

# Alessandro Corsini

---

## Current Position

---

### Ph.D. Student in Translational Neuroscience and Neurotechnology

Center of Translational Neurophysiology for Speech and Communication (CTNSC@UniFe), Istituto Italiano di Tecnologia  
Department of Neuroscience and Rehabilitation, University of Ferrara

Via Fossato di Mortara 19, Ferrara, Italy, 44121

E-mail: [crslsn1@unife.it](mailto:crslsn1@unife.it)

WebSite: <https://alessandrocorsini.github.io>

GitHub: <https://github.com/AlessandroCorsini>

Linkedin: <https://www.linkedin.com/in/alessandro-corsini-8b1887158>

X: <https://twitter.com/Alessan86081796>

## Job Experience

---

### Research and development intern

Organic Bioelectronics Srl

Mar. – Aug. 2022 (Ferrara, Italy)

- Electrophysiological signal processing (EEG, EMG)
- Scientific literature research and writing

## Education

---

### Ph.D. in Translational Neuroscience and Neurotechnology

University of Ferrara

Nov. 2022 – To Date (Ferrara, Italy)

### M.Sc. in Innovation in Information and Communication Technology

Technische Universität Berlin

Sept. 2020 – Oct. 2022 (Berlin, Germany)

Final grade: 1.5 / 1.0

### M.Sc. in Computer Science and Engineering

Politecnico di Milano

Sept. 2020 – Sept. 2022 (Milan, Italy)

Final grade: 110/110 cum Laude

### B.Sc. in Engineering of Computing Systems

Politecnico di Milano

Sept. 2017 – Sept. 2020 (Milan, Italy)

Final grade: 104/110

### High School Diploma

Liceo Scientifico “Cosimo De Giorgi”

2012 – 2017 (Lecce, Italy)

Final grade: 100/100 cum Laude

## Other certifications

---

### Computational Neuroscience

Neuromatch Academy

July 2023

Certificate : <https://alessandrocorsini.github.io/docs/Neuromatch%20Comp%20Neuroscience.pdf>

- Machine and Deep learning
- Dynamical systems
- Stochastic processes
- ECoG-based motor imagery of tongue and hand gestures

Course material : [compneuro.neuromatch.io/tutorials/intro.html](http://compneuro.neuromatch.io/tutorials/intro.html)

Project: [github.com/AlessandroCorsini/NMA\\_2023\\_MotorImagery](https://github.com/AlessandroCorsini/NMA_2023_MotorImagery)

### EIT Label in Human-Computer Interaction & Design

(Minor in Innovation & Entrepreneurship)

European Institute of Innovation and Technology (EIT) Digital Master School

Nov. 2022

### Digital Transformation for Organisational Resilience

EIT Digital & School of Economics and Business of Lubljana

Aug. 2021

- Lean startup approach
- Business model
- Innovation & Entrepreneurship

### Hack the NECSTCamp

NECSTLab & Politecnico di Milano

Nov. 2020

Certificate : <https://best.it/award/show/ga2VnZm2SgSp7CfsgvSIhA>

- Hackathon
- Software development for a smart alarm

### EleMenti d'Impresa

Politecnico di Milano

Dec. 2019

Certificate : <https://best.it/badge/show/1000>

- Innovation & Entrepreneurship

## Relevant projects

---

### Encoding of articulatory features (ArticEncod\_difficulty)

CTNSC@Unife

GitHub : [https://github.com/AlessandroCorsini/articEncod\\_difficulty](https://github.com/AlessandroCorsini/articEncod_difficulty)

### Python package for Partial Information Decomposition (PyPID\_mvn)

CTNSC@Unife

GitHub : [https://github.com/AlessandroCorsini/PyPID\\_mvn](https://github.com/AlessandroCorsini/PyPID_mvn)

GitHub : <https://github.com/robince/partial-info-decomp>

## Relevant university projects

---

### Front-End/Back-End Headless CMS integration

DocVox & Technische Universität Berlin

Oct. 2021 – Feb. 2022 (Berlin, Germany)

GitHub : <https://github.com/DocVox-Official/app-frontend.git>; <https://github.com/DocVox-Official/cms.git>

### Digital Transformation for the next pandemic tracking

Microsoft Garage & Politecnico di Milano

Feb. – July 2021 (Milan, Italy)

Report: [https://polimi365-](https://polimi365-my.sharepoint.com/:b/g/personal/10623885_polimi_it/EYOsBJo8dyhBttHsMYKcEdcBz7Q2TCu_OU_AQGdChcw3VA?e=0HQuYa)

[my.sharepoint.com/:b/g/personal/10623885\\_polimi\\_it/EYOsBJo8dyhBttHsMYKcEdcBz7Q2TCu\\_OU\\_AQGdChcw3VA?e=0HQuYa](https://polimi365-my.sharepoint.com/:b/g/personal/10623885_polimi_it/EYOsBJo8dyhBttHsMYKcEdcBz7Q2TCu_OU_AQGdChcw3VA?e=0HQuYa)

### Advanced User Interfaces (MuseX)

i3Lab & Politecnico di Milano

Sept. – Feb. 2021 (Milan, Italy)

Natural science VR Museum in Unity, Youtube video: <https://www.youtube.com/watch?v=lo4tcn5UZQc>

### Hypermedia Applications (Invasion)

i3Lab & Politecnico di Milano

Feb. – Jul. 2022 (Milan, Italy)

GitHub : [https://github.com/AlessandroCorsini/Invasion\\_2020\\_21\\_HYP](https://github.com/AlessandroCorsini/Invasion_2020_21_HYP)

## Language

---

**English:** Advanced, **Italian:** Native

## Programming languages and Tools

---

Python, Matlab, C, Java, C++, Unity, HTML, CSS, VueJs

## Publications

---

“EEG Encoding of Speech Acoustics and Articulatory Features: A Partial Information Decomposition Study”, M.Sc. Thesis (2022), <https://hdl.handle.net/10589/195240>

## Work in progress

---

“Speech perception difficulty modulates theta-band encoding of articulatory synergies” (Submitted to J. Neurophysiology)

“Complementary neural encoding of invisible articulatory synergies” (Submitted to COSYNE 2024)