### EUROPEAN CURRICULUM VITAE FORMAT



### **PERSONAL INFORMATION**

Name Address Telephone Fax

> E-mail Website

FRANCESCO AMATO

**OMISSIS** 

Nationality

Date of birth

### **GENERAL RESEARCH INTERESTS**

Control theory and applications
Systems and Synthetic Biology
Biomedical Signal and Image Processing
Modeling and Management of Healthcare Systems

### **BIBLIOMETRIC SUMMARY DATA**

• Total international publications

Total citations

• Total cited paper

H-index

[362] source scholar.google.com [8176] source scholar.google.com

[259] source scholar.google.com

[41] source scholar.google.com

#### **EDUCATION AND TRAINING**

• Dates (from – to)

• Name and type of organization providing education and training

Principal subjects/occupational skills covered

• Title of qualification awarded

• Dates (from – to)

Name and type of organization
 Page 1 - Curriculum vitae of
 AMATO, Francesco

1990-1994

Università degli studi di Napoli Federico II

PhD student

PhD in Electronic Engineering

1983-1990

Università degli studi di Napoli Federico II

providing education and training

Principal subjects/occupational skills covered

Student

· Title of qualification awarded

Laurea degree in Electronic Engineering

#### PRINCIPAL POSITIONS

• Dates (from - to)

2018-

Name and address of employer

Università degli Studi di Napoli Federico II

Full Professor of Biomedical Engineering

• Type of business or sector

Educational

Occupation or position held
 Main activities and responsibilities

Teaching and research; dean of the School of Biomedical Engineering

• Dates (from – to)

2003-18

· Name and address of employer

Università degli studi Magna Græcia di Catanzaro

• Type of business or sector

Educational

• Occupation or position held

Full Professor of Automatic Control (2003-10); Full Professor of Biomedical Engineering (2010-18)

· Main activities and responsibilities

Teaching and research; dean of the School of Biomedical Engineering; coordinator of the PhD program in Biomedical and Computer Engineering; vice-president of the School of Medicine and Surgery

• Dates (from - to)

2001-03

Name and address of employer

Università degli Studi Mediterranea di Reggio Calabria

• Type of business or sector

Educational

· Occupation or position held

Full Professor of Automatic Control

Main activities and responsibilities

To

Teaching and research; coordinator of the PhD program in Electrical and Automation Engineering

#### **ADDITIONAL POSITIONS**

Dates (from – to)

1998-2001

• Name and address of employer

· Main activities and responsibilities

Università degli Studi di Napoli Federico II

• Type of business or sector

Educational

Occupation or position held

Associate Professor of Automatic Control

Teaching and research

#### **VISITING POSITIONS**

• Dates (from - to)

1992-93

· Name and address of employer

Purdue University (Indiana, USA)

• Type of business or sector

Educational

Occupation or position held

Visiting Scholar

• Main activities and responsibilities

Research

#### **TEACHING**

CurrentPast

Biomedical Signal Analysis; Foundation of Bioengineering; Physiological Control Systems Systems Theory; Automatic Control

### **GRANTS & PROJECTS**

• Dates (from - to)

2012-16

[€]

• Name of the project

title: Modelli innovativi di riparazione per rigenerazione di tessuti in traumi ortopedici Funded by the Ministry of University and Research under the FIRB program

Description

PI Università di Catanzaro

Total grant

Page 2 - Curriculum vitae of AMATO, Francesco

• Dates (from – to) 2010-13

• Name of the project Brain-computer interface devices to support individual autonomy in locked-in individuals

(BRINDISYS)" Funded by ARISLA

• Description PI Università di Catanzaro

• Total grant [129000 €]

## SELECTED PUBLICATIONS AND RESEARCH REPORTS

- [1] A. M. Ponsiglione, Francesco Amato\*, M. Romano\*, Multiparametric Investigation of Dynamics in Fetal Heart Rate Signals. *Bioengineering*, 9, 8, 1—17, 2021.
- [2] A. M. Ponsiglione, C. Cosentino, G. Cesarelli, F. Amato, M. Romano, A Comprehensive Review of Techniques for Processing and Analyzing Fetal Heart Rate Signals, *Sensors*, 21, 6136, 2021.
- [3] A. Procopio, S. De Rosa, F. Montefusco, G. Canino, A. Merola, J. Sabatino, J. Ielapi, C. Indolfi, F. Amato, C. Cosentino, CBRA: Cardiac biomarkers release analyzer, *Computer Methods and Programs in Biomedicine*, 204, 10.1016/j.cmpb.2021.106037, 2021.
- [4] A. Procopio, S. De Rosa, C. Covello, A. Merola, J. Sabatino, A. De Luca, C. Liebetrau, C. W. Hamm, C. Indolfi, F. Amato, C. Cosentino, Estimation of the acute myocardial infarction onset time based on time-course acquisitions, *Annals of Biomedical Engineering*, https://doi.org/10.1007/s10439-020-02568-z, 2020.
- [5] C. Ricciardi, G. Improta, F. Amato,G. Cesarelli, M. Romano, Classifying the type of delivery from cardiotocographic signals: A machine learning approach, *Computer Methods and Programs in Biomedicine*, 196, 2020.
- [6] A. Procopio, S. De Rosa, M. R. García, C. Covello, A. Merola, J. Sabatino, A. De Luca, C. Indolfi, F. Amato, C. Cosentino, Experimental Modeling and Identification of Cardiac Biomarkers Release in Acute Myocardial Infarction, *IEEE Trans. Contr. Syst. Tech.*, 28(1), 183—195, 2020.
- [7] M. F. Spadea, G. Pileggi, P. Zaffino, P. Salome, C. Catana, D. Izquierdo-Garcia, F. Amato, J. Seco, Deep Convolution Neural Network (DCNN) Multiplane Approach to Synthetic CT Generation From MR images Application in Brain Proton Therapy, Int. Journal of Radiation Oncology Biology Physics, 105, 495—503, 2019.
- [8] F. Amato, R. Ambrosino, M. Ariola, G. De Tommasi, A. Pironti, On the finite-time boundedness of linear systems, *Automatica*, (107), 454-466, 2019.
- [9] A. Melina, N. N. Dinh, B. Tafuri, G. Schipani, S. Nisticò, C. Cosentino, F. Amato, D. Thiboutot, A. Cherubini, Artificial Intelligence for the Objective Evaluation of Acne Investigator Global Assessment, *J. of Drugs in Dermatology*, Vol. 17(9), 602—605, 2018.
- [10] G. Pileggi, C. Speier, G. C. Sharp, D. Izquierdo Garcia, C. Catana, J. Pursley, F. Amato, J. Seco, M. F. Spadea, Proton Range shift analysis on brain pseudo-CT generated from T1 and T2 MR, Acta Oncologica, 1—11, 2018.
- [11] P. Zaffino, D. Ciardo, P. Raudaschl, K. Fritscher, R. Ricotti, D Alterio, G. Marvaso, C. Fodor, G. Baroni, F. Amato, R. Orecchia, B. A. Jereczek-Fossa, G. C. Sharp, M. F. Spadea, Multi atlas based segmentation: should we prefer the best atlas group over the group of best atlases?, *Physics in Medicine & Biology*, 63, 1—9, 2018.
- [12] A. Merola, D. Colacino, C. Cosentino, F. Amato, Model-based tracking control design, implementation of embedded digital controller and testing of a biomechatronic device for robotic rehabilitation, *Mechatronics*, 52, 70—77, 2018.
- [13] V. Onesto, R. Narducci, F. Amato, L. Cancedda, F. Gentile, The effect of connectivity on information in neural networks, *Integrative Biology*, 121-127, 2018.
- [14] F. Amato, M. Darouach, G. De Tommasi, Finite-time

- stabilizability, detectability, and dynamic output feedback finite-time stabilization of linear systems, *IEEE Trans. Auto. Contr.*, 6521--6528, 2017.
- [15] V. Onesto, L. Cancedda, M. L. Coluccio, M. Nanni, M. Pesce, N. Malara, M. Cesarelli, E. Di Fabrizio, F. Amato, F. Gentile, Nanotopography Enhances Communication in Neural Cells Networks, *Scientific Reports*, 2017.
- [16] M. Romano, P. Bifulco, A. M. Ponsiglione, G. D. Gargiulo, F. Amato, M. Cesarelli, Evaluation of floatingline and foetal heart rate variability, *J. Biomedical Proc. Contr.*, 2017.
- [17] A. Cherubini, M. E. Caligiuri, P. Peran, U. Sabatini, C. Cosentino, F. Amato, Importance of Multimodal MRI in Characterizing Brain Tissue and its Potential Application for Individual Age Prediction, *IEEE J. Biomedical Health Inf.* 1232—39, September 2016.
- [18] V. Onesto, C. Cosentino, E. Di Fabrizio, M. Cesarelli, F. Amato, F. Gentile, Information in a network of neuronal cells: effect of cell density and short-term depression, *Biomed Reseach International*, June 2016.

# PERSONAL SKILLS AND COMPETENCES

Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.

MOTHER TONGUE

**I**TALIAN

OTHER LANGUAGES

#### **ENGLISH**

- · Reading skills
- EXCELLENT
- Writing skills
- EXCELLENT
- Verbal skills

EXCELLENT

SOCIAL SKILLS

AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential. [ Describe these competences and indicate where they were acquired. ]

# ORGANISATIONAL SKILLS AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work.

[ Describe these competences and indicate where they were acquired. ]

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.

Naples, 04/05/2022 Francesco Amato Signature

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