EMBODY^{i} Projects

OCTOPUS
Novel Design Principles and Technologies for a New Generation of High Dexterity Soft-bodied Robots Inspired by the Morphology and Behaviour of the Octopus

COORD: Scuola Superiore Sant'Anna, Pisa, Italy

ANGELS
Anguilliform swimming robot with a bio-inspired electrical sense

COORD: Ecole Nationale Supérieure de Nantes, France

EMORPH
Biologically-inspired visual sensor

COORD: Italian Institure of Technology, Genova, Italy

EVRYON
Wearable robots for functional restoration, substitution, rehabilitation, augmentation

COORD: University Campus Biomedico, Rome, Italy

LOCOMORPH
Locomotion and movement in robots, with enhanced manoeuvrability, self-stabilization, energy efficiency and adaptation, thanks to morphology and morphosis

COORD: University of Zurich, Switzerland

VIACTORS
Safe, energy-efficient and highly dynamic variable impedance actuators

COORD: DLR, Germany

SEVENTH FRAMEWORK PROGRAMME

Program Committee

Rolf Pfeifer (UZH)
Paolo Dario (SSSA)
Cecilia Laschi (SSSA)

Organizers

Cecilia Laschi (SSSA) OCTOPUS IP Coord.
Chiara Bartolozzi (IIT) EMORPH Coord.
Frederic Boyer (EC-Nantes) ANGELS Coord.
Eugenio Guglielmelli (UniCampus) EVRYON Coord.
Lijin Aryananda (UZH) LOCOMORPH Coord.
Alin Albu-Schaeffer (DLR) VIACTORS Coord.

Local Organizing Committee

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Scuola Superiore Sant'Anna
di Studi Universitari e di Perfezionamento

www.octopus-project.eu/summerschool

SEVENTH FRAMEWORK PROGRAMME

Call FP7-ICT-2007-3

Future and Emerging Technologies
ICT-2007.8.5 Embodied Intelligence

EMBODY^{i}

Embodied Intelligence Summer School

September 20-24, 2010
Livorno, Italy

www.octopus-project.eu/summerschool

School Program

"The nature of the human mind is largely determined by the form of the human body."
Rodney A. Brooks, 1999

"Artificial intelligence can only be achieved by machines that have sensory and motor skills and are connected to the world through a body."
R. Pfeifer and J. C. Bongard, 2007
How the Body Shapes the Way We Think
a new view of intelligence

The Embodied Intelligence Summer School will cover the concepts of the Embodied Intelligence theory through the integration of many disciplines viewpoint, as robotics, biology, neuroscience, medicine, physiology, psychology, as well as sociology and ethics.

Monday 20 September

9.00-9.45 Registration and Opening
9.45-10.30 Lecture 1: Rolf Pfeifer
10.30-11.00 Coffee Break
11.00-11.30 EMBODYi Projects Students Presentation
11.30-12.30 EMBODYi Projects Group Discussion
12.30-13.00 Students Poster Session
13.00-14.30 Lunch Break
14.30-15.00 Assignment of Group Work
15.00-19.30 Technical Tour to SSSA Labs
19.30-20.30 Welcome Party

Tuesday 21 September

9.00-9.45 Lecture 2: Auke Jan Ijspeert
9.45-10.30 Lecture 3: Benny Hochner
10.30-11.00 Coffee Break
11.00-11.45 Lecture 4: Barbara Webb
11.45-13.00 Students Poster Session
13.00-14.30 Lunch Break
14.30-16.00 Group Work
16.00-16.30 Coffee Break
16.30-19.30 Group Work

Wednesday 22 September

9.00-9.45 Group Work
9.45-10.30 Group Work
10.30-11.00 Coffee Break
11.00-12.00 Students Poster Session
12.00-12.45 Lecture 5: Eugenio Guglielmelli
13.00- .... Lunch Break and
....-23.00 Social Activity: Tour to Florence

Thursday 23 September

9.00-9.45 Lecture 6: Paolo Dario
9.45-10.30 Lecture 7: Tamar Flash
10.30-11.00 Coffee Break
11.00-12.00 Group Work
12.00-13.00 Students Poster Session
13.00-14.30 Lunch Break
14.30-16.00 Group Work
16.00-16.30 Coffee Break
16.30-20.00 Group Work
20.30-23.00 Farewell Party
@ Fortezza Vecchia

Friday 24 September

9.00-10.30 Group Work Students Presentations
10.30-11.00 Coffee Break
11.00-12.00 Group Work Students Presentations
12.00-13.30 Closing

LECTURES LOCATION: **L.E.M.**
Livorno Euro Mediterranea
Piazza del Pamiglione 1/2
Livorno, Italy

L·E·M
Livorno Euro Mediterranea