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B3LAB Newsletter N°10

November 2023

Dear B-cubici,

If anyone is missing from the B3LAB mailing list, please contact stefania.coelli@polimi.it!

CHEERS

News

Congratulation to **Anna Corti** and **Lorenzo Gianquintieri** for their new position (Junior Researcher) in our group!!

Prof **Enrico Caiani** has been invited @ Panel Debate "I settori hi-tech in Italia: leva di sviluppo per il Paese", fondazione ASPEN, Milano 27/11/2023 and to be part of the jury for the prizeo "AboutPharma Digital Awards - 11° Year"

Vice-President-Elect, Conferences Nominees

Riccardo Barbieri, Politecnico di Milano

BIO:

Dr. Riccardo Barbieri received the M.S. degree in Electrical Engineering from the University of Rome "La Sapienza", Rome, Italy, in 1992, and the Ph.D. in Biomedical Engineering from Boston University, Boston, MA, in 1998. He is currently Associate Professor at the Politecnico di Milano. His broad research interests are in the development of signal processing algorithms for the analysis of biological systems, focusing on A.I.-based computational modeling of neural information encoding and characterization of cardiovascular control pathophysiology in clinical and non-clinical environments. He is author of more than 200 peer-reviewed publications in these fields since 1994 (h-index 38). Dr.

Prof **Riccardo Barbieri** has been nominated to participate at the **Vice-President-Elect, Conferences Nominees of the IEEE EMBS.**

Stefania, Pierluigi and Marta are looking for volunteers for their study *"MUSA-spoke 2-WP4: Validazione di dispositivi wearable per l'acquisizione di parametri fisiologici durante attività motoria"*
If you'd like to participate, contact us!

Events

GiViTi critical care datathon has been a success, congratulation to all the participants!

https://www.linkedin.com/posts/giviti-gruppo-italiano-per-la-valutazione-degli-interventi-in-terapia-intensiva_datathon-ugcPost-7133762595555033090-5Mzc?utm_source=share&utm_medium=member_desktop

30/11 e 1/12, Prof. Caiani, Yijun Ren, Riccardo Gibello and Antonella Lombardi, presented at Palazzo Regione Lombardia for the final stage of Premio Nazionale Innovazione with their proposal **MONIMEDS**

Conference

E. Caiani, Sarah Solbiati and **Andrea Carpi**, will participate at the Workshop "AR/VR for Space Programmes 2023", ESA-ESTEC, 11-12/12/2023, with the presentation "Measuring physiological parameters through head-micromovements by the VR/AR headset for user bio-feedback and adaptive experience

CALL FOR PAPERS

MELECON 2024 @Porto https://2024.ieee-melecon.org/

EMBEC 2024 https://www.embec2024.org/important-dates/

EMBC 2024 https://embc.embs.org/2024/

Publications

Pirastru A, Di Tella S, Cazzoli M, Esposito F, **Baselli G**, Baglio F, Blasi V. The impact of emotional valence and stimulus habituation on fMRI signal reliability during emotion generation. Neuroimage. 2023 Nov 15;284:120457. doi: 10.1016/j.neuroimage.2023.120457. Epub ahead of print. PMID: 37977407.

Farabbi A, Mainardi L. Domain-Specific Processing Stage for Estimating Single-Trail Evoked Potential Improves CNN Performance in Detecting Error Potential. Sensors. 2023; 23(22):9049. https://doi.org/10.3390/s23229049

Tomasino, B., **Maggioni**, E., Piani, M. C., Bonivento, C., D'Agostini, S., Balestrieri, M., & Brambilla, P. (2024). The mental simulation of state/psychological stimuli in anxiety disorders: A 3T fMRI study. *Journal of Affective Disorders*, *345*, 435-442.

Edoardo M. Polo, Andrea Farabbi, Maximiliano Mollura, , Alessia Paglialonga, **Luca Mainardi**, and **Riccardo Barbieri,** "Comparative assessment of physiological responses to emotional elicitation by auditory and visual stimuli", IEEE Journal of Translational Engineering in Health and Medicine (2023).

Andrea Moglia, **Luca Marsilio**, Matteo Rossi, Maria Pinelli, Emanuele Lettieri, **Luca Mainardi**, Alfonso Manzotti, Pietro Cerveri, "Mixed Reality and Artificial Intelligence: a Holistic Approach to Multimodal Visualization and Extended Interaction in Knee Osteotomy", IEEE Journal of Translational Engineering in Health & Medicine (2023), pp. 1-11, https://doi.org/10.1109/JTEHM.2023.3335608