

## **PERSONAL INFORMATION**

Family name, First name: Presti, Paolo

ORCID 0000-0002-1274-538X

## **CURRENT POSITION**

PhD Candidate in Neuroscience at the University of Parma, Department of Medicine and Surgery, Parma, Italy,  
Supervisor(s) Dr. Pietro Avanzini, Dr. Giovanni Vecchiato

## **PREVIOUS POSITIONS**

11/2019 – Current Position

PhD Candidate in Neuroscience, University of Parma, Department of Medicine and Surgery, Parma, Italy,  
Supervisor(s) Dr. Pietro Avanzini, Dr. Giovanni Vecchiato

09/2019 – 11/2019

Post-graduate Research Fellowship, University of Parma, Department of Medicine and Surgery, Parma, Italy,  
Supervisor(s) Dr. Pietro Avanzini, Dr. Giovanni Vecchiato

01/2018 – 07/2019

IT Consultant, Product Specialist at Lutech SPA, Via Milano 150, Cologno Monzese, Milan, Italy

10/2017 – 12/2017

Post-graduate Research Fellowship, University of Ghent, Faculty of Psychology and Educational Sciences,  
Department of Data Analysis, Ghent, Belgium, Supervisor Dr. Daniele Marinazzo

01/2017 - 06/2017

Scholarship holder for master thesis project at the University of Ghent, Faculty of Psychology and Educational Sciences, Department of Data Analysis, Ghent, Belgium, Supervisor(s): Dr. Daniele Marinazzo, Prof. Laura Astolfi.

## **MAJOR COLLABORATION**

Collaboration with Tuned, Lombardini22 architectural firm, Milano (Arch. Davide Ruzzon): study of mechanisms underpinning the perception of others' affective states modulated by the architectural experience. Analysis of behavioural and electroencephalography data collected during an immersive and dynamic experience of architectural designs in virtual reality.

## **RESEARCH INTERESTS**

Affective neuroscience, cognitive neuroscience, embodied cognition, mirror neurons, action perception, emotion perception.

## **PROGRAMMING SKILLS and SOFTWARE**

Matlab, EEGLAB, Fieldtrip, Brainstorm, C# (for programming in Unity Game Engine), Python

## **TECHNIQUES**

Electroencephalography (EEG) using a high-density 128-channels Geodesic EEG System (Electrical Geodesics Inc., Oregon) and the HydroCel Geodesic Sensor Net (GSN300).

Virtual Reality using a Head Mounted Display HTC Vive Pro Eye. Eye-tracking (pupil dilatation, fixation times, scan path).

Motion Capture using XSens technology.

## **EDUCATION**

October 21, 2017

M.Sc. in Biomedical Engineering at the University of Rome La Sapienza, Supervisor(s) Prof. Laura Astolfi, Dr. Daniele Marinazzo, Dr. Alessandra Anzolin  
Grade: 110/110 magna cum laude

March 17, 2014

B.Sc in Clinical Engineering at the University of Rome La Sapienza, Supervisor Prof. Mariagrazia Bonicelli  
Grade: 96/110

## **LANGUAGE**

Italian: Native speaker.

English: Reading skills: excellent; Writing Skills: excellent; Verbal skills: excellent.

## **PUBLICATIONS ON JOURNALS:**

### **2023**

\*Pecori, R., \***Presti, P.**, Lerina Aversano, L., Marta Cimitile M., Ruzzon, D., Fausto Caruana, F., Avanzini P., Bernardi M. L., & Vecchiato, G. (2023). AI techniques for classifying arousal judgments in dynamic virtual experience of architecture. Proceedings of International Joint Conference on Neural Networks (IJCNN) 2023, June 18 – June 23, 2023

Submitted

\*Equal Contribution

### **2022**

**Presti, P.**, Ruzzon, D., Galasso, G. M., Avanzini, P., Caruana, F., & Vecchiato, G. (2022). The Avatar's Gist: How to Transfer Affective Components From Dynamic Walking to Static Body Postures. *Frontiers in Neuroscience*, 16. <https://www.frontiersin.org/article/10.3389/fnins.2022.842433>

DOI: <https://doi.org/10.3389/fnins.2022.842433>

**Presti, P.**, Ruzzon, D., Avanzini, P., Caruana, F., Rizzolatti, G., & Vecchiato, G. (2022). Dynamic experience of architectural forms affects arousal and valence perception in virtual environments. *Scientific Reports*, 12(1), 13376.

DOI: <https://doi.org/10.1038/s41598-022-17689-9>

**Presti, P.**, Galasso, G. M., Avanzini, P., Caruana, F., Ruzzon, D., & Vecchiato, G. (2022). The dynamic experience of virtual architecture modulates the perception of others' affective states: eye-gaze and ERPs evidence. Springer Proceedings of 1st International Conference on Hybrid Societies

Paolini, S., Bazzini, MC., Rossini, M., De Marco, D., Nuara, A., **Presti, P.**, Scalona, E., Avanzini, P., Fabbri-Destro, M., (2022). Kicking in, kicking out? The role of the individual motor expertise in predicting sports actions.

Under review

### **2019**

\*Anzolin, A., \***Presti, P.**, Van De Steen, F., Astolfi, L., Haufe, S., & Marinazzo, D. (2019). Quantifying the Effect of Demixing Approaches on Directed Connectivity Estimated Between Reconstructed EEG Sources. *Brain Topography*, 32(4), 655–674.

\*Equal contribution

DOI: <https://doi.org/10.1007/s10548-019-00705-z>

## **CONFERENCES AND SYMPOSIA**

### Oral presentations

**P. Presti**, G. M. Galasso, D. Ruzzon, P. Avanzini, F. Caruana, G. Vecchiato. « The dynamic experience of virtual environments alters the perception of emotional body posture: an EEG experiment in virtual reality» Research Day Department of Medicine and Surgery, Parma, Italy, 7 October 2022

**P. Presti**, G. M. Galasso, P. Avanzini, F. Caruana, D. Ruzzon, G. Vecchiato. «The dynamic experience of architecture influences the perception of emotional body postures at an early stage: an ERP study in virtual reality» Società Italiana di Psicofisiologia e Neuroscienze Cognitive (SIPF), Udine 15-17 Septemper 2022.

**P. Presti**, G. M. Galasso, P. Avanzini, F. Caruana, D. Ruzzon, G. Vecchiato. «The dynamic experience of arousing architectures influences the perception of emotional body postures: an EEG study in virtual reality» European Society for Cognitive and Affective Neuroscience (ESCAN), Vienna 19-22 July 2022.

**P. Presti**, D. Ruzzon, G. M. Galasso, P. Avanzini, F. Caruana, G. Vecchiato. «The impact of architectural forms on the perception of emotional body postures: evidence from an adaptation aftereffect experiment in virtual reality». Italian Association of Cognitive Science (AISC), Parma 22-24 June 2022.

**P. Presti**, D. Ruzzon, F. Caruana, G. Vecchiato. «Architectural forms impact on perceived valence and arousal of virtual environments». Academy of Neuroscience for Architecture, September 16-18 2021, Salk Institute, San Diego, La Jolla.

**P. Presti**, D. Ruzzon, P. Avanzini, F. Caruana, G. Vecchiato «Linking architecture and emotions by the recognition of virtual body expressions». ICSC-2021 Rome, Italy, September 13-17, 2021.

**P. Presti**, S. Lenzi, D. Ruzzon, P. Avanzini, F. Caruana, G. Vecchiato. «The experience of virtual environments affects the perception of emotional body postures: an adaptation after effect pilot study». 8th annual Society for Affective Science conference, April 13- 16 2021.

G. Vecchiato, **P. Presti**, S. Lenzi, D. Ruzzon, P. Avanzini, F. Caruana. «An adaptation effect paradigm showing the relationship between architectural experience and the perception of body postures: a pilot study in virtual reality». 13th Annual Meeting of the Social & Affective Neuroscience Society, April 28 – May 2, 2021.

### Poster presentations

M. C. Bazzini, S. Paolini, **P. Presti**. « Revealing the role of the motor system in cognitive processing. Evidence from emotional judgement task, performance prediction and motor learning» Research Day Department of Medicine and Surgery, Parma, Italy, 7 October 2022

**P. Presti**, G. M. Galasso, P. Avanzini, F. Caruana, D. Ruzzon, G. Vecchiato. « The perception of emotional body postures is influenced by the dynamic experience of the surrounding environment: evidence from an eye-tracking study in virtual reality» Annual Retreat of the Italian National Research Council of Italy, Institute of Neuroscience, Cagliari, 22-24 September 2022.

**P. Presti**, D. Ruzzon, F. Caruana, G. Vecchiato «The dynamic experience of virtual architectural forms interacts with the perceived valence and arousal». Research Day Unipr, 1st October 2021

**P. Presti**, S. Lenzi, D. Ruzzon, P. Avanzini, F. Caruana, G. Vecchiato. «An adaptation aftereffect paradigm to investigate the social impact of built environments: behavioural and electrophysiological evidences in body judgment tasks in virtual reality». 5th HBP Student Conference on Interdisciplinary Brain Research, February 1-4 2021, Medical University Innsbruck, Switzerland.

**P. Presti**, D. Ruzzon, S. Lenzi, F. Caruana, G. Rizzolatti, P. Avanzini, G. Vecchiato. «The relationship between architecture and body expression: a pilot behavioral study in virtual reality». Academy of Neuroscience for Architecture, September 17-19 2020, Salk Institute, San Diego, La Jolla.

## LECTURES

Measuring Humans Responses to Architectural Perception - An adaptation aftereffect paradigm to investigate the social impact of built environments: behavioral and electrophysiological evidence in body judgment tasks in virtual reality. NAAD Master, neuroscience applied to architectural design, IUAV Venice, 16-01-2022.

Measuring Humans Responses to Architectural Perception - The relationship between architecture and emotional body posture: a study in virtual reality. NAAD Master, neuroscience applied to architectural design, IUAV Venice, 18-01-2021.

Measuring Humans Responses to Architectural Perception - The relationship between architecture and emotional body posture. NAAD Master, neuroscience applied to architectural design, IUAV Venice, 16-04-2020.

## GRANT AND AWARDS

09/2022

YOUNG RESEARCHER AWARD: Società di Psicofisiologia e Neuroscienze Cognitive (SIPF) – young researcher award's recipient at the XXX SIPF 2022 conference, September 15 -17. Oral presentation: «The dynamic experience of architecture influences the perception of emotional body postures at an early stage: an ERP study in virtual reality»

01/2020

TRAVEL GRANT: Neurospritz, Musica e Cervello, winner of the contest for young researcher, January 30, 2020, Rome. "Riconoscimento di azioni all'interno di ambienti architettonici, uno studio in realtà virtuale".

09/2018

BEST THESIS AWARD: Gruppo Nazionale di Bioingegneria (GNB) - Premio di Laurea "Laboratorio di Modelli, Segnali e Controllo di Sistemi Biologici", con la tesi dal titolo "Evaluation of Algorithms for the Estimation of Brain Connectivity from Neuroelectrical Signals".

Autorizzo il trattamento dei miei dati personali, ai sensi del Decreto Lgs. 196/2003 art. 7

Autocertificazione compilata ai sensi degli artt. 46 e 47 del DPR 445/2000 e s.m.i. (All. B)

Consapevole delle sanzioni penali previste in caso di dichiarazioni mendaci, falsità negli atti e uso di atti falsi (ART. 76 D.P.R 445/28. 12.2000)

Aggiornato a dicembre 2022