked on Approach behavior methodology • Fixed lot of bugs in the behavior program execution • Testing	

Date	Content	Problems/Remarks
2015/06/04	- Behavior simple block added - Expressive say with an argument support - Therapy scenario support start	
2015/06/05	- Modified main program execution to support therapy scenario - Fixed the bugs in the "expressive say with arguments" - Performed the experiment for the "Therapy facilitator scenario"	
2015/06/06	- Museum scenario - Choregraphe program added - Approach behavior modification	
2015/06/07	- Approach behavior as a combination of pure rotation and translation motions - Museum scenario experiment	

2 2015/06/08-2015/06/14

Date	Content	Problems/Remarks
2015/06/08	• Conference paper update	-
2015/06/09	• Conference paper update • Speech recognition module integration (Microsoft speech platform). Added speech recognition node.	
2015/06/10	• Conference paper update and submission	
2015/06/11	• Behavior description method redesign • Speech recognition Japanese language test	
2015/06/12	• Thesis documentation	

3   2015/06/15-2015/06/21

Date	Content	Problems/Remarks
2015/06/15	- Thesis documentation - Changing behavior description	-
2015/06/16	- Completely changing the way behavior program is defined - Added new run time behavior execution engine and direct code generation from the block description	
2015/06/17	(Blockly definition $\rightarrow$ C# code generation $\rightarrow$ Dynamic execution) - Implementation and test (ongoing)	

Date	Content	Problems/Remarks
2015/06/18	- Speech Trigger implementation and test - Speech response wait function - added new block, implementation and test - Parallel task execution block - added, implemented - Approach behavior migration to new execution engine	
2015/06/19	Thesis documentation	

4   2015/06/22-2015/06/28

Date	Content	Problems/Remarks
2015/06/22	• Thesis documentation • Questionnaire discussion	-
2015/06/23	• Thesis documentation • First year students : Choregraphe Lesson	
2015/06/24	• Thesis documentation	
2015/06/25	• Implemented asynchronous robot task execution • FSM for execution of tasks in the robot side and the application side • Fixed priority based premption implementation and test	

Date	Content	Problems/Remarks
2015/06/26	- Thesis documentation - Fixed priority premption test - Parallel task execution test	
2015/06/27	- Software update on GVLab Nao and TagawaLab Nao - Fixed priority premption test in real robot - Parallel task execution test in real robot	
2015/06/28	Thesis documentation	

5 2015/06/29-2015/06/30

Date	Content	Problems/Remarks
2015/06/29	- Thesis documentation - Questionnaire update - Preparation for user study	-
2015/06/30	- Thesis documentation - Handout preparation	