

Francesco Ponzio | Ph.D.

Corso Sicilia 41, Torino, Italy, 10133

☎ (+39) 3386305589 • ✉ francesco.ponzio@polito.it

Work Experience

Postdoctoral Researcher

Dept. of Control and Computer Engineering, Polytechnic University of Turin from 2021

Research assistant

Dept. of Control and Computer Engineering, Polytechnic University of Turin 2015-2017

Temporary research fellow

Dept. of Neuroscience, University of Turin 2014-2015

Patent Applications

IT Patent No. 102017000129971: Roatta S.; De Sperati C.; Mesin L.; Pasian V.; **Ponzio F.** Procedure and system for detecting binary responses by analyzing the pupil diameter of a subject, 2017

Founded projects

BEYOND EYE MOVEMENTS 2018

Research project founded by Compagnia Di San Paolo 2018

Devices for NeuroControl and NeuroRehabilitation, DENECON

European funded project 2015

Education

Ph.D. in Control and Computer engineering

Polytechnic University of Turin 2017-2020

Master of Science in Biomedical engineering

Polytechnic University of Turin 2012-2014

Bachelor of Science in Biomedical engineering

Polytechnic University of Turin 2009-2012

Technical Skills

Programming: Python, Matlab, R, C.

Operating systems: Linux, Windows, macOS.

AI: TensorFlow, PyTorch, Keras, scikit-learn.

Computer vision: OpenCV, ITK, VTK, ImageJ.

Data science: Strong expertise and theoretical understanding of the AI's backbone technologies (machine and deep learning). Solid know-how in statistics, data visualization, and management of big data flows.

Image processing: Traditional and learning-based image processing for classification, segmentation and object detection.

Electronics: Single board computers programming. Design of systems for detection, conditioning and processing of biomedical signals.

Biomechanics: Human motion analysis and multi-body systems dynamics.

Others: Medical instrumentation, biomedical application of electromagnetic fields, human physiology, biology, organic and inorganic chemistry.

Teaching

Currently enrolled in the teaching register*:

ING-INF/05 - SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

*Albo degli studiosi e degli esperti esterni al Politecnico di Torino qualificati allo svolgimento di attività didattica integrativa

From 2021/2022: Teaching assistant for Machine learning in application (Polytechnic University of Turin, Master's Degree). Preparation of teaching material, laboratory assignments and assistance to laboratory classroom. Language: Italian. Programming: Python.

From 2020/2021: Teaching assistant for Computer Science (Polytechnic University of Turin, Bachelor's Degree). Preparation of teaching material, laboratory assignments and assistance to laboratory classroom. Language: Italian. Programming: Python.

2021/2022, 2020/2021: Teaching assistant for AI and ML - theory and models (Polytechnic University of Turin, 2nd level Master's degree). Preparation of teaching material, laboratory assignments and assistance to laboratory classroom. Language: English. Programming: Python, R.

2019/2020: Teaching assistant for Bioinformatics (Polytechnic University of Turin, Master's Degree course). Preparation of teaching material, laboratory assignments and assistance to laboratory classroom. Tutoring of research projects on Machine/Deep Learning applied to Bioinformatics and Bioimaging. Language: English.

2018/2019, 2019/2020: Teaching assistant for Computer Science, (Polytechnic University of Turin, Bachelor's Degree course). Preparation of teaching material, laboratory assignments and assistance to laboratory classroom. Language: Italian. Programming: C.

Publications

Updated list *here*.

Languages

Italian: Mother-tongue

English: Fluent, *First Certificate in English*

I declare that I read the privacy statement on the processing of my personal data and my rights within the meaning of the General Data Protection Regulation (EU Regulation 2016/679) and Legislative decree no.196 of 30th June 2003. I hereby give my consent to the processing of my personal data included in my CV.