

# LETIZIA CERUTTI

Biomedical Engineer



## PROFILE

I am a determined Phd student in Neuroengineering and Neurotechnologies, with a great passion for studying the principles behind brain function and the application of cutting-edge technologies.

## EDUCATION

Phd in Bioengineering and Robotics

University of Genoa

📅 November 223 - Ongoing

- Engineering Polymeric Nanoparticles for Targeting Neuronal Cells

Master's Degree in Bioengineering

University of Genoa

📅 September 2021 - October 2023

- Specialization in Neuroengineering

Bachelor's Degree in Physics Engineering

Polytechnic University of Milan

📅 September 2017 - July 2021

High School Diploma

Liceo Linguistico Galileo Galilei (Gozzano, Italy)

📅 September 2012 - July 2017

## STRENGTHS

Programming Languages and Softwares

Matlab

Python

Unity

Simulink

Microsoft Office

ImageJ

SpyCodePro

## LANGUAGES

English - C1



Spanish - C1



German - B1



## PROJECTS

Microstructure in EEG signals

Matlab

📅 2022

- Acquired skills: unsupervised learning methods applied to the analysis of EEG signals.

Medical Simulation

Unity

📅 2022

- Acquired skills: programming in Unity to set up a hospital-like environment.

Functional Connectivity Analyses of Neural Signals

Matlab

📅 2022

- Acquired skills: neural signal analyses in Matlab applied to intracortical signals of rats before and after a lesion.

Spettroscopia ottica a singolo rivelatore tramite conversione tempo - spettro

Python

📅 2020-2021

- Acquired skills: analyses of data collected through Time-Correlated Single Photon Counting.

## PUBLICATIONS

Peer-Reviewed Conference Proceedings

Poster at the National Congress of Bioengineering

📅 2023

- Authors: Martina Brofiga, Francesca Callegari, Fabio Poggio, Ilaria Donati della Lunga, Letizia Cerutti, Mariateresa Tedesco and Paolo Massobrio
- Title: Interconnected brain regions-on-a-chip: role of connectivity and heterogeneity in the electrophysiological activity

Poster at the Maxwell Summit

📅 2023

- Authors: Martina Brofiga, Francesca Callegari, Fabio Poggio, Ilaria Donati della Lunga, Letizia Cerutti, Mariateresa Tedesco and Paolo Massobrio
- Title: Investigation of the cortical-hippocampal circuit in a brain-on-a-chip model