

Paolo Tripicchio

- EDUCATION
- ◇ **Doctor of Philosophy in Innovative Technologies curriculum Perceptual Robotics**
Sant'Anna Superior School of Advanced Studies, Pisa, 20th November 2012, with Honors.
 - ◇ **Abilitation to profession of Engineer Section A Industrial Sector**
University of Studies of Pisa, Pisa, 29 February 2008.
 - ◇ **MSc Degree in Automation Engineering**
University of Studies of Pisa, Pisa, December 2006.
 - ◇ **Bachelor Degree in Computer Science Engineering**
University of Studies of Pisa, Pisa, May 2003.

- THESIS
WORK
- ◇ **Intelligent Interfaces for Mixed Reality Environments**
Sant'Anna Superior School of Advanced Studies, Pisa. [Ph.D. Thesis]

Summary: *This thesis presents some studies in Mixed Reality environments. In particular focus is given to human perception and generation of feedback stimuli. Some applicative scenarios show the potentiality of these technological aids in the field of skills learning, specialistic training and physical and mental enhancement. The investigation deals with human motion analysis and rendering of haptic and visual stimuli. The technologies presented are proven effective in all the fields they were applied to.*

- ◇ **Development of software for an Embedded Motor Control Unit with Simulink and Real-Time Workshop Embedded Coder.**
Department of Electrical Systems and Automation , Pisa
and F.N.M. marine engines, Caserta. [MSc Thesis]

Summary: *Dealing with real-time embedded systems we must have a fine knowledge on many topics to achieve good results. Thesis work starts analyzing Real- Time Workshop code production stage in order to obtain a custom target developed modifying existing Infineon C166 target. Thesis shows Keil crossdevelopment enviroment software architecture and hardware architecture of the family of Infineon C166 microcontroller. Follows the design of Simulink blocks to achieve on-chip peripheral control that will be used to implements important tasks inside the ECU's software. With the thesis results we can assert that is possible to realize the ECU's control code directly with Simulink without the need of external hand-written code. This allow us to modify the model as many times as wanted without an hardware expert to build ours own application.*

- RESEARCH
INTERESTS
- ◇ System Theory and Process Control
 - ◇ Digital Control Systems and Real-Time Systems
 - ◇ Guidance and Navigation Systems
 - ◇ Mechatronics and Microcontrollers
 - ◇ Robotics and Haptics
 - ◇ Field Robotics
 - ◇ Simulink and Real Time workshop
 - ◇ 2d/3d Graphics, Virtual Reality
 - ◇ Machine Learning, AI and Intelligent Systems
 - ◇ Physical Simulation

- SKILLS
- ◇ General purpose programming languages: C/C++, Basic, Pascal, Python, Java, Assembly, C#
 - ◇ Network Programming: HTML, PHP, Javascript, CSS, AJAX
 - ◇ Modeling and graphics: 3D studio, Blender, Photoshop
 - ◇ Office e OpenOffice suites
 - ◇ Operating Systems: Unix, Linux, MS-DOS, MS-Windows, NT , FreeBSD, Android
 - ◇ Simulation and calculus programs: Matlab, Simulink, RTW, Maple
 - ◇ Written and spoken English (Advanced Level C1/C2)
 - ◇ Basic Knowledge of russian language
- WORK EXPERIENCE
- ◇ **Scientific Program Manager and Executive Director of Gustavo Stefanini Advanced Robotics Research Center (La Spezia, January 2013 - now)**
 - ◇ **Assistant Professor (RTD-A) at Scuola Superiore Sant'Anna. Financed by TeCIP Institute for the Excellence Department on Robotics and AI. (Pisa, 1 August 2019 - now)**
 - ◇ Technologist contract, category D5, with Sant'Anna Superior School of Advanced Studies, TeCIP Institute. (Pisa, 1 February 2018 - 31 July 2019)
 - ◇ Collaboration with F.N.M. marine engines Research Center(C.M.D. Diesel Motor Construction) for the development of Embedded Control Unit of a Diesel Motor for naval applications (Caserta, 1st May 2006 - 30th November 2006)
 - ◇ Collaboration with PERCRO Laboratory - Scuola Superiore Sant'Anna
"Development of control system for a 6DOF haptic interface for the european project ENACTIVE RD3.2 EES1" (15th January 2007 - 30th April 2007, Pontedera)
 - ◇ Development of demo for a manipulation and assembling scenario for the ENACTIVE project and presentation to the ENACTIVE workshop (Miralab, Geneve, 28 - 30 March 2007)
 - ◇ Software development for integration of mobile robot control for the first review meeting of the DECISION IN MOTION european project (Pisa, 16 April 2007)
 - ◇ Collaboration with PERCRO Laboratory - Scuola Superiore Sant'Anna
"A demonstrator of assembly in industrial application" related to the european project ENACTIVE EES1 (1st July 2007 - 31st October 2007, Pisa)
 - ◇ Research contract with PERCRO Laboratory - Scuola Superiore Sant'Anna
"Design and implementation of the Distribute Platform for the Enactive Virtual Laboratory" (1st July 2007 - 31st December 2008, Pisa)
 - ◇ Research contract with PERCRO Laboratory - Scuola Superiore Sant'Anna
"Development of a framework for multimodal experiments" related to the european project 035005 - SKILLS *Multimodal interfaces for capturing and transfer*(1st January 2008 - 31st October 2009, Pisa)
 - ◇ Collaboration with EERobotics Engineering, Electronics and Robotics s.r.l.for the development of an IP video streaming camera module for the integration in the iX environment (Livorno, Italy, 1st March - 31th March 2011)
 - ◇ Collaboration with EERobotics Engineering, Electronics and Robotics s.r.l. for the development of a 3d rendering engine and software modules for the Electronic Mooring Assistant System (EMAS) (Livorno, Italy, 1st May - 31 July 2011)
 - ◇ Research contract with PERCRO laboratory - TECIP institute - Scuola Superiore Sant'Anna
"Haptic control models development for micro-gravity applications" (1st december 2011- 1st February 2013)
 - ◇ Research contract with PERCRO laboratory - TECIP institute - Scuola Superiore Sant'Anna
"Design and development of projectual activities of telepresence in industrial domain" (2nd February 2013- 30th November 2014)

- ◇ Research contract with PERCRO laboratory - TECIP institute - Scuola Superiore Sant'Anna "Study of algorithms for transferring knowledge to machines" (1st June 2014 - 31th October 2014)
- ◇ Research contract with PERCRO laboratory - TECIP institute - Scuola Superiore Sant'Anna "Design and development of a telepresence learning system composed by an haptic suit and a humanoid remote robot for the project TAUM" (1st December 2014- 30th November 2017)
- ◇ Contract with PERCRO laboratory - TECIP institute - Scuola Superiore Sant'Anna for the "development of a software application for injector heads inspection" (December 2017 - January 2018).
- ◇ Technical support for the assembly and setup of simulator INDICA for VRMEDIA (MOVINT , fiera di Bologna, 2-5 May 2007)
- ◇ Participation to ENACTIVE 2007 conference and presentation of demo "Virtual Laboratory" and "Virtual Assembly" (19-24 November 2007, Grenoble)
- ◇ Participation to SKILLS EU project Review meeting and presentation of demo "Encountered Haptics" (17-20 December 2007, Pisa)
- ◇ Participation to Haptic Symposium 2008 conference and presentation of demo "Virtual Laboratory" (12-14 March 2008 , Reno)
- ◇ Participation to ENACTIVE 2008 conference and presentation of demo "encountered juggling" (October 2008, Pisa)
- ◇ Participation to "Futuro Remoto" at Città della scienza, Napoli (November 2009)
- ◇ Participation to RO-MAN 2010 conference and presentation of demo "Pureform Museum" (September 2010, Viareggio)
- ◇ Participation to Eurathlon 2014 competition with a demo on autonomous Ground Veichles (September 2014,La Spezia, Italy)
- ◇ Design and development of a real time panoramic stereo head and portable 3d vision system for the YANMAR Concept Backhoe (2014, Osaka, Japan)

RESEARCH
PROJECTS

- ◇ SKILLS IP(IST-2005-2.5.7) : Multimodal Interfaces for Capturing and Transfer of Skills [2009-2012]. Role: Responsible for the development of an Haptic Juggling demonstrator and Managment and development of a Haptic simulator for the training in minimally invasive surgery procedures.
- ◇ MANTES (POR-CREO) : Sistema di realtà virtuale per la simulazione del contatto fra MANo e TESSuti - Virtual reality system for the simulation of contacts between the hand and textiles. [2013] Role: Design and development of a software simulation for deformable objects physics and haptic contact simulation.
- ◇ Enactive Network of Excellence (IST-2004-002114) : Enactive Interfaces [2007-2008]. Role: Responsible for the development of an haptic system for the manipulation of virtual mechanical components for the demonstration scenario 2 of the project.
- ◇ Decision in Motion: Natural Decision Making in Motion [2008]. Role: Development and integration of a custom mechanical head into a mobile platform.
- ◇ ASI CRUSOE: CRUising in Space with Out-of-body Experiences. Study of the human dynamical interaction in micro-gravity conditions. (ASI) [2013]. Role: Supervision to the development of haptic control modules for the simulation of reduced gravity models of impacts with balls.
- ◇ TAUM: Development of a wearable system for the teaching-by demonstration of robots. [2014-2015] Role: Coordination and management of the activities of the whole project. Development of a haptic device for force interaction.

- ◇ REMEDI: Remote control of dexterous mobile robot for clinical purposes. [2014] Role: Development of virtual reality setups for the tele-palpation.
- ◇ VERE: Virtual Embodiment and Robotic Re-Embodiment [2012]. Role: Supervision to the development of haptic enabled teleoperation software.
- ◇ SWAD: Teleoperated sea watchdog for deep water surveillance and scouting.[2014] Role: Scientific Management and coordination of the whole project. Development of algorithms for the simulation of realistic stimuli to the user through a Stewart platform.
- ◇ ENEL Robotica Aerea: Development of semi-autonomous flying vehicle for the inspection of industrial boilers. [2012-2015] Role: Coordination and scientific management of the whole project. Development of SLAM algorithm for the navigation of a MAV in confined spaces.
- ◇ μ UGV: Development of an innovative teleoperated snake-like robot for the inspection and IED detection. [2014] Role: Coordination of the activities and analysis of the electronics and vision modules.
- ◇ ADM-H: Autonomous Decision Making based coordination techniques for Heterogeneous Autonomous Vehicles. The project was conducted by the EDA to improve decision-making algorithms for the coordination of groups of unmanned systems engaged in a military mission and the exploitation of the operational advantages of using such systems in future defence theatres. The performance assessment has shown that through adequately coordinated unmanned heterogeneous vehicles even complex tasks directed by a Commander can be handled autonomously, reducing the human workload except for the most critical decisions. Role: **Principal Investigator** [2014-2015, budget: 50.000 €]
- ◇ OTO-GSI: Innovative Ground Station for Haptic teleoperation of a robotic manipulator for intervention and inspection [2012-2015]. Role: Responsible for the scientific development and management of the whole project activities. Design and development of a custom robotic arm, of operational software and of a training simulator integrating 3D vision cameras and communication modules.
- ◇ YRE-FWM: Future Working Machine - Automatic Paneling (YANMAR Research Europe)[2016-2017] Role: Responsible of the development of path planning algorithms for collision avoidance and efficient motion of a 7DOF industrial robotic arm.
- ◇ VIGILANTE: Development of a vision system as auxiliary security measure for train operator vigilance (TRENITALIA) [2016-2018]. Role: Development and analysis of software functions. Performed testing sessions and acquisition campaigns on the railway infrastructure.
- ◇ Testa Mouse: Definizione caratteristiche e sviluppo prototipo di un mouse indossabile low cost per PC adatto a persone con ridotte capacità motorie. Development of a low cost head mouse for user with mobility problems (CARISPE). Role: **Principal Investigator** [12 months 2017, budget: 54.400 €]
- ◇ MBDA: Design, Implementazione e progettazione HW di algoritmi IP per il tracking di obiettivi in video acquisiti tramite video-camere e termo-camere [2017-2018]. Role: Responsible for the coordination, management and development of vision software modules and communication software.
- ◇ CONTINENTAL: Sistema di analisi per saldature basata su visione e intelligenza artificiale [2017- 2018]. Role: Responsible for the development of custom software architecture for the analysis of defects in the production line with Vision algorithms.
- ◇ Magneti Marelli: Development of Behaviour prediction techniques for autonomous driving vehicles [2017-2018]. Role: Supervision of data acquisition software and development of machine learning algorithms.
- ◇ 3D Virtual Baby Hearth GR-2016-02365072: Sponsored by The Italian Ministry of Health. Validation of three-dimension virtual and printed models in children undergoing cardiac surgery for complex congenital heart disease and tracheal defects: feasibility, applications,

cost effectiveness and exploration of new techniques. Once You Could Only Image, Now You Can Also Touch Complex Anatomy! 3D Virtual Baby Heart. Role: **Principal Investigator** [36 months 2018-2020, budget: 53.000 €(of 351k of the project)]

- ◇ TRENO DRONE: Development of a low weight drone vehicle able to inspect encumbrances on the railway lines. Sponsored by RFI. (November 2018 - May 2020). Role: Design and development of embedded control unit and vision modules integration.
- ◇ CONTINENTAL-ESV11: Studio di fattibilita' e realizzazione di algoritmi di visione e intelligenza artificiale per riconoscimento difetti sulla sede ESV11. Role: **Principal Investigator** [3 months 2019, budget: 34.000 €]
- ◇ LUXOTTICA-2019: Studio di fattibilita' e realizzazione di un sistema robotico per carico e scarico di montature di Ray Ban Aviator su/da telai di galvanica. Role: **Principal Investigator** [14 months 2019-2020, budget: 189.000 €]
- ◇ MONITOR-2021: Studio e sviluppo di un sistema robotico mobile per la localizzazione di tag rfid in ambienti industriali e retail. Role: **Principal Investigator** [8 months , budget: 110.000 €]

CONFERENCE ORGANIZATION AND REVIEWS ◇ Co-Chair of the 1st International Workshop on "Intelligent Multimodal Interfaces Applied in Skills Transfer, Healthcare and Rehabilitation" (IMIASH 2012) (26-29 June 2012, Guanajuato, Mexico)

- ◇ Organization and scientific coordination (Chair) of the "Joint PRESENCIA and SKILLS PhD Symposium" (26-27 May 2009, Pisa)
- ◇ Member of the Program Committee of the IADIS Interfaces and Human Computer Interaction 2009 (IHCI 2009) Conference (Algarve, Portugal, 20 - 22 June 2009)
- ◇ Member of the Program Committee of the IADIS Interfaces and Human Computer Interaction 2010 (IHCI 2010) Conference (Freiburg, Germany, 26 - 31 July 2010)
- ◇ Member of the Program Committee of the IEEE International Conference on Computer Science and Information Technology (ICCSIT 2011, June 10-12, 2011, China)
- ◇ Reviewer for international conferences and journals: ICRA , IROS, World Haptics, RO-MAN, Computer Animation and Virtual Worlds, International Journal of Virtual Reality, The Industrial Robot, Euro Haptics, Haptic Symposium, ICORR, JVRB, SKILLS, ENACTIVE, IJRR, IJMAV, T-RO, Sensors, Journal of Sensor, Applied Sciences, Computers in Industry, etc.
- ◇ International Reviewing member for the call "ciencia de Frontera 2019" for the Mexican National Science Counsel (CONACYT)
- ◇ Editor of the Volume 13 of the " Ambient Intelligence and Smart Environments" series by IOS Press, "Workshop Proceedings of the 8th International Conference on Intelligent Environments", ISBN 978-1-61499-079-6 (print).
- ◇ Topic Editor of Remote Sensing (ISSN 2072-4292, IF:4.509, CiteScore: 6.1)
- ◇ Topic Editor of Applied Sciences (ISSN 2076-3417, IF: 2.474)
- ◇ Technical support in the organization of the 19th IEEE International Symposium on Robot and Human interactive communication 2010, Viareggio (Italy).

TEACHING AND TUTORING ◇ Invited speaker at "Coloquio de Investigacin Multidisciplinaria CIM-Orizaba-2020" (Orizaba/online, October 2020).

- ◇ Lectures on "Simultaneous Localization and Mapping. Visual Odometry" on the Workshop "Advanced topics in Rehabilitation Robotics and Biomechanics" at the Orizaba Institute of Technology (MIE-ITO, September 2016, 6 hours)
- ◇ Lectures on "Visual Odometry and SLAM" in Toluca Autonomous university (UAEM, August 2016, 6 hours)

- ◇ Lectures on "Physical Based Modelling" for the Class of "Interaction with Virtual Environments" (Scuola Superiore Sant'Anna, 14 hours, 2015)
- ◇ Invited speaker at 2nd International Workshop on "Un futuro per la Dislessia", 27-28 September 2013, Ostia Antica (Roma)
- ◇ Lectures of "Digital Control Systems and Mechatronics" classes on Msc course in Embedded Systems (University of Pisa, 4 hours, year 2013)
- ◇ Class of "Virtual Reality" on Msc course in Electronics and Electrical Systems (Orizaba Institute of Technology, 10 hours, year 2012)
- ◇ Class of "Virtual environments, design and applications" for Researchers and Professors of Toluca autonomous University and Orizaba institute of technology (Orizaba Institute of Technology, 35 hours, year 2012)
- ◇ Lectures of "Mechatronics" class on Msc course in Automation Engineering(University of Pisa, 10 hours , year 2006/2007)
- ◇ Lectures of "Mechatronics" and "Industrial Automation Technologies" classes on Msc course in Automation Engineering(University of Pisa, more than 30 hours , year 2007/2008)
- ◇ Lectures of "Mechatronics" and "Industrial Automation Technologies" classes on Msc course in Automation Engineering(University of Pisa, 20 hours, year 2008/2009)
- ◇ Lectures of "Mechatronics" and "Industrial Automation Technologies" classes on Msc course in Automation Engineering(University of Pisa, 10 hours, year 2009/2010)
- ◇ Lectures of "Mechanics and Mechatronics Laboratory" classes on Msc course in Automation Engineering (University of Pisa, 12 hours, year 2010/2011)
- ◇ Lectures of "Mechanics and Mechatronics Laboratory" classes on Msc course in Automation Engineering (University of Pisa, 19 hours, year 2011/2012)
- ◇ Lectures of "Mechanics and Mechatronics Laboratory" classes on Msc course in Automation Engineering (University of Pisa, 20 hours, year 2012/2013)
- ◇ Lectures on "HAPTICS Transparent Interfaces: encountered haptics and vibrotactile" at the International Master in Virtual Environments Technologies for Industrial Applications 2009/2010.
- ◇ Supervising and tutoring of the MSc Student Nicola Fauceglia for the development of the thesis "Behaviour prediction in driving lanes" for the MSc degree in Robotics and Automation, 2019
- ◇ Supervising and tutoring of the MSc Student Gabriele Scivoletto for the development of the thesis "A robust extended kalman filter with gaussian mixture input observations for stitching and reconstructing rolling stocks from a single camera video flow" for the MSc degree in Embedded Computing Systems, 2019
- ◇ Supervising and tutoring of the student Meuneur Orane of the Telecom Physique Strasbourg engineering school during a 2 months internship on "SLAM using RFID sensors", 2019
- ◇ Supervising and tutoring of MSc Student Chiara Farnesi for the development of the thesis "Experimental Design and Development of an Embedded Computer Vision System for Detection and Analysis of Pantographs" for the MSc degree in Embedded Computing Systems, 2018-2019.
- ◇ Supervising and tutoring of MSc Student Salvatore D'avella for the development of the thesis "Autonomous pick and place in cluttered environments" for the MSc degree in Embedded Computing Systems, 2018-2019.
- ◇ Supervising and tutoring of MSc Student Gabriele Baris for the development of the thesis "Visual SLAM for Driverless racing vehicle" for the MSc degree in Embedded Computing Systems, 2018-2019.

- ◇ Supervising and tutoring of the students Miguel Angel Montalvo Sanchez and Francisco Cambambia Rivera during a 2 months internship on "Development of an electronic circuit for energy harvesting applications", 2018.
- ◇ Supervising and tutoring of the student Guillaume Pepe of the Telecom Physique Strasbourg engineering school during a 6 months internship on "Autonomous navigation and exploration of MAV in indoor environments", 2015.
- ◇ Supervising and tutoring of the student Oceane Ribaric of the Telecom Physique Strasbourg engineering school during a 3 months internship on "Visual SLAM techniques for autonomous navigation of mobile robots", 2015.
- ◇ Tutoring of Automation Engineering Students for the course on "Mechatronics" , "Industrial Automation Technologies" and "Mechanics and Mechatronics Laboratory", 2007-2012.
- ◇ Tutoring of the student J.J. Mendoza-Santana for the project "Realization of a virtual assembly simulator", May-July 2009.
- ◇ Tutoring of the student D.A. Guadarrama for the project "Low cost Upper limb rehabilitation with virtual reality", May-July 2009.
- ◇ Tutoring of the student Yael Herrera Halley for the project "Upper body motion tracking for action and gesture analysis", July-September 2010.
- ◇ Tutoring of the student Heéctor J. Ché Cortes for the project "Embedding the electronics of the Rowing System", July-August 2010.
- ◇ Tutoring of the student Karla Miriam de la Rosa Munive for the project "Haptic simulation of drilling with volumetric rendering", July-August 2010.
- ◇ Tutoring of student Alexandru Voica for the project "Virtual Basketball Simulation", 2010

EVENTS,
WORKSHOP
E SEMINARS

- ◇ MATLAB Seminar at Scuola Superiore Sant'anna,divisione alta formazione (21 june 2006)
- ◇ "Net & System Security " Seminar by Colonel Rapetto(GAT) at CNR of Pisa (Pisa, 2002)
- ◇ Rockwell Automation Seminar at university of Pisa(2003)
- ◇ Fieldbus e Profibus seminar at university of Pisa(2003)
- ◇ Webinars online of Matlab and Simulink about control, code production and discrete system modeling techniques(more than 20 seminars)
- ◇ "Stability theory in Russian Academy of Sciences for 280 years" and "Dynamics and Stability of Multycomponent Nonlinear Systems", Prof. V.M. Matrosov and Dr. N. I. Matrosova (Russian Academy of Sciences, Mosca)(20 May 2004, University of Pisa)
- ◇ Participation at the "Innovation way" day (25 May 2008, Technological pole of Navacchio, Italy)
- ◇ Participation at SOPC World 2007 (ALTERA)(7 November 2008, Cinisello Balsamo, Italy)
- ◇ Participation at SIDRA Summer School on Robotics (7-12 July 2010, Bertinoro, Italy)
- ◇ Participation at the P.h.D. School on Scientific GPU Computing (23-27 May 2011, Copenhagen, Denmark)
- ◇ Participation at the Summer School on Impedance (25-29 July 2011, Frauenchiemsee, Bavaria, Germany)
- ◇ Participation at the 3rd BRICS Research Camp on Control and Coordination (13-18 November 2011, Bertinoro, Italy)
- ◇ Participation at SAUC-E 2014 (20 September 2014, La Spezia, Italy)
- ◇ Participation at Eurathlon 2014 (29 September 2014, La Spezia, Italy)
- ◇ Participation at the YANMAR Y-Flying building presentation (Osaka, 19 November, 2014)

- ◇ Participation at TIEM2 with the project AUVnet "Distributed synergistic control of autonomous unmanned units and optimal mission planning", (Italian Embassy, Washington, USA, 2014)
 - ◇ Participation at "Premio Innovazione 2015" of Finmeccanica company with a remote control unit for the navigation of an offshore unmanned surface vehicle.
- PATENTS
- ◇ WO 2016079557 (A1) - "Display system for remote control of working machine" - NICCOLINI, M. and ALBA, A. and Eguchi, S. and KUSUNO, J. and TRIPICCHIO, P. and Ruffaldi, E. and Avizzano, C.A. and GASPARELLO, P.S. 26 May 2016 , registered as US 10474228 on 12 November 2019
 - ◇ Italian Patent Deposit N 102018000005222. "Sistema innovativo di visione e di assistenza all'Agente di Condotta nel settore ferroviario." - Valentini A., Neri S., Russo D., Masini P., Caposciutti M., Bergamasco M., Avizzano C.A., Ruffaldi E., Tripicchio P., Villegas J.M.J., Filippeschi A., 15 May 2018
- PUBLICATION AND PRESENTATIONS
- ◇ Poster "RD3.2 Enactive Emblematic Scenario 1: Assembly and Manipulation", P. Tripicchio (Miralab, Geneva, 28 - 30 March 2007)
 - ◇ Poster "A robotic active vision head for decision making in motion", A. Frisoli, E. Sotgiu, E. Ruffaldi, P. Tripicchio, S. Bacinelli and M. Bergamasco (Decision in Motion 2007, Pisa)
 - ◇ Presentation of the project "Enactive Emblematic Scenario I" at XVR one day Workshop (31 may 2007, Pisa)
 - ◇ "Manipulation with Haptic Interface: an high performance 6-DoF system to verify assembly procedures on CAD models", P. Tripicchio, C.A. Avizzano, A. Frisoli, E. Ruffaldi and M. Bergamasco (11 Settembre 2007 , SIDRA2007 conference, Genova)
 - ◇ "Virtual Laboratory: a virtual distributed platform to share and perform experiments", P. Tripicchio, E. Ruffaldi, C.A. Avizzano and M. Bergamasco (12-14 march 2008 , Reno , Haptic Symposium 2008)
 - ◇ "Dynamic interaction with an Encountered Haptic Interface", C.A. Avizzano, E. Ruffaldi, P. Tripicchio and M. Bergamasco (31 May , Napoli , MITH '08)
 - ◇ "Surface Perception in a Large Workspace Encounter Interface", E. Ruffaldi, C.A. Avizzano, P. Tripicchio, A. Frisoli and M. Bergamasco (RO-MAN '08)
 - ◇ "Cognitive Cooperation in Virtual Reality: an Haptical Enabled Experiment" , P. Tripicchio, E. Ruffaldi, C.A. Avizzano and M. Bergamasco, (ENACTIVE 2008, Pisa)
 - ◇ "A sensory-motor study of the control of perception during impact with encountered haptics", C.A. Avizzano, A. Frisoli, E. Ruffaldi, P. Tripicchio and M. Bergamasco(SIDRA 2008, Vicenza)
 - ◇ "A Low-Cost Gesture Recognition System for Rehabilitation and Movement Assessment" , P. Tripicchio, O. Portillo-Rodrigues, O. Sandoval-Gonzales, E. Ruffaldi, C.A. Avizzano (ENACTIVE 2008, Pisa)
 - ◇ "Spatial Sound and Frequency Distortion for Enactive Transfer of Skills in Tai-Chi Movements to Visual Impaired People", O.Sandoval-Gonzalez, O. Portillo-Rodriguez, L. Gerzay, P. Tripicchio, E. Ruffaldi, C.A. Avizzano and M. Bergamasco (ENACTIVE 2008, Pisa)
 - ◇ "Control Strategies and Perception Effects in Co-located and Large Workspace Dynamical Encountered Haptics" , P. Tripicchio, E. Ruffaldi, C.A. Avizzano and M. Bergamasco (World Haptics Conference 2009, Salt Lake)
 - ◇ "Integration of Multimodal Technologies for a Rowing Platform", E. Ruffaldi, O. Sandoval-Gonzalez, A. Filippeschi, P. Tripicchio, A. Frisoli, C.A. Avizzano and M. Bergamasco (ICM 2009, Malaga)
 - ◇ "Bilateral Teleoperation under Time-Varying Delay using Wave Variables", M. Satler, C.A. Avizzano, A. Frisoli, P. Tripicchio, M. Bergamasco (IROS 2009, St. Louis)

- ◇ "Human forces in hands free interaction: a new paradigm for immersive virtual environments", P.Tripicchio, O. Sandoval-Gonzalez, A. Filippeschi, E. Ruffaldi, C. A. Avizzano and M. Bergamasco (RO-MAN 09, Toyama)
- ◇ "Transfer of skills in assembly process using virtual reality and multimodal interfaces", J. J. Mendoza-Santana, O. O. Sandoval-Gonzalez, P. Tripicchio, O. Portillo-Rodriguez, E. Ruffaldi, C. A. Avizzano and M. Bergamasco, CONAGOLFO 2009
- ◇ "Low-cost upper rehabilitation system using virtual reality environments", D. A. Guadarrama, O. O. Sandoval-Gonzalez, O. Portillo-Rodriguez, P. Tripicchio, C. Avizzano and M. Bergamasco, CONAGOLFO 2009
- ◇ "Skills Accelerators Using Multimodal Systems for Boxing Training", O. Sandoval-Gonzalez, P. Tripicchio, E. Ruffaldi, A. Filippeschi, C. A. Avizzano and M. Bergamasco (SKILLS09, Bilbao, December 2009)
- ◇ "A measuring tool for accurate haptic modeling in industrial maintenance training", Paolo Tripicchio, Alessandro Filippeschi, Emanuele Ruffaldi, Franco Tecchia, Carlo Alberto Avizzano, and Massimo Bergamasco. Lecture Notes in Computer Science, Volume 6192, 2010, Springer. (Euro Haptics 2010, Amsterdam, July 2010)
- ◇ "Design of a Motion Based Sailing Simulator", Carlo Alberto Avizzano, Paolo Tripicchio, Lorenzo Joale and Massimo Bergamasco (RO-MAN 10, Viareggio, September 2010)
- ◇ "A Multimodal Training Platform for Minimally Invasive Robotic Surgery", Rainer Konietzschke, Andreas Tobergte, Carsten Preusche, Paolo Tripicchio, Emanuele Ruffaldi, Sabine Webel and Ulrich Bockholt (RO-MAN 10, Viareggio, September 2010)
- ◇ "Energy recovery in Time-Varying delay teleoperated system using Wave-Variables", Massimo Satler, Carlo Alberto Avizzano, Antonio Frisoli, Paolo Tripicchio and Massimo Bergamasco (RO-MAN 10, Viareggio, September 2010)
- ◇ "A Multimodal Training Platform for Minimally Invasive Robotic Surgery", Rainer Konietzschke, Andreas Tobergte, Carsten Preusche, Paolo Tripicchio, Emanuele Ruffaldi, Sabine Webel and Ulrich Bockholt (MMVR 2010 -14 December 2010 - Scuola Superiore Sant'Anna, Pisa)
- ◇ "Haptic Rendering of Juggling with Encountered Type Interfaces", E. Ruffaldi, P. Tripicchio, C. A. Avizzano, M. Bergamasco. (Presence: Teleoperators and Virtual Environments, October 2011, Vol. 20, No. 5: 480501.)
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Tutto quanto dichiarato corrisponde a verità ai sensi delle norme in materia di dichiarazioni sostitutive di cui all'art. 46 e ss. del D.P.R. 445/2000.

Con la presente consento il trattamento dei miei dati personali ai sensi dell' art. 13 del D. Lgs. 196/2003.

Li 23.02.2021 , Pisa.