

Abstract: "The Hand Dance - Manual Skills System Laboratory"
Elvira Todaro (Scuola Superiore Sant'Anna di Pisa)

The presentation will feature documentation and discussion of The Hand Dance, an Immersive Virtual Reality (Machine Learning) and live performance installation developed at the PERCRO Perceptual Robotics Laboratory at the Scuola Superiore Sant'Anna in Pisa, Italy (www.percro.org - www.sssup.it).

In this project technology is used to rediscover the human being and his senses, while preserving and bringing into reach the enactive knowledge of manual abilities (A Virtual Laboratory for Human Skills).

The Hand Dance System is as project where technology preserves the historical and artistic heritage related to the body and its abilities through nonverbal language. PERCRO is currently engaged with two major EU projects related to the research and development relevant in this installation. The first is as coordinator for the European Network of Excellence ENACTIVE, where the objective is the creation of a multidisciplinary research community with the major aim of structuring the research on a new generation of human-computer interfaces called Enactive Interfaces. www.enactivenetwork.org.

An additional PERCRO project is called SKILLS, an Integrated Project in the framework of European IST FP6 strategic objective named Multimodal Interfaces that deals with the acquisition, interpretation, storing and transfer of human skill by means of multimodal interfaces, robotics, virtual environments (VE) technologies and interaction design methodologies.

Elvira Todaro is PhD Student on Scuola Superiore Sant'Anna of Pisa (www.sssup.it) working in the field of Innovative technologies for Art and Cultural Heritage at the PERCRO Laboratory (www.percro.org), directed by Prof. Massimo Bergamasco, in Pisa, Italy.

Her design experience spans graphic design, Movie Design, digital media design, Art installation, Robotic Art, Virtual Scenography, Virtual Museums, multisensory interaction in Virtual Museum Exhibitions and Digital Libraries.

Degree: Industrial Design/Multimedia Communication- Politecnico di Milano

Her work is included in the 2007 Biennale di Cinema di Venezia (www.labiennale.org/it/cinema/), and she worked as a graphic designer and Communication assistant for the Communication Lab, a Communication Degree Course of the University of Pisa. Prior to this, she worked as a Videomaker and Graphic Designer at Emage (www.emage.it) multimedia lab, of Grazia Neri (www.grazianeri.com), a well-known Photography and video company in Milan. For Emage she was videojournalist Reporter for Corriere della Sera (www.corriere.it). Assistant producer for the Filmmaster society (www.filmmaster.com), and assistant editor of spots for Lavazza and Tim. She worked on projects (Movie Design) including interfaces for various consumer products, video, DVD and CD-ROMs for such clients as Alessi, RAS, Cagiva and Lancia.

She won a first award (1999), at the competition "Il mobile in valigia" Politecnico di Milano, Go, Industrial design Magazine "Interni", with her product "Flash".

She now enjoys working in Tuscany on projects of cultural design, and development the territory and small reality.

She especially likes projects trying to reach targets such as social integration, economic development and urban regeneration trough arts and cultural growth, and to attend events concerning cultural information and communication.

Her research interests in the PERCRO Laboratory are in the field of Innovative technology for Art and Cultural Heritage, in particular, new Technology and Method to make Art (Virtual Scenography, Art installation, Robotic Art etc.) and preservation, fruition and communication design for Cultural Heritage (Virtual Architecture, Virtual Museums, multisensory interaction in Virtual Museum Exhibitions and Digital Libraries).