

## PERSONAL INFORMATION

**Danilo Canepa**

Sex | Date of birth 30/01/1997 | Nationality

## PREFERRED JOB

**Biomedical engineer in the rehabilitation context**

## WORK EXPERIENCE

November 2023 – Current

**Phd in in Bioengineering and Robotics**University of Genoa, Italy  
Thesis advisors: Maura Casadio

June 2023 – November 2023

**Research fellow**University of Genoa, Italy  
Unità Spinale-Santa Corona in Pietra Ligure  
▪ Title: Diversity aware human-robot e human-machine interfaces  
Thesis advisors: Maura Casadio

## EDUCATION AND TRAINING

September 2020 – March 2022

**Master's degree in Rehabilitation Engineering and Biomaterials**  
Graduation mark: 110/110 cum laudeUniversity of Genoa, Italy  
▪ Thesis Social robot for people with spinal cord injury  
Thesis advisors: Maura Casadio

September 2016 – July 2020

**Bachelor's degree in Biomedical Engineering**  
Graduation mark: 98/110University of Genoa, Italy  
▪ Thesis: Evaluation of the ability to identify where a change has occurred in an Immersive Virtual Reality scenario  
Thesis advisors: Fabio Solari

2011 – 2016

**High school diploma**  
Mark: 88/100

Scientific High Luigi Lanfranconi, Genoa

PAPERS

June 2023 Paper submitted and accepted for presentation at the 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023)  
 Title: "Diversity-Aware verbal interaction between a robot and people with Spinal Cord Injury"

CONFERENCES

November 2023 I've attended the conference "XIV CORSO ANNUALE SIMS FARE SISTEMA IN UNITA' SPINALE. Non chi comincia, ma quel che persevera".  
 Location: Portonovo, Ancona  
 Abstract title: "Robot Sociale per Persone Affette da Lesione Midollare"  
 Award: For this work I won an award for the best innovative project

MENTORING

2023 - 2024 Federica Tignonsini, master student in Bioengineering, DIBRIS, University of Genoa, GE, Italy.  
 Project: Study shoulder pain in professional water polo players

2022 - 2023 Anna Mortelli, bachelor student in Biomedical Engineering, DIBRIS, University of Genoa, GE, Italy.  
 Project: Exoskeleton-assisted walking: Rehabilitation treatment effects on individuals with spinal cord injury

PRESENTATIONS

May 2024 I was invited to present my thesis work and the ethical aspects linked to it at the course "APPROCCI SPERIMENTALI ALLA NEUROINGEGNERIA" of the bachelor degree in biomedical engineering of the University of Genoa

April 2023 After my degree I've exposed my work at Unità Spinale-Santa Corona in Pietra Ligure to the clinician and patients of the hospital

August 2022 I've presented my thesis project at Unità Spinale-Santa Corona in Pietra Ligure to the clinician and patients of the hospital.

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	B2	C1

FCE, December 2015

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	A1	A1	A1	A1	A1

FCE, December 2015

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through my thesis experience
- attitude in team working gained through my studies and projects
- good ability to interact with people who work in hospital and with the patients, acquired during my study period at Unità Spinale-Santa Corona in Pietra Ligure in which I did my thesis project I always try to actively participate in the group as I think teamwork is a stimulating and effective way for achieving goals.

Organisational / managerial skills

- background in managing and organizing activities acquired through my hospital experience and projects
- ability to manage and coordinate activities acquired through my hospital experience and projects I adapt myself quickly to new situations and always try to acquire new skills that may be useful in my work. I can efficiently manage the time, meeting deadlines, fixing priorities, and working independently.

Computer skills

- good knowledge of C++ and of Matlab
- good knowledge of Microsoft Office™ tools
- experience in using Arduino IDE and python
- basic knowledge of the design software 2D CAD (Autocad LT)

Driving licence ▪ B

## ADDITIONAL INFORMATION

- Project work
- “Biomechanics of jumping rope”- a project for the course of *Sports Biomechanics*, academic year 2021-22.  
Data registration and analysis of jumping rope using markers, cameras, and Matlab.
  - “Horus – *A pair of glasses for blind people*” - a project for the course of *Motor control and human performance assessment*, academic year 2021-22.  
Development of a wearable device (glasses) to enable blind people to detect obstacles and signal them through sound impulse
  - “Motor unit sorting”- a project for the course of *Analysis of Biomedical Data and Signals*, academic year 2021-22.  
Data analysis of an EMG signal referring to the trapezius muscle using Matlab.
- Articles
- “Robot umanoidi per l’assistenza alle persone con lesioni midollari al Santa Corona”  
<https://liguria.bizjournal.it/2022/08/robot-umanoidi-per-lassistenza-alle-persone-con-lesioni-midollari-al-santa-corona/>
- “Robot umanoidi all’Unità Spinale del Santa Corona, prima applicazione in Italia”  
<https://www.ivg.it/2022/08/robot-umanoidi-allunita-spinale-del-santa-corona-prima-applicazione-in-italia/>
- “Robot umanoidi per l’assistenza alle persone con lesioni midollari al Santa Corona”  
<https://www.asl2.liguria.it/tutte-le-notizie/1160-al-santa-corona-robot-assistenza-persona-con-lesioni-midollari.html>
- “TgR Buone Notizie: il robot Pepper al servizio dei pazienti”  
”[https://www.rainews.it/tgr/liguria/video/2022/12/tgr-buone-notizie-il-robot-pepper-al-servizio-dei-pazienti-5dee06db-172b-41ef-9302-3e5c897645fb.html?nxtep&fbclid=IwAR3b7oTcqMU6sORkBF\\_RA8L8woW8TC8LCivMDMErzmHw27TwyRpSZIOAWo](https://www.rainews.it/tgr/liguria/video/2022/12/tgr-buone-notizie-il-robot-pepper-al-servizio-dei-pazienti-5dee06db-172b-41ef-9302-3e5c897645fb.html?nxtep&fbclid=IwAR3b7oTcqMU6sORkBF_RA8L8woW8TC8LCivMDMErzmHw27TwyRpSZIOAWo)”
- “TG di Scienza e Ambiente a cura della redazione scientifica della Tgr Piemonte”  
<https://www.rainews.it/tgr/rubriche/leonardo/video/2022/12/TGR-Leonardo-del-21122022-f2042b52-3336-4c08-8b77-783814d68733.html>