

'Nice to meet you' Exposition 'Pianeta Galileo 2010' initiative Lucca – Italy – 16-18/11/2010 Summary of the TERECoP group activity

Organizer: Region of Toscana, Province of Lucca (Italy)

People of TERECoP involved: Michele Moro, 2 Msc students

PIANETA GALILEO 2010

Pianeta Galileo è un'iniziativa dedicata alla diffusione della cultura scientifica promossa dal Consiglio Regionale della Toscana in collaborazione con Province, Comuni e Atenei Universitari. In provincia di Lucca, dal 12 al 19 novembre 2010, si prevedono lezioni-incontro, la mostra "Nice to meet you", lo spettacolo teatrale "Doctor Frankenstein" e altre iniziative.

Elenco scuole aderenti:

- I.T. Comm. e Geom. "L. Campedelli" - Castelnuovo G.
- I.T. Commerciale "F. Carrara" - Lucca
- Ist. Professionale "M. Civitali" - Lucca
- I.T. Industriale e L. Scientifico - Scienze Applicate "E. Fermi" - Lucca
- I.T. Industriale e L. Scientifico - Scienze Applicate "G. Galilei" - Viareggio
- Ist. Professionale "G. Giorgi" - Lucca
- I.S.I. "N. Machiavelli" - Lucca
- I.S.I. Piana di Lucca e L. Scientifico "E. Majorana" - Capannori
- I.T. Geometri "L. Nottolini" - Lucca
- I.T. Commerciale e per il Turismo "C. Piaggia" - Viareggio
- I.S.I. "S. Simoni" - Castelnuovo G.
- L. Scientifico "A. Vallisneri" - Lucca
- Scuola Secondaria di 1° grado "Da Vinci - Chelini" - Lucca
- Scuola Primaria "Giovanni XXIII" - Lucca

Partecipano:

- LUS Ludoteca Scientifica (IPCF-CNR, Dip. di Fisica e INFN di Pisa)
- Università di Padova, Dip. di Ingegneria dell'Informazione, Progetto Europeo TERECoP (robotica educativa)

Servizio hostess, accoglienza e informazioni curato da:

- I.S.I. "S. Pertini" - Lucca



Programma - Provincia di Lucca
12 - 19 novembre 2010

Per informazioni sul programma di Lucca:
Ufficio Pubblica Istruzione
tel. 0583.417778 - 0583.417499
e-mail: istruzione@provincia.lucca.it





On the days November 16th-18th, 2010, in the framework of the annual 'Pianeta Galileo' (Galileo's planet) initiative, sponsored by the Region of Toscana, the TERECoP group has been invited to present its activities at the exposition 'Nice to meet you - Tecnologia e innovazione nella didattica' (Technology and innovation in education), hosted in two large halls of the Duke Palace in Lucca (fig. 1).



Fig. 1

The TERECoP stand showed the following activities:



Fig. 2a



Fig. 2b

1. Determination of a minimum Hamiltonian path on a unknown map (fig. 2a) which is a known, general exercise in the framework of Operation Research. This experience was developed on NXT in Java using the Lejos/NXJ development system.
2. A simple motion planning experience where a robot NXT, representing an insect, moves on a mat, divided in regular squares, where it knows the position of some obstacles and searches for a flower (represented by a calibrated colored object identified by means of a NXT compatible videocam). After having reached the flower, the insect communicates with another insect, represented by a second 'blind' NXT robot, transmitting the whole path to be followed to reach the flower (fig. 2b).
3. A sequence of human movements performed by a Robovie-X humanoid (fig. 3). The realization of a translator from a simple pseudo-natural language to the Robovie-X command language, developed as the project for his graduation, was also explained by one of the two student.



Fig. 3

The stand was also showing some videos regarding the TERECoP objectives and results and the presented experiences.

On the 17th afternoon M.Moro was invited to illustrate the TERECoP activities and results to a group of teacher, some of them already involved with robotics at school, some only with initial interest. At the end of the presentation a short discussion began about the future possible activities in the field of ER. The present teachers expressed the desire to be connected in a community network for an exchange of experiences, collaborations and comments.