
MATHEMATICS & COMPUTER SCIENCE COLLOQUIUM



FRANCESCO REA

Instituto Italiano di Tecnologia (IIT) Genoa

Thursday - October 19, 2017

Room: E690

Time: 1:40 - 2:30 pm

Title: "iCub" a shared platform for research in robotics & AI

Abstract: Assistive Robotics requires a wide range of capabilities, at present, only partially exploited in the context of unstructured scenarios. The study of models of human-human interaction can indicate which skills the new generation of assistive robots should exhibit to promote dependable assistance. The result leverages on elementary forms of interaction, familiar to most of the untrained users, thus avoiding specific training to use the technology or uncanny experiences. In particular, these models rely on mutual understanding between the human and the robot and build on communication strategies based on essential social signaling. In this talk, I will present the recent achievements in human-robot interaction (e.g.: social robotics and affective computing) focusing on the context of assistance to humans in unstructured environments, and I will give an insight in our recent experience in providing assistive robotic technology for frail people, persons with cognitive disabilities and elders.

Bio:

Postdoc 2013 to present, Instituto Italiano di Tecnologia (IIT) Genoa; Ph.D 2012, Robotics, U. of Genoa (Italy); M.Sc. 2008, Robotics and Automation, U. of Salford (UK)

Awards:

Canada-Italy Innovation Award 2017 "Computational Neuroscience models for auditory aware robots"

Research Areas:

Modeling and replication of human and humanoid perception and cognitive skills, human-robot interaction and dynamic simulation of multibody systems.

Everyone welcome! Student friendly presentation.

Light refreshments provided