



Beatrice Lagomarsino

Work

Email: _____

Nationality:

WORK EXPERIENCE

[11/2022 – Current]

PhD Student

University of Genoa, Italy

Curriculum: Bioengineering and Robotics at Department of Informatics, Bioengineering, Robotics and Systems Engineering.

Collaboration with Movendo Technology srl, Genoa, Italy

Study area: rehabilitation, computer vision

EDUCATION AND TRAINING

[09/2020 – 10/2022]

Master's Degree in Bioengineering

University of Genoa

Country: Italy

Final grade: 110/110 cum laude

Thesis: Adaptive response of muscle activity in exoskeleton-assisted locomotion (in collaboration with Unipolar Spinal Unit of the Santa Corona Hospital, Pietra Ligure, Savona, Italy)

[09/2017 – 09/2020]

Bachelor's Degree in Biomedical Engineering

University of Genoa

Country: Italy

Final grade: 93/110

Thesis: Analysis of data of motor rehabilitation through exergames for musculoskeletal disorders. Processing of data from rehabilitation activities through serious- games. Algorithms for the evaluation of patient performance through the definition and classification of indicators of movement

[2012 – 2017]

Diploma from classical high school

High School Giovanni da Vigo

Country: Italy

Final grade: 100/100

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

MATLAB | Python | ARDUINO IDE | LaTeX | C++

CONFERENCES AND SEMINARS

[07/2022] **8th International Summer School of Neuroengineering** Genoa, Italy

[06/2023] **Towards a Continuum of Robot-assisted Therapy Summer School** Brissago, Switzerland

- Plenary lectures by experts in the field of assistive technology and neurorehabilitation
- Case studies, and discussion with patients and therapists
- Poster sessions (Poster presented, '*Adaptive response of muscle activity to exoskeleton-assisted walking*')

[06/2023] **Deep Learning and Computer Vision School (DLCV)** Genoa, Italy

Poster presented, '*Advanced computer-vision techniques in body machine interfaces for rehabilitation and assistance of people with neurological diseases*'

PROJECTS

[04/2022 – 10/10/2022] **Adaptive response of muscle activity to exoskeleton-assisted walking**

Master thesis project.

The specific goals were:

- examine whether the muscle activation of unimpaired subjects changed during a one-hour training at maximum assistance to evaluate the presence of an adaptive response
- compare muscle activations during walking with and without the exoskeleton

[11/2022 – Current]

Advanced computer-vision techniques in body machine interfaces for rehabilitation and assistance of people with neurological diseases

The main goal of my project is to develop a product based on open-source pose estimation that extracts and quantifies kinematic and dynamic parameters from video, provides a correct assessment of the impairment level, guides users through a set of exercises (involving interaction with objects of their everyday life) to rehabilitate defective functional areas.
