

PERSONAL INFORMATION **Franca Garzotto****WORK EXPERIENCE**

- 1999 – present **ASSOCIATE PROFESSOR**  
Associate Professor in Information and Computer Engineering at Politecnico di Milano - Dept. of Electronics, Information and Bio-engineering (DEIB)
- 2010 – present **FOUNDER AND DIRECTOR OF i3LAB - Innovative Interactive Interfaces Laboratory (<https://i3lab.polimi.it/>)**  
A multidisciplinary research lab at DEIB that currently comprises: 5 PhD students in Information Engineering; 1 PhD student in Design&Engineering; 4 Research Assistants (2 computer engineers, 1 psychologist, 1 designer) + 7 Thesis Interns (6 Computer Engineering and 2 in Design)
- 2017- present **POLIMI COORDINATOR OF EIT DIGITAL INTERNATIONAL MASTER IN HUMAN-COMPUTER INTERACTION AND DESIGN (HCID)**  
<https://masterschool.eitdigital.eu/programmes/hcid/>
- 2015- present **MEMBER OF “COMMISSIONE REGOLAMENTO DIDATTICO” IN INFORMATION AND COMPUTER ENGINEERING AT POLIMI**
- 2017-2019 **POLIMI COORDINATOR OF EIT DIGITAL INTERNATIONAL DOCTORAL SCHOOL**
- 2014-2019 **RECTOR’S REPRESENTATIVE** the Italian Node Steering Committee of EIT Digital
- 1990 - 1998 **SENIOR RESEARCHER**  
Politecnico di Milano - Dept. of Electronics, Information and Bio-engineering (DEIB)
- 1989 - 1990 **POST DOC RESEARCHER**  
Politecnico di Milano - Dept. of Electronics, Information and Bio-engineering (DEIB)

**EDUCATION AND TRAINING**

- 1989 **Doctoral degree in Information and System Engineering**  
Politecnico di Milano
- 1987 **Summer classes at Stanford University on "Building Expert Systems" (proff. M. Genesereth & D. Lenat); Knowledge Engineering (prof. J. McCarthy)**
- 1985 **Master of Science Degree in Mathematics**  
University of Padova (110/110)

## PERSONAL SKILLS

---

Mother tongue(s)

Other language(s)

## ADDITIONAL INFORMATION

---

### AWARDS AND RECOGNITION

- IBM Faculty Award 2016 (15.000 US\$) For project: "Socially Assistive Cognitive Robotics for the Elderly (SACRE)" (project coordinator)
- IBM Faculty Award 2013 (18.000 US\$) For project "Bodily Interaction on the cloud for Remote Therapy of Motor and Intellectual Disability"
- EIT Innovators Awards 2016 – Finalist For project EIT DIGITAL P3S ("Playful Supervised Smart Spaces") (Project Coordinator)
- Success Story Project Award 2015" - Award of the Directorate-General for Education and Culture of the European Commission. For project M4ALL – Motion-based adaptable playful learning experiences for children with motor and intellectual disabilities" (Project Coordinator)
- Polisocial Award 2018 (78 keu) LUDOMI- Smart Multisensory Spaces for Children with Intellectual Disability (Project Coordinator)
- Polisocial Award 2015 (79.5 keu) KROG – Social Robots for Autism (Project Coordinator)

### DEVELOPMENT OF PRODUCTS/OPEN SOURCES TOOLS/APPLICATIONS/

- MAGIC ROROM: a multisensory multimodal smart space for children's play, learning, and inclusion, developed in polisocial award project ludomi (<https://ludomi.polimi.it>) an innovative cyber physical system (<https://ludomi.polimi.it/magika/>), unique for its capability of supporting multiple interaction paradigms (based on gestures, movements, wall touch, manipulation, voice), personalization, activity configuration and real-time multimodal interaction control.
- TWB VR: a platform integrating immersive virtual reality interactive applications available on low-cost vr headsets, wearable bio-sensors, and analytic tools. vr application help persons with various cognitive impairments to develop attention skills, communication skills, and autonomy through wearable vr simulations and game-based tasks. analytic tools exploit bio-sensor data for real-time monitoring and post-therapy analysis of user's physiological parameters and inner state (e.g. stress)
- LETS SAY: a set of services for linguistic training and assessment of children with communication disorders, available on tablet, wearable vr and robots, and based on new linguistic theories and advances in conversational agents. designed in cooperation with the psycholinguistic research group at univ. milano bicocca led by a pioneer of erc synergy grant in the field
- HOLOLEARN: a kit of augmented reality (ar) multimodal applications for ms hololens (the most advanced commercial technology for wearable ar) devoted to persons with alzheimer or with intellectual disability. hololearn provides a number of simulation activities and game tasks integrated with a vocal assistant and is integrated with a smart phone app for experience configuration.
- EMOTY: a toolkit of speech-based interactive applications that play as vocal "trainers" of emotional communication skills particularly for persons with limited or null capability of expressing and recognizing emotions, which is typical, for example, of autism.

### RECENT PUBLICATIONS

2022 (Journal Paper)

Eikerling, M.; Secco, M.; Marchesi, G.; Guasti, M.T.; Vona, F.; Garzotto, F.; Lorusso, M.L. Remote Dyslexia Screening for Bilingual Children. *Multimodal Technol. Interact.* 2022, 6, 7. <https://doi.org/10.3390/mti6010007> (Journal Rank: Q2)

2022 (Conference Paper)

Corrado Pacelli, Tharushi Kinkini, De Silva Pallimulla Hewa Geeganage, Micol Spitale, Eleonora Beccaluva, Franca Garzotto. "How Would You Communicate With a Robot?": People with Neurodevelopmental Disorder's Perspective". Proc. IEEE 2022 17th ACM/IEEE International Conference on Human-Robot Interaction (HRI)-to appear

2022 (Conference Paper)

Eleonora Toscano; Micol Spitale; Franca Garzotto "Socially Assistive Robots in Smart Homes: Design Factors that Influence the User Perception". Proc. IEEE 2022 17th ACM/IEEE International Conference on Human-Robot Interaction (HRI)-to appear

2021 (Journal Paper)

Pidò, S., Crovari, P. & Garzotto, F. Modelling the bioinformatics tertiary analysis research process. *BMC Bioinformatics* 22, 452 (2021). <https://doi.org/10.1186/s12859-021-04310-5> (Journal Rank: Q1)

2021 (Journal Paper)

M. Gelsomini, M. Spitale, F. Garzotto. Phygital Interfaces for People with Intellectual Disability: an Exploratory Study at a Social Care Center Multimedia Tools and Applications. Springer – in press (Journal Rank in Engineering/Media Technology: Q1)

2021 (Journal Paper)

Eleonora Beccaluva, Fabiano Riccardi, Mattia Gianotti, Jessica Barbieri, Franca Garzotto. VIC — A Tangible User Interface to train memory skills in children with Intellectual Disability. *International Journal of Child-Computer Interaction*, 2021, <https://doi.org/10.1016/j.ijcci.2021.100376>. (Journal Rank in HCI: Q1)

2021 (Journal Paper)

P. Crovari, S. Pidò, P. Pinoli, A. Bernasconi, A. Canakoglu, F. Garzotto, S. Ceri. GeCoAgent: a Conversational Agent for Empowering Genomic Data Extraction and Analysis. *ACM Transactions on Computing for Healthcare* – in press. <https://doi.org/10.1145/3464383> (new ACM Transactions - not ranked yet)

2021 (Journal Paper)

S. Pidò, P. Crovari, F. Garzotto. Modeling the Bioinformatics Tertiary Analysis Research Process. *BMC Bioinformatics*. – accepted for publication (Journal Rank: Applied Computer Science: Q1)

2021 (Conference paper)

M. Vergari, T. Kojić, F. Vona, F. Garzotto, S. Möller, J.N. Voigt-Antons. Influence of Interactivity and Social Environments on User Experience and Social Acceptability in Virtual Reality, *2021 IEEE Virtual Reality and 3D User Interfaces (IEEE VR)*, pp. 695-704, doi: 10.1109/VR50410.2021.00096. **HONORABLE MENTION PAPER** (Conference Ranking A-)

2021 (Conference short paper/poster)

Fabio Catania, Pietro Crovari, Eleonora Beccaluva, Giorgio De Luca, Erica Colombo, Nicola Bombaci, and Franca Garzotto. 2021. Boris: a Spoken Conversational Agent for Music Production for People with Motor Disabilities. In *CHIItaly 2021: 14th Biannual Conference of the Italian SIGCHI Chapter (CHIItaly '21)*. Association for Computing Machinery, New York, NY, USA, Article 28, 1–5. DOI: <https://doi.org/10.1145/3464385.3464713>

2021 (Conference short paper/poster)

F. Catania, M. Spitale, F. Garzotto. Toward the Introduction of Google Assistant in Therapy for Children with Neurodevelopmental Disorders: An Exploratory Study. Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, New York, NY, USA, Article 272, 1–7. DOI: <https://doi.org/10.1145/3411763.3451666> (Conference Ranking A++)

2021 (Conference short paper/poster)

M. Spitale, S. Silleresi, G. Leonardi, F. Arosio, B. Giustolisi, M.T. Guasti, F. Garzotto

Design Patterns of Technology-based Therapeutic Activities for Children with Language Impairments: A Psycholinguistic-Driven Approach.  
 Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, New York, NY, USA, Article 398, 1–7.  
 DOI: <https://doi.org/10.1145/3411763.3451775>  
 (Conference Ranking A++)

2021 (Conference paper)  
 E. Beccaluva, F. Garzotto, F. Vona, S. Silleresi  
 Social MatchUP: Collaborative Games in Wearable Virtual Reality for Persons with Neurodevelopmental Disorders. Proc. 2020 JCSG – Joint International Conference on Serious Games pp. 49-65 – Springer LNCS

2021 (Conference paper)  
 P. Crovari, S. Pidó, F. Garzotto, S. Ceri  
 Show, Don't Tell. Reflections on the Design of Multi-modal Conversational Interfaces.  
 Proc. 4th International Workshop on Chatbot Research and Design, CONVERSATIONS2020. Springer, LNCS pp. 64-77

2021 (Conference paper)  
 F. Catania, M. Spitale, G. Cosentino, F. Garzotto  
 Conversational Agents to Promote Children's Verbal Communication Skills  
 Proc. 4th International Workshop on Chatbot Research and Design, CONVERSATIONS2020. Springer LNCS, pp. 158-172

#### RECENT RESEARCH ACTIVITIES

Project Acronym	Time Period	Funding Institution	Funding Program	Role of the applicant	FUNDING for the APPLICANT
INCLUDE- AI enhanced mobile solutions for charities	Jan. 2022- Dec 2022	EC	EIT Digital	Project Coordinator	120.000 eu
International Summer School "Interactive Technologies for Smart Spaces "	Jan. 2022- Dec 2022	EC ACM SIGCHI Lake Como School of Advanced Studies	EIT Digital	Project Coordinator	60.000 keu (EIT) 20 keu (ACM) 5.keu (Como Lake School)
5A- Autonomie per l'Autismo Attraverso realtà virtuale, realtà aumentata, e Agenti conversazionali	March. 2021- Marc 2023	TIM Foundation	Bando Fond. TIM "Liberi di Comunicare"	Project Coordinator	200.000 eu
SARA++- Smart Social Robots for the Elderly	Jan. 2021- Dec. 2021	EC	EIT Digital	WP Leader	80.000 eu
ART- Augmented Reality for Tourism	Sept. 2020- Dec. 2021	EC	EIT Digital	WP Leader	115.000 eu
COVID 19- UNUS TERRA	Aug. 2020- Dec. 2020	EC	EIT Digital	WP Leader	120.000 eu
COVID 19-DLUB- Don't Let Us Behind	Aug. 2020- Dec. 2020	EC	EIT Digital	Technical Coordinator(*) + WP Leader	130.000 eu
Marie Curie International Training Network "MULTIMIND"	Jan 2020- Dec	EC	MSCA	Subcontractor	30 keu

	2022				
LETSSAY - Conversational Technology for Speech and Language Therapy	Sept 2019- Dec. 2020	EC	EIT Digital	Technical Coordinator(*) + WP Leader	225.500 eu
TWB – Therapeutic Services based on Wearable Virtual Reality and Bio-sensors	Sept. 2017- Dec. 2019	EC	EIT Digital	Technical Coordinator(*) + WP Leader	407.220 eu

## TEACHING ACTIVITIES

Institution name	Course name	CFU	No. of students	Reference Study Course	Time period
POLIMI	Hypermedia applications (web and multimedia)	5	120-270	CSE Master Also offered to 4 Masters in Engineering and 6 Masters in Design	Since 1998
POLIMI	Advanced User Interfaces	5	80-94	CSE Master Also offered to 3 Masters in Engineering and 2 Masters in Design	Since 2006
POLIMI	Interaction Design Studio/Applied Informatics	6	45	Master in Communication Design and Master in Digital Interaction Design	Since 1998
POLIMI	Le tecnologie interattive in una prospettiva centrata sull'utente: Design partecipativo e studi empirici	1	75	"Didattica Innovativa" Passion in Action Program @Polimi; course offered to Polimi Master Students in CSE and Design	Nov. 2019
POLIMI	Trattare di scienza: Introduzione (semi) seria alla divulgazione scientifica (2nd edition)	1	253	"Didattica Innovativa"- Passion in Action Program; course offered to all Polimi Students	April-May 2021
POLIMI	Trattare di scienza: Introduzione (semi) seria alla divulgazione scientifica (1st edition)	1	130	"Didattica Innovativa"- Passion in Action Program; course offered to all Polimi Students	April-May 2020
POLIMI	UNIVERSALMENTE– Hack your talent	1	65	"Didattica Innovativa"- (Hackaton) Passion in Action Program; course offered to all Polimi Students	April-May 2020
University of Tampere	Smart Objects and Smart Spaces	1	20	PhD Course (3 Days) at the Computer Science Department of UniTampere	June 2019
Marie Curie International Training Network "MULTIMIND"	"Ubiquitous computing: New directions for language learning"	N/A	50	Invited full- day PhD course 1st PhD Summer School of Marie Curie International Training Network "MULTIMIND"	Sept. 2019
EIT Digital + Lake Como School of Advanced Studies	International Summer School "Interactive Technologies for Smart Spaces "	3	50 Master and PhD international students (expected)	N/A <i>Note: 2 weeks event Co-Funded by ACM SIGCHI and EIT Digital I am the Summer School Director</i>	July 2022