

1 Short CV

Luca Mainardi received the Master Degree (Italian *Laurea*) in Electronic Engineering from the Politecnico di Milano, Italy in 1990 and the Doctorate Degree (PhD) in Biomedical Engineering in 1997 from the same University.

Academic record & Responsibilities In 2001 he joined Politecnico di Milano and he is currently with the *Dipartimento di Eletttronica, Informazione e Bioingegneria* as Full Professor. Since 1999 he is teaching *Biomedical Signals Processing Laboratory*, a course of the Master Degree in Biomedical Engineering (BME) and *Bioelectromagnetism*, a course of the Bachelor Degree in BME. Chair of the Biomedical Engineering Program (CCS) (2019-2021) and also member of the Board of the PhD track in Bioengineering. He is currently the Co-chair of the *SPiNlabS Laboratory* at Politecnico di Milano.

Research Activity & Publication record. His research activity is in the field of biomedical signal and image processing, and biomedical system modelling. He studies and develops methods for time-frequency analysis, recursive parametric identification and non-linear analysis of cardiovascular signals and series, with interest in the investigation of Atrial Fibrillation. He also studies advanced biomedical image processing techniques for features extraction, image registration and Radiomics for oncology applications. He is author of more than 140 peer reviewed papers on international journals and more than 160 conference papers. He authored 18 book chapters and 2 books (one in Italian). He was co-editor of the Special Issue *Processing and Interpretation of Cardiac Signal during Atrial Fibrillation* of the IEEE-EMB Magazine (2006) and co-editor of the Focus Issue on *Biosignal interpretation I. Advanced methods for studying cardiovascular and respiratory systems* of Methods Information in Medicine (2014). *Scopus h-index: 32; Scholar h-index: 43*. More details can be found [here](#).

Research Grants & Funds. Since 2001, he has been the PI of several industrial and institutional Research grants. Currently, he is the Coordinator of the EU Marie-Curie project *MY-ATRIA:Multidisciplinary training network for Atrial fibrillation monitoring, treatment and progression* (2017–2021) under the H2020 program framework (GA-766082) and the PI of Politecnico Unit in the EU project *BD2Decide: Big Data and models for personalized Head and Neck Cancer Decision support* (2016-2019) (GA-689715).

Scientific & Editorial Boards. He is member of the Editorial Board of the journal *Biomedical Engineering - Biomedizinische Technik* (deGruyter) and member of the International Advisory Board of the Journal *Physiological Measurements* (IOPScience). Member of the Directory Board of the Italian National Group of Bioengineering (GNB) in the period 2004–2007, he was elected Chair of the International Medical Informatics Association (IMIA) WG7 on Biomedical Pattern Recognition for two terms (2010-2017) and also Chair of the EMBS *Technical Committee on Biomedical Signal Processing* (2017-2020). He is member of the Board of *Computing in Cardiology* (CinC) annual Conference.

