

CRISTINA BRAMBILLA

MSC GRADUATE IN BIOMEDICAL ENGINEERING

RESEARCH FELLOW AT STIIMA - CNR

EXPERIENCE

Research fellow

Sistemi e Tecnologie Industriali Intelligenti per il Manifatturiero Avanzato (STIIMA)

Consiglio Nazionale delle Ricerche (CNR)

Lecco (LC)

2021 –

Research topics: human movement analysis, optoelectronic and markerless tracking systems, biomechanics, biomechanical modelling, electromyography, motor control, muscle synergies.

EDUCATION

Master of science degree in Biomedical Engineering, Biomechanics and Biomaterials

Politecnico di Milano, Milano (MI)

Final mark 109/110

2017 – 2020

Thesis: Sviluppo di un modello muscolo-scheletrico di caviglia per la simulazione dinamica del cammino

Advisor: Prof. Carlo Albino Frigo

Laboratory: TBM - MBMC - Movement Biomechanics and Motor Control

March 2019 – April 2020

Bachelor of science degree in Biomedical Engineering

Politecnico di Milano, Milano (MI)

Final mark 108/110

2014 – 2017

Thesis: Analisi di modelli in vitro di patologie neurodegenerative

Other group members: Eleonora Bernardi, Annapaola Carraro

Advisor: Prof. Carmen Giordano

March – July 2017

Liceo scientifico

F. Enriques, Lissone (MB)

Final mark 87/100

2009 – 2014

PERSONAL INFORMATION

CRISTINA BRAMBILLA

Place and date of birth

Contacts

Languages

Italian (mother tongue)

English (B2, TOEIC certification in 2016, 925/990)

09/01/2023

SKILLS

Programming languages

Very good knowledge of Matlab

Good knowledge of C, Latex

Software

Very good knowledge of Microsoft Office

Good knowledge of SimWise4D, OpenSim, Vicon Nexus

Basic knowledge of Solidworks, Fluent, Unity

Soft skills

Organizational skills acquired during team projects, adaptability, teamworking, flexibility, preciseness, hardworking

PUBLICATIONS

- Scano, A., Brambilla, C., Müller, H., & Atzori, M. (2022). Mapping of the Upper Limb Work-Space: Benchmarking Four Wrist Smoothness Metrics. *Applied Sciences*, 12(24), 12643.

- Brambilla, C., & Scano, A. (2022). The Number and Structure of Muscle Synergies Depend on the Number of Recorded Muscles: A Pilot Simulation Study with OpenSim. *Sensors*, 22(22), 8584.

- Scano, A., Guanziroli, E., Mira, R.M., Brambilla, C., Molinari Tosatti, L., & Molteni, F. (2022). Biomechanical assessment of the ipsilesional upper limb in post-stroke patients during multi-joint reaching tasks: A quantitative study. *Front. Rehabil. Sci.* 3:943397.

- Brambilla, C., Atzori, M., Müller, H., d'Avella, A., & Scano, A. (2022). Spatial and temporal muscle synergies provide a dual characterization of low-dimensional and intermittent control of upper-limb movements. *bioRxiv*.

- Brambilla, C., Malosio, M., Reni, G., & Scano, A. (2022). Optimal Biomechanical Performance in Upper-Limb Gestures Depends on Velocity and Carried Load. *Biology*, 11(3), 391.

- Marano, G., Brambilla, C., Mira, R. M., Scano, A., Müller, H., & Atzori, M. (2021). Questioning domain adaptation in myoelectric hand prostheses control: an inter-and intra-subject study. *Sensors*, 21(22), 7500.

- Brambilla, C., Pirovano, I., Mira, R. M., Rizzo, G., Scano, A., & Mastropietro, A. (2021). Combined use of EMG and EEG techniques for neuromotor assessment in rehabilitative applications: a systematic review. *Sensors*, 21(21), 7014.

Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali).

09/01/2023

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