EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	**MAINARDI LUCA**
Address	
Telephone	
SCOPUS link	
Other link	
E-mail	
Nationality	
Date of Birth	
Gender	

WORK EXPERIENCE

• Dates (from - to)	2018-today
• Name ad address of the employer	Politecnico di Milano
• Type of business or sector	Higher Education
• Occupation or position held	**Full professor**
• Main activities and responsibilities	Chair of the Bachelor and Master Programme in Biomedical Engineering (2019-today) Co-chair of the SPiNlabS Laboratory at Politecnico di Milano (2015-today) Member of the Board of the PhD track in Bioengineering (2016-2021)

EDUCATION AND TRAINING

• Dates (from - to)	1994-1997
• Name and type of organisation providing education and training	Politecnico di Milano
• Principal subjects/occupational skills covered	Time-frequency analysis of cardiovascular signals, Biomedical signal processing
• Title of qualification awarded	**PhD in Biomedical Engineering**
• Dates (from - to)	1985-1990
• Name and type of organisation providing education and training	Politecnico di Milano
• Title of qualification awarded	Master in Electronic Engineering

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE	**ITALIAN**
OTHER LANGUAGES	**ENGLISH**

SCIENTIFIC SKILLS AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and

- Research interests (5 Key words): Biomedical signal processing, feature extraction, decision support systems in medicine, ML and Artificial intelligence methods for biosignals, emotion recognition.
- National scientific qualification as Full professor (2014)
- Author of 162 publication on Scientific Journals.

situations where teamwork is essential (for example culture and sports), etc.

- Lecturer of 2 academic courses or modules since 2010 (#1 BIOMEDICAL SIGNAL PROCESSING, #2 BIOELECTROMAGNETISM).
- Thesis supervisor or co-supervisor for more than 15 undergraduate students, 30 postgraduate students and 11 PhD students (plus 4 on-going).
- Lecturer in several advanced training courses (PhD courses: "BIOSTATISTICS & EXPERIMENTAL DESIGN", "AI METHODS for BIOENGINEERING CHALLENGES").

RELEVANT ROLES AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

- Co-chair and members of the SPiNlabS Laboratory at Politecnico di Milano
- Member of the research BBB "Biosignal, Bioimages and Bioinformatics" Laboratory at DEIB., Politecnico di Milano
- Participated > 10 funded research projects as work package leader, task leader, research team leader or research associate. The three most important ones in the last 5 years:
    - 2022-2024 PI of Politecnico Unit, EraPrMed EU project "Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular
    - Diseases" (PerCard)
    - 2016-2022: Coordinator of the Marie-Curie Action, call: H2020–MSCA–ITN–2017, GA #766082, MultidisciplinarY training networkfor ATrial fibRillation monItoring, treAtment and progression (MY-ATRIA)
    - 2016-2019: PI of Politecnico Unit, EU project, call: H2020–PHC–2015,GA #689715, BD2Decide: Big Data and models for personalized Head and Neck Cancer Decision support. (BD2Decide)
- Member of the Board of Computing in Cardiology Conference (since 2017)
- Co-Chair of Team #1 Biomedical signal processing, IEEE EMBS Conference (since 2018)
- Chair/co-Chair of the Bioengineering and biotechnology panel of the Fundação para a Ciência e a Tecnologia, I.P. (FCT), Portugal
- Member of the editorial board of the Editorial Board of Biomedical Engineering / Biomedizinische Technik, De Gruyter publisher.
- Referee for several international journals

PUBLICATION INDEXES (SCOPUS)

- NUMBER OF PUBLICATIONS: 162 (Journals) – 316 (global documents)
- TOTAL NUMBER OF CITATIONS:4252
- H-INDEX: 35 (Scopus); H-INDEX: 43 (Scholar)

10 MOST RELEVANT PUBLICATIONS

In the last 10 years.

1. D Marzorati, A Dorizza, D Bovio, C Salito, L Mainardi, P Cerveri, "Hybrid Convolutional Networks for End-to-End Event Detection in Concurrent PPG and PCG Signals Affected by Motion Artifacts", IEEE Transactions on Biomedical Engineering, (2022), ahead of print.
2. Guadalupe García-Isla, Valentina Corino, Luca Mainardi, ‘‘Poincaré Plot image and rhythm-specific atlas for atrial bigeminy and atrial fibrillation detection", IEEE Journal of Biomedical and Health Informatics (2020),25, 1093-1100.
3. Rita Laureanti, Marco Bilucaglia, Margherita Zito, Riccardo Circi, Alessandro Fici, Fiamma Rivetti, Riccardo Valesi, C Oldrini, Luca T Mainardi, Vincenzo Russo, "Emotion assessment using Machine Learning and low-cost wearable devices", 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) (2020)
4. Davide Marzorati, Dario Bovio, Caterina Salito, Luca Mainardi, Pietro Cerveri, "Chest wearable apparatus for cuffless continuous blood pressure measurements based on PPG and PCG signals", IEEE Access 55424-55437 (2020).
5. Luca Iozza, Jesús Lázaro, Luca Cerina, Davide Silvestri, Luca Mainardi, Pablo Laguna, Eduardo Gil, "Monitoring breathing rate by fusing the physiological impact of respiration on video-photoplethysmogram with head movements", (2019) Physiological measurement, 40, 9.
6. M. Bologna, V. Corino, and L. Mainardi, "Technical note: Virtual phantom analyses for preprocessing evaluation and detection of a robust feature set for MRI-radiomics of the brain," MEDICAL PHYSICS, (2019) vol. 46, pp. 5116–5123.
7. Valentina DA Corino, Rita Laureanti, Lorenzo Ferranti, Giorgio Scarpini, Federico Lombardi, Luca T Mainardi, "Detection of atrial fibrillation episodes using a wristband device", Physiological measurement, (2017), 38,5.
8. Luca Iozzia, Luca Cerina, Luca Mainardi, "A Relationships between heart-rate variability and pulse-rate variability obtained from video-PPG signal using ZCA", Physiological measurement, (2016), 37, 1934.
9. Francesco Onorati, Luca T Mainardi, Fabiola Sirca, Vincenzo Russo, Riccardo Barbieri, "Nonlinear analysis of pupillary dynamics", Biomedical Engineering/Biomedizinische Technik (2016) 61, 95-106.
10. F Onorati, R Barbieri, M Mauri, V Russo, Luca T. Mainardi, "Characterization of affective states by pupillary dynamics and autonomic correlates" Frontiers in neuroengineering 6, 9, (2013)

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Milano, 14.02.2022