

CHRISTIAN CIPRIANI

CURRICULUM VITAE ET STUDIORUM

Lucca, Italy – November 2019

PERSONAL DATA

- First name: Christian
- Family name: Cipriani
- Gender: Male
- Place and date of birth: [REDACTED]
- Nationality: [REDACTED]
- Business address: The BioRobotics Institute | Scuola Superiore Sant'Anna
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- Business numbers: mobile: (+39)331 6992268, office: (+39)050 883133, fax: (+39)050 883101
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ACTUAL POSITION

December 2016 – present	Scuola Superiore Sant'Anna The BioRobotics Institute	Pisa, Italy
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Professor of Bioengineering

Since May 2014 Head of the Artificial Hands Area (intuitively controlled prostheses and robotic hands). Coordinator of a group of ~25 researchers. Since January 2018 Principal Investigator (PI) of the national project ARLEM (funded by MIUR – Ministry of Education and Research). Since July 2017 Co-PI of the national project PCR 1/1 (funded by INAIL – National Workers' Compensation). Since April 2017 Coordinator and PI of the national project CECA2020 (funded by INAIL). Since Sept. 2016 PI of the MYKI project funded by the **European Research Council** with a Starting Grant (ERC #679820). Since March 2016 Coordinator and PI of the H2020 European project DeTOP (ICT #687905).

December 2017 – present	The BioRobotics Institute Scuola Superiore Sant'Anna	Pisa, Italy
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Director (i.e. *Head of Department*)

The BioRobotics Institute, founded in 2011, is one of the six Institutes of the Scuola Superiore Sant'Anna. The Institute is involved in several fields of biorobotics, such as: social robotics, industrial robotics, assistive/rehabilitation/surgical robotics, neural engineering, cognitive systems, bio-inspired robots and their ethical, legal, social and economic implications. At present the Institute includes ~250 people: 24 faculty members, 90+ PhD students, 75+ research associates, 20+ staff members, and a variable number of MSc students and visiting researchers. The Institute is involved in over 65 international and national research projects, including one funded by European Research Council, and it spun out 25 start-up companies. Website: <http://www.santannapisa.it/en/institute/biorobotics/biorobotics-institute>

BRIEF RESUME

Holding a PhD in Biorobotics (2008) and a MSc in Electronic Engineering (2004), I have been working at ARTS Lab of Scuola Superiore Sant'Anna since 2005 and –as a Visiting Scientist– at the University of Colorado Denver | Anschutz Medical Campus, in 2012, within many national and international research projects on prosthetics and robotics.

My current field of research is (bio)mechatronics applied to the area of upper limb prosthetics. I am interested in mechatronic, controllability and sensory feedback issues of dexterous robotic hands to be used as thought-controlled prostheses. In particular: the design of mechatronic components for artificial hands; the design of control architectures and intuitive control strategies; the use of biological signals for the physiological control of prehension; the development and clinical experimentation of bi-directional non-invasive interfaces through novel assessment tools; the investigation and comparison of shared-control strategies between user and the prosthesis. Most of my activities are strongly related to the development of hardware with the goal of building reliable, robust and durable stand-alone mechatronic hands.

I have authored ~100 peer reviewed scientific papers, 70+ of which on international journals in the field of prosthetics and rehabilitation robotics (IEEE TRO, IEEE RAM, IEEE TBME, STM, JNER, PLOS ONE, JPO among others). I also filed eight patents on related fields and founded a spin-off company of the Scuola Sant'Anna - Prensilia.

For my research activity I have been the recipient of several awards including a Starting Grant from the European Research Council in 2015, an early career grant by the Italian Ministry of Research in 2011 (Futuro in Ricerca FIRB 2010 program), a Fulbright Research Scholar fellowship in 2011 and the d'Auria Award from the Italian Robotics and Automation Association, in 2009.

I have two objectives: the first is to manage -at some point- to successfully construct something which could practically improve someone's life. The second, to become the most experienced researcher in this field.

EDUCATION AND PROFESSIONAL EXPERIENCE

May 2014 – December 2016	Scuola Superiore Sant'Anna The BioRobotics Institute	Pisa, Italy
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Associate Professor of Bioengineering

Head of the Artificial Hands Area (intuitively controlled prostheses and robotic hands). Coordinator of a group of ~16 researchers. Since Sept. 2016 Principal Investigator (PI) of the MYKI project funded by the **European Research Council** with a Starting Grant (ERC #679820). Since March 2016 Coordinator and PI of the H2020 European project DeTOP (ICT #687905). Since Jan. 2014 PI in the national project PPR3 (funded by INAIL). Since Nov. 2013 CO-PI in the European project NEBIAS (ICT-FET #611687). From 2014 to 2017 Deputy Director of the BioRobotics Institute.

March 2012 – Sept. 2012	University of Colorado Biomechatronic Development Lab Anschutz Medical Campus	Denver, CO
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Visiting Scientist

At Prof. Richard Weir's laboratory, with a project entitled: "Evaluating effectiveness of sensory feedback and parallel control on a myoelectric controlled dexterous hand prosthesis" with a Fulbright Research Scholar Fellowship.

Jan. 2011 – April 2014	Scuola Superiore Sant'Anna The BioRobotics Institute	Pisa, Italy
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Assistant Professor of Bioengineering

Head of the Artificial Hands Laboratory (intuitively controlled prostheses and robotic hands) at the BioRobotics Institute (formerly ARTS lab). Coordinator of a group of ~14 young researchers. Since March 2012 PI in the MY-HAND project (# RBF10VCLD) funded by the Italian Ministry of Research under the "Futuro in Ricerca - FIRB 2010" program (early career grant – 2% acceptance rate). From Oct. 2011 to April 2013 CO-PI and Project Manager in the European project WAY (ICT #288551), since April 2013, Coordinator (PI) of the same project (until the end of it, in May 2015).

Jun. 2008 – Dec. 2010	Scuola Superiore Sant'Anna ARTS Lab	Pisa, Italy
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Post-doc research fellow

Within the research group led by Prof. Maria Chiara Carrozza at the Advanced Robotics Technology and Systems laboratory (ARTS lab), Dr. Cipriani was responsible for the activities on prosthetic and robotic hands, coordinating a small group of 4-5 students. He was the internal team leader in the EU funded project SMARTHAND (2006-2009), and in the national funded project SAFEHAND (2007-2009). In Oct. 2009 he has been a (short term) **Visiting Scientist** at Aalborg University, Denmark, Center for Sensory-Motor Interaction, in the lab of Prof. Dejan Popović. During 2010 he was the internal team leader in the EU funded NANOBIO TOUCH project.

2005 – 2008	IMT Institute for advanced studies & Scuola Superiore Sant'Anna	Lucca, Italy Pisa, Italy
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PhD in Biorobotic Science and Engineering

PhD received on Apr. 22, 2008. Thesis: "Control developments for prosthetic and cybernetic hands", Supervisor: Prof. M. Chiara Carrozza, Scuola Superiore Sant'Anna. PhD Coordinator: Prof. Paolo Dario, Scuola Superiore Sant'Anna. During the PhD he has been a **Visiting Student** at Lund University, Sweden, in Prof. Thomas Laurell's lab in collaboration with hand surgeon Prof. Göran Lundborg in the framework of the EU project SMARTHAND. The objective was to clinically assess innovative non-invasive interfaces for the control and perception of a technologically advanced prosthetic hand with trans-radial amputees. Short visits (maximum 1 month) in March 2008, May 2009 and November 2009.

1999 - 2004	Università di Pisa	Pisa, Italy
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M.Sc Electronic Engineering

Laurea received on December 13, 2004. Title of the thesis: "Design and development of a pattern generator for electron beam lithography", Supervisors: Prof. Bruno Pellegrini, Prof. Alessandro Diligenti, Dr. Giovanni Pennelli. The developed system is now a national patent, owned by University of Pisa. B.Sc. also in Electronic Engineering received on December 13, 2002.

Mark 110/110

AWARDS AND HONOURS

June 19, 2019	Associazione Valore Uomo	Rome, Italy
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Valore Award (Premio Valore)

For the research activities within DeTOP H2020 European project on upper limb prostheses. The "Premio Valore" is conferred under the endorsement of the Italian Prime Ministry (Presidenza del Consiglio dei Ministri) to those that besides having excelled in their fields have contributed to improve the social welfare of each individual.

March 30, 2017	Ministry of Education and Research	Rome, Italy
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National Scientific Habilitation (Abilitazione Scientifica Nazionale)

As Full Professor of BioEngineering 09/G2. Call 2016 (DD n. 1532/2016).

October 28, 2015	European Research Council	Brussels, Belgium
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ERC Starting Grant

awarded to Dr. Cipriani with the project MYKI: "A Bidirectional MyoKinetic Implanted Interface for Natural Control of Artificial Limbs" (ERC # 679820), for the period 2016-2021 (60 months). The ERC Starting Grant is the most prestigious and competitive research grant in Europe targeting promising scientists. Dr. Cipriani's ERC grant is the first one of this kind at the Scuola Sant'Anna.

February 14, 2014	Ministry of Education and Research	Rome, Italy
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National Scientific Habilitation (Abilitazione Scientifica Nazionale)

As Associate Professor of BioEngineering 09/G2. Call 2012 (DD n. 222/2012).

December 8, 2012	IEEE	New York City, USA
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Senior Member

For admission to this grade, a candidate shall be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields for a total of 10 years and have demonstrated 5 years of significant performance. Only 8% of IEEE's ~400,000 members hold this grade.

September 21, 2011	Ministry of Education and Research	Rome, Italy
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Futuro in Ricerca FIRB 2010 - under 33 early-career grant

The project entitled: "Myoelectric-Hand prosthesis with Afferent Non-invasive feedback Delivery: MY-HAND", proposed by Dr. Cipriani was awarded with 402 k€, for the period 2012-2014. Futuro in Ricerca ("Future in research") grants aim to support young scientists, in order to promote generational exchange within Universities. It is among the most competitive and prestigious research grants in Italy, and the only one targeting promising researchers. Roughly, 2% of proposals, from all disciplines (excluding medicine) are awarded.

June 30, 2011

J. William Fulbright
Foreign Scholarship Board

Washington DC, USA

“Fulbright Research Scholar” grant

To spend a six month research period in 2012 at the Department of Bioengineering of the University of Colorado – Denver, visiting Prof. Richard Weir’s laboratory. The Fulbright is a program of competitive, merit-based grants for international educational exchange, founded in 1946. The program is one of the most prestigious awards programs worldwide, operating in over 155 countries. Fourteen candidates from all disciplines were awarded in Italy in 2011.

May 11, 2009

SIRI
Italian Robotics and Automation Association

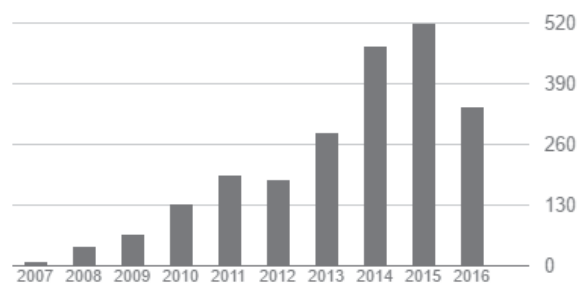
Milan, Italy

“Antonio d’Auria Award” (Premio Antonio d’Auria)

Winner with the project: Biomechatronic underactuated transradial prosthesis: SMARTHAND. The Antonio d’Auria prize (open to European citizens) awards projects and prototypes of innovative robotic devices to aid the motor disabled.

BIBLIOMETRIC DATA

(On Sept. 27, 2016)	# publications	# journal publications	# citations	h-index
Scopus	70	51	1461	21
Since 2011	50	39	671	12
Google Scholar	83		2271	23
Since 2011	46		1994	22

Citations in Each Year

Source: Google Scholar, Sept 27, 2016

The full list of publications is attached.

TEACHING AND ACADEMIC ACTIVITY

Academic teaching

Class entitled “Artificial Limbs” to the M.Sc. students in Bionics Engineering at University of Pisa and Scuola Superiore Sant’Anna since A.Y. 2016-2017 (60 hours, yearly class).

Class entitled “Embedded control systems” to the undergraduate students at Scuola Superiore Sant’Anna since A.Y. 2014-2015 (35 hours, yearly class).

Class entitled “Electrical control systems (for biomedical robots) and instrumentation” to the PhD students at Scuola Superiore Sant’Anna, A.Y. 2012-2013 (40 hours, 2nd semester).

I have also had the opportunity to advise and mentor students and post-docs (~50) at various levels, leading to interesting research, technical projects and rewarding feedback. Among these I had the chance and privilege to collaborate and fund the research activity of [..omissis..] with **Assistant Professor** positions.

Ph.D. theses [..omissis..]

Post-Docs [..omissis..]

M.Sc. theses [..omissis..]

B.Sc. projects [..omissis..]

Research Assistants projects (*assegnisti di ricerca*) [..omissis..]

Internship projects or visiting students [..omissis..]

Academic Service

Dr. Christian Cipriani serves / has served SSSA as:

- **Deputy Director** of the BioRobotics Institute (appointed by the Director), and as such member of the Governing Board of the Institute (Giunta d’Istituto) (09/2016-10/2017);
- member of the Steering Committee of the agreement between SSSA and ENEL (2016-2018);
- representative member of the Professors in the Governing Board of the BioRobotics Institute (Giunta d’Istituto) and as such, **Deputy Director** of the BioRobotics Institute (2014-2016);
- scientific responsible of the **REPAIR** (Rehabilitation Engineering and Prosthetics Applied Innovation & Research) **joint Lab**, between the BioRobotics Institute of Scuola Superiore Sant’Anna and INAIL Centro Protesi in Budrio – Bologna (November 2014-present);
- member of the Professors’ Board (Consiglio di Classe di Scienze Sperimentali) of the Scuola Superiore Sant’Anna (2014-present);
- member of the Faculty Board (Collegio dei Docenti) of the PhD course in BioRobotics of the Scuola Superiore Sant’Anna (2011-present);
- representative member of the Assistant Professors in the Governing Board of the BioRobotics Institute (Giunta d’Istituto) (2012-2014);
- member of the Scientific and Technical Committee of the joint lab between SSSA and ST Microelectronics (2011-present);
- member of the Ethical and Advisory Board for the Agreement between SSSA and the Italian Association of Work Injured (ANMIL) (2012-present);
- external examiner, or committee member for PhD defences at SSSA, University of Cagliari, University of Houston, University of Strathclyde – Glasgow.

 NATIONAL AND INTERNATIONAL FUNDED GRANTS (MAIN)

Dr. Christian Cipriani has secured/contributed to secure > **7.5 M€** to his research team (Artificial Hands Lab/Area) at SSSA, through national/international competitive grants:

Coordination of European grants proposals:

- ERC-STG-2015 #679820: **MYKI** (A Bidirectional MyoKinetic Implanted Interface for Natural Control of Artificial Limbs). 60 months project (2016-2020); total funding: **1.5 M€** (to Dr. Cipriani). *Dr. Cipriani PI.*
- H2020-2015-ICT-24a Robotics RIA#687905: **DeTOP** (Dexterous Transradial Osseointegrated Prosthesis with neural control and sensory feedback). 48 months project (2016-2020); total cost: **5.1 M€** (773 k€ to SSSA). *Dr. Cipriani Coordinator and PI.*
- FP7-ICT-2011-7 Challenge 5.5: ICT for smart and personalised inclusion. STREP #288551: **WAY** (Wearable interfaces for hAnd function recoveryY). 36 (→ amended to 44) months project (2012-2014 → 2015); total EU funding: 2250 k€ (797 k€ to SSSA). *Dr. Cipriani Coordinator and PI.*

Participation in European grant proposals (full Work Package):

- FP7-ICT-2013-10 Challenge 9.6: FET Proactive. STREP #611687: **NEBIAS** (NEurocontrolled BIdirectional Artificial upper limb and hand prosthesis). 48 months (2013-2017); total EU funding: 3500 k€ (820 k€ to SSSA). *Dr. Cipriani CO-PI*
- FP7-ICT-2011-7 Challenge 2.1: Cognitive Systems and Robotics. STREP #287888: **CogLaboration** (Successful real world human-robot collaboration: from the cognition of human-human collaboration to the cognition of fluent human-robot collaboration). 36 months (2012-2014); total EU funding: 2520 k€ (430 k€ to SSSA). *Dr. Cipriani CO-PI and Advisory Board member.*

Participation in European grant proposals (part of a Work Package):

- FP7-ICT-2011-7 Challenge 2.1: Cognitive Systems and Robotics. STREP #287894: **CYBERLEGs** (The CYBERnetic LowEr-Limb CoGnitive Ortho-prosthesis). 36 months (2012-2014); total requested EU funding: 2665 k€ (805 k€ to SSSA). *Dr. Cipriani CO-PI.*
- FP7-NMP-2008-2. Theme 4: Nanosciences, Nanotechnologies, Materials and new Production Technologies. STREP #228844: **NANOBIOTOUCH** (Nano-resolved multi-scale investigations of human tactile sensations and tissue engineered nanobiosensors). 48 months (2010-2014); total EU funding: 3745 k€ (495 k€ to SSSA). *Dr. Cipriani WP Leader.*

Coordination of national grants (Italian Ministry of Research) proposals:

- FARE 2017 (only for ERC awardee), **ARLEM** (Activity Recognition and Limb position Effect compensation for Myokinetic hand prostheses). 60 months (2017-2022); total funding: 177 k€ (177 k€ to SSSA). *Dr. Cipriani Coordinator and PI.*
- FIRB 2010 (early career grant), **MY-HAND** (Myoelectric Hand prosthesis with Afferent Non-invasive feedback Delivery). 36 (→ amended to 44) months (2012-2015); total funding: 320 k€ (320 k€ to SSSA). *Dr. Cipriani Coordinator and PI.*
- PRIN 2008, **OPENHAND** (OPEN neuro-prosthetic HAND platform for clinical trials). 24 months (2009-2010); total funding: 163 k€ (62 k€ to SSSA). *Dr. Cipriani Project Manager.*

Coordination of national grants (INAIL – National Workers Compensation) proposals:

- **PPR AS 1/2 CECA 2020** (Protesi funzionale di arto superiore con mano multi-articolata sensorizzata a controllo bio-mimetico non invasivo). 36 months project (2017-2019); total funding: 900 k€ (to SSSA). *Dr. Cipriani PI.*
- **PPR3** (Sviluppo di un sistema protesico nelle amputazioni digitali della mano). 36 months

project (2014-2016); total funding: **1.7 M€** (1.7 M€ to SSSA). *Dr. Cipriani PI.*

Participation in national grants (INAIL – National Workers Compensation) proposals:

- **PCR 1/1** (Nuove metodologia per il trattamento delle amputazioni di arto mediante osteointegrazione). 48 months project (2017-2021); total funding: 1.6Mk€ (100 k€ to SSSA). *Dr. Cipriani CO-PI.*

Work package writing in national projects (Ministry of Health):

- **MINISTERO DELLA SALUTE 2009, NEMESIS.** 36 months project (2012-2014); total funding: 530 k€ (160 k€ to SSSA). *Dr. Cipriani CO-PI.*

RESPONSIBILITIES IN NATIONAL AND INTERNATIONAL FUNDED RESEARCH PROJECTS

- Since January 2018 for 60 months **PI**, ARLEM (Activity Recognition and Limb position Effect compensation for Myokinetic hand prostheses # R16H2KJRHA) (FARE 2017).
- Since July 2017 for 48 months **CO-PI**, grant from national workers insurance (INAIL). PCR 1/1 (Nuove metodologia per il trattamento delle amputazioni di arto mediante osteointegrazione).
- Since April 2017 for 36 months **PI**, grant from national workers insurance (INAIL). PPR AS1/2 CECA 2020 (Protesi funzionale di arto superiore con mano multi-articolata sensorizzata a controllo bio-mimetico non invasivo).
- Since September 2016 for 60 months **PI**, ERC-STG-2015. MYKI (A Bidirectional MyoKinetic Implanted Interface for Natural Control of Artificial Limbs #679820).
- Since March 2016 for 48 months **PI and Coordinator**, H2020-2015-ICT-24a Robotics RIA. DeTOP (Dexterous Transradial Osseointegrated Prosthesis with neural control and sensory feedback #687905).
- Since Jan. 2014 for 36 months **PI**, grant from national workers insurance (INAIL). PPR3 (Sviluppo di un sistema protesico nelle amputazioni digitali della mano).
- Since Nov. 2013 for 48 months **CO-PI**, FP7-ICT-2013-10: FET Proactive. NEBIAS (NEurocontrolled Bidirectional Artificial upper limb and hand prosthesis #611687).
- From April 2013 to May 2015 **PI and Coordinator**, FP7 ICT- 7-5.5 WAY (Wearable interfaces for hAnd function recovery #288551).
- From March 2012 to September 2015 **PI**, MY-HAND (Myoelectric Hand prosthesis with Afferent Non-invasive feedback Devices # RBF10VCLD) (FIRB 2010 early career grant).
- From Nov. 2011 to Jan 2015 **CO-PI and Advisory Board Member**, FP7-ICT-7-2.1 CogLaboration (#287888).
- From Oct. 2011 to March 2013 **CO-PI and Project Manager**, FP7 ICT- 7-5.5 WAY (Wearable interfaces for hAnd function recovery #288551).
- From March 2010 to Nov. 2012, **Project Manager**, PRIN 2008, OPENHAND (OPEN neuro-prosthetic HAND platform for clinical trials).
- From Jan 2010 to May 2011, **Team and WP leader**, FP7 NMP-2008-1.1-1 NANOBIO TOUCH (Nano-resolved multi-scale investigations of human tactile sensations and tissue engineered nanobiosensors #228844).
- From 2006 to 2010, **Team Leader**, FP6 NMP-2004-3.4.1.1-1 SMARTHAND (The Smart bio-adaptive hand prosthesis #33423).

- From 2007 to 2008, **Team Leader**, PRIN 2006, SAFEHAND (Progettazione e sperimentazione di una protesi di mano cibernetica).
- From 2006 to 2007, **Research Engineer**, DARPA RPP 2007 (Support to the Revolutionizing Prosthetics Program 2007).
- From 2007 to 2008, **Research Engineer**, FP6 IST-2002-2.3.4.2 FET pro-actives NEUROBOTICS (The fusion of neuroscience and robotics #1917).
- From 2005 to 2007, **Research Engineer**, FP6 IST-2002-2.3.2.4 Cognitive systems ROBOTCUB (Robotic open-architecture technology for cognition, understanding and behaviour #4370).
- 2005, **Research Engineer**, FP6 IST-FET-2001 CYBERHAND (Development of a cybernetic hand prosthesis #35094).

REVIEWER FOR NATIONAL/INTERNATIONAL RESEARCH AGENCIES

- 2017, Swiss National Competence Center for Research (NCCR) in Robotics.
- 2015, Australian National Health and Medical Research (NHMRC) Academy.
- 2014, European Research Council (ERC).
- 2012, The Atlantic Canada Opportunities Agency (ACOA) (handling the AIF program).
- 2012, The Icelandic Centre for Research, RANNIS.

JOURNAL AND INTERNATIONAL CONFERENCE REVIEWING ACTIVITY, EDITORIAL APPOINTMENTS

Journals:

Applied bionics and biomechanics (Taylor & Francis), Biomedical engineering on-line (BioMed Central), IEEE Robotics & Automation Magazine, IEEE Transactions on Biomedical Engineering, IEEE Transactions on Haptics, IEEE/ASME Transactions on Mechatronics, IEEE Transactions on Neural Systems and Rehabilitation Engineering, IEEE Transactions on Robotics, International Journal of Humanoid Robotics (World Scientific Publishing), International Journal of Robotics Research (Sage), Journal of Biomechanics (Elsevier), Journal of Neural Engineering (IOP), Journal of NeuroEngineering and Rehabilitation (BioMed Central), Journal of Robotics (Hindawi), Medical Engineering and Physics (Elsevier), Robotica (Cambridge University Press), Scientific Data (Nature), Sensors & Actuators: A. Physical (Elsevier), Sensors (MDPI).

International conferences:

- 2007/15/17 IEEE/RAS Intl. Conference on Rehabilitation Robotics.
- 2008/9/11 IEEE/RSJ Intl. Conference on Intelligent Robots and Systems.
- 2008/10/11/12 IEEE/RAS Intl. Conference on Robotics and Automation.
- 2010/12 IEEE RAS/EMBS Intl. Conference on Biomedical Robotics and Biomechanics.
- 2010 IEEE Intl. Symposium in Robot and Human Interactive Communication.
- 2010/11/15 Intl. Conference of the IEEE Engineering in Medicine and Biology Society.
- 2011 Intl. IEEE EMBS Neural Engineering Conference.

Scientific Programme Committee at National/International meetings/conferences:

- 2015 IEEE/RAS Intl. Conference on Rehabilitation Robotics (ICORR).
- 2016 GNB National Congress on Bioengineering (GNB).
- 2016 IEEE Italy Section Medical Informatics Summer School (MISS).

- 2017 Human-Machine Interaction Summer School (HMISS)
- 2018 GNB National Congress on Bioengineering (GNB).
- 2018 Festival Internazionale della Robotica (in Pisa) – Coordinator of the Scientific Committee.

Editorial appointments:

- IEEE Transactions on Medical Robotics and Bionics, Associate Editor (since 2019).
- IEEE Journal of Translational Engineering in Health and Medicine, Associate Editor (since 2015).
- Applied Bionics and Biomechanics (Hindawi), Associate Editor (since 2015).
- IEEE Transactions on Neural Systems and Rehabilitation Engineering, Guest Editor, Special Theme Issue dedicated to Advances in Control of Multi-functional Powered Upper-Limb Prosthesis, vol. 22, no. 4, 2014 (July 2014).
- American Journal of Biomedical Engineering (SAP), Editorial Board (since 2012).

SCIENTIFIC SOCIETIES

- Member (since 2006) of IEEE Robotics and Automation Society.
- Member (since 2009) of IEEE Engineering in Medicine & Biology.
 - Member of the EMBS Technical Committee on BioRobotics (since 2015);
and Chair of the Sub-Committee for Road-mapping (since 2015).
- Member (since 2005) of the National Group of Bioengineering.

INVITED LECTURES

“Achievements and challenges towards the development of thought controlled prostheses,” Institute Cognitive and Clinical Neuroscience, Central Institute of Mental Health, Mannheim, Germany, February 11, 2019.

“The research on artificial hands at the BioRobotics Institute of Scuola Sant’Anna,” Robotics Research Jam Session, University of Pisa, Italy, June 11, 2018.

“MYKI: A Bidirectional MyoKinetic Implanted Interface for Natural Control of Artificial Limbs,” Workshop on ERC projects, *SMIT 2017*, Turin, Italy, November 11, 2017.

“Achievements and challenges towards the development of thought controlled prostheses,” Computer Science and Electronic Engineering Conference CEEC 2017, University of Essex, Keynote Speaker, Colchester, UK, September 28, 2017.

“Achievements and challenges towards the development of thought controlled prostheses,” School and Symposium of Advanced Neurorehabilitation SSNR 2017, Plenary Speaker, Baiona, Spain, September 17-22, 2017.

“Non-invasive, temporally discrete feedback improves grasp control of closed-loop myoelectric transradial prostheses,” Symposium at the IEEE EMBS Neural Engineering Conference, Shanghai, China, May 27, 2017.

“Achievements and challenges towards the development of thought controlled prostheses,” Jiao Tong University, Shanghai, China, May 24, 2017.

“Design and control of dexterous hand prostheses,” Workshop at Boğaziçi Üniversitesi, Istanbul, Turkey, February 2, 2017.

“Non-invasive, temporally discrete feedback improves grasp control of closed-loop myoelectric transradial prostheses,” Workshop on tactile coding and neuroprostheses, the BioRobotics Institute, Scuola Superiore Sant’Anna, Pisa, Italy, December 2, 2016.

“Design and control of dexterous hand prostheses,” II Semana Bioengenharia, Instituto Superior Tecnico Lisbon, University of Lisbon, **Key-note talk**, Portugal, March 3, 2016.

“Progress on myoelectric control of multi-graps hand prostheses,” OT Bioelettronica Day (workshop), Turin, Italy, September 25, 2015.

“Vibrotactile discrete-event sensory feedback in hand prostheses,” Symposium (workshop) organized at the 2015 ISPO World Congress, Lyon, France, June 24, 2015.

“Design and control of dexterous hand prostheses,” 6th Symposium on Bioengineering, Faculty of Engineering, University of Porto, Portugal, November 21, 2014.

“NEurocontrolled BIdirectional Artificial upper limb and hand prosthesiS (NEBIAS)” European BCI Day, 6th Intl. Brain-Computer Interface Conf., Graz University of Technology, Austria, September 16, 2014.

“WAY: Wearable interfaces for hAnd function recoverY” European BCI Day, 6th Intl. Brain-Computer Interface Conf., Graz University of Technology, Austria, September 16, 2014.

“La mano bionica: mani robotiche e interfacce di controllo indossabili,” Giornata di orientamento per gli studenti del quarto e quinto anno delle scuole superiori, Scuola Superiore Sant’Anna, March 24, 2014.

M. D’Alonzo, S. Dosen, C. Cipriani, D. Farina, “HyVE – Hybrid Vibro-Electrotactile Stimulation – is an Efficient Approach to Multi-Channel Sensory Feedback,” *IEEE Haptics Symposium*, Houston, TX, Feb. 23-26, 2014. Special invited session: outstanding papers accepted on IEEE Transactions on Haptics in 2013 (4 papers invited, presented by Dr. D’Alonzo).

“Design and control of dexterous hand prostheses,” Department of Electrical Engineering, Newcastle University, Newcastle upon Tyne, UK, October 30, 2013.

“Non-invasive control and sensory feedback in hand prostheses,” DEMOVE symposium: Translational engineering in neurorehabilitation, Medical University of Göttingen, Germany, October 22-23, 2013.

“Challenges towards the non-invasive control of dexterous hand prostheses,” TIRR Memorial Hermann Rehabilitation Hospital, Houston, Texas, June 6, 2013.

“Design and control of dexterous hand prostheses,” Department of Electrical & Computer Engineering, University of Houston, Houston, Texas, June 5, 2013.

“Design and control of dexterous hand prostheses,” Department of Engineering, **Cambridge University**, Cambridge, UK, May 30, 2013.

“Control and sensory feedback of dexterous artificial hands” MYOSENS Workshop – EMG best

practice - Department of Neurorehabilitation Engineering University Medical Center Göttingen, Germany, May 15, 2013.

"Design and control of dexterous hand prostheses," Department of Mechanical Engineering, Instrumentation & Robotics Special Seminar, **Massachusetts Institute of Technology**, Cambridge, Massachusetts, March 4, 2013.

"Design and control of dexterous hand prostheses," Vanderbilt University, Nashville, Tennessee, August 27, 2012.

"Design of dexterous hand prostheses," Department of Electrical & Computer Engineering, University of Houston, Houston, Texas, May 14, 2012.

"Design of dexterous hand prostheses," Olin Engineering Center, Marquette University, Milwaukee, Wisconsin, April 20, 2012.

"Design and control of dexterous hand prostheses," Research Grand Rounds, Medical College of Wisconsin, Milwaukee, Wisconsin, April 20, 2012.

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TECHNOLOGY TRANSFER AND PATENTS

Dr. Cipriani is the Founder of one Spin-off company of SSSA: **Prensilia Srl**. Prensilia customizes the technology resulting from the decennial research activities on artificial hands. Core products are anthropomorphic, under-actuated robotic hands to be used for education and research. Since 2009 Prensilia has sold prototypes in four continents and has fostered research activities in 20+ Institutes, including world-class leading companies in US (software) and Japan (automotive). Due to its flexibility, today the *IH2 Azzurra hand* developed by Prensilia, is one of **the most used by researchers across the world**, in the fields of upper limb prosthetics and human machine interfaces (e.g. EPFL - Switzerland, UCF - Florida, SIAT - China, DPM - Germany). Prensilia has been featured on a number of magazines including: **IEEE Spectrum**, **Le Scienze**, **Il Sole 24 ore** and **Repubblica**. (website: www.prensilia.com)

In 2013 Prensilia was selected as a finalist of the **eu-Robotics Technology Transfer Award**. In 2009 Prensilia received the **Vespucci Award** (Premio Vespucci) from the Tuscany Regional Government (Regione Toscana) on Nov. 27, i.e. 10'000 € check, to the most brilliant and innovative entrepreneurship project, open to Tuscany citizens and enterprises.

In 2019 Prensilia wins the **Red-Dot Design** award with MIA.

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Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003. 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.

