

## FREE WEBINAR – June 9th 2pm CEST (Zoom) “The artificial substitution of missing hands“

The replacement of a missing hand by a prosthesis is one of the most fascinating challenges in rehabilitation engineering. For decades, science and engineering have tried to match the sensory and motor features of the human body, designing limbs aiming at replicating the shape and functionality of the natural counterparts. Building such incredible devices and making them wearable and intuitively controllable by people is the goal of prosthetics research.

This talk aims at providing an overview of past and present artificial prosthetic hands developed and at discussing the main design issues.

Presentation by **Dr. Marco Controzzi** (Assistant Professor at Scuola Superiore Sant’Anna) and **Dr. Francesco Clemente** (Managing Director at Prensilia SRL, Affiliate Professional at Scuola Superiore Sant’Anna)



**Dr. Marco Controzzi** designs artificial hands since 2006. He received his BSc and MSc in Mechanical Engineering in 2005 and 2008, respectively. In 2013, he received a PhD in Robotics and ICT from the Scuola Superiore Sant’Anna (SSSA) and Since 2014 is Assistant Professor at the Biorobotics Institute. In 2009 he founded a spin-off company commercializing robot hands (Prensilia SRL).



**Dr. Francesco Clemente** is the Managing Director of Prensilia SRL, a company manufacturing robot hands for prosthetics and robotics. He received his M.Sc. degree in Biomedical Engineering from the University of Pisa, Italy, in 2012, and the Ph.D. in BioRobotics from Scuola Superiore Sant’Anna, Pisa, Italy, in 2016. During the PhD studies, his research activities focused on the design, development and testing of wearable devices for restoring sensory feedback to upper limb amputees wearing a prosthetic hand. He has been collaborating with Prensilia since 2013 and has a wide experience in design and

development of mechatronic systems for prosthetics. He filed 2 patents on this topic and authored more than 30 peer reviewed scientific papers on scientific journals in the field of prosthetics and robotics. He has been working in several EU and nationally funded R&D projects (WAY, NEBIAS, MY-HAND, DeTOP, APRIL, MAGNELIQ, MYKI, DANTE).