

## Curriculum vitae et studiorum of FRANCESCO BELTRAME

April, the 8<sup>th</sup>, 2013

Born in Genoa, Italy, September the 11th, 1953.

Classical High School Degree at Liceo A. D'Oria, Genoa, Italy, 1971 (60/60 marks).

Laurea degree in Electronic Engineering, University of Genoa, Italy, 1977 (110/110 marks *cum laude*) and Italian National Qualification ("Esame di Stato") to practice the profession of Engineer.

- 75- Member of the Institute of Electrical and Electronics Engineers (IEEE) and of the Italian Electrical Engineers Association (AEIT).
- 77 Teaching assistant to the course of Introduction to Digital Computers.
- 77-78 Visiting Scientist (Faculty *status*) at the Department of Physiology and Biophysics of Temple University, Philadelphia, USA. Research activities in the area of image analysis of cells during chemical cancerogenesis and during the biological development phases of primary tumors.
- 77-81 National Research Council of Italy (CNR) fellowship at the Electrical Engineering Institute of the Engineering School of the University of Genoa, Italy, working on digital image processing of biostructures in optical microscopy and studies on interactions between electromagnetic fields and biostructures. Teaching activities in the course of Semiconductor Devices.
- 79 Research Associate (Faculty *status*) at the Department of Physiology and Biophysics of Temple University, Philadelphia, USA, with research activity on the 3D structure of chromatin-DNA on human cells *in situ* at optical microscopy level.
- 79-80 Teaching activity in the course of Applied Biophysics at the Engineering School of the University of Genoa, Italy.
- 80-83 CNR (the National Research Council of Italy) Research-Associate on Bioengineering and Antropomorphic Robotics at the School of Engineering of the University of Genoa, Italy.
- 80-84 Teaching activities in the course of Basic Circuit Theory at the Engineering School of the University of Genoa, Italy.
- 80 Member of the Directive Council of the Specialistic Group of Bioengineering of the Italian Electrical Engineers Association (AEIT) and Secretary of the same Group from 1983 until 1987.
- 81-87 Funding and acting member of the Project Management Group of the Concerted Action of the European Commission DG XII on "Automated and Analytical Cytology".
- 80-86 Tenured University Researcher on Bioengineering at the Engineering School of the University of Genoa, Italy.

- 82-85 Research activity at the Department of Biophysical and Electronic Engineering of the University of Genoa, Italy, on acquisition and digital processing of microscopic images of cells in coherent light.
- 86- Research activity on Magnetic Resonance bioimages 3D reconstruction.
- 87-00 Tenured Associate Professor of Bioengineering at the Department of Communication, Computer and System Sciences of the University of Genoa, Italy.
- 87- Research activity on 3D biological objects reconstruction by confocal laser scanning optical microscopy, biomedical images integration and telematic applications in healthcare (telemedicine). Teaching activity in the course of Biomedical Instrumentation and in the course of Bioimages.
- 87-88 Member of the Commission for the pre-feasibility study of the Italian CNR Progetto Finalizzato “Biomedical Images”.
- 89-91 Member of the Concerted Action of the European Commission DG XII “ISCAMI” on the clinical use of medical images.
- 89 Evaluator of European R&D Projects of the Program AIM (Advanced Informatics in Medicine) (exploratory phase) of the European Commission DG XIII.
- 89-04 Partner of R&D European Projects in the AIM, BIOMED, TIDE e TELEMATICS APPLICATIONS Programmes (Healthcare Telematics sector) of DG XII and DG XIII of the European Commission.
- 90 Member of the Commission for the feasibility study of the Italian CNR Progetto Finalizzato “Biomedical Images” and member of the Commission for the feasibility study of the Italian CNR Progetto Finalizzato “Biomedical, Therapeutic and Rehabilitation Technologies”.
- 91-06 Teaching activities on Computer Science at the Specialization School on General Surgery of the Medical School of the University of Genoa, Italy.
- 91 Evaluator of European R&D Projects of the Programme AIM (Advanced Informatics in Medicine) (main phase) of the European Commission DG XIII.
- 92 Evaluator of European R&D Projects of the Programme BIOMED of the European Commission DG XII.
- 92-06 Teacher of the course Bioimages at the Engineering School of the University of Genoa, Italy.
- 92-94 Italian Delegate and Expert of the Ministry of Education, University and Research (MIUR) in the European Commission R&D Programmes – DG XIII “Telematic Systems of General Interest” – Healthcare sector (AIM), during the IIIrd European Framework Programmes, as Member of the AIM Working Party.
- 94-98 Italian Delegate and Expert of the Ministry of Education, University and Research (MIUR) in the European Commission R&D Programmes – DG XIII/C “Telematics Applications”,

during the IVth European Framework Programmes as Member of the Working Party on Healthcare and Disabled and Elderly (DG XIII/C4 e DG XIII/C5).

- 96-97 Evaluator of European R&D Projects of the Programme INFO2000 of DG XIII/E of the European Commission (Luxembourg).
- 96-06 Director of the Research Centre on Clinical Telematics of the University of Genoa, Italy.
- 96- Evaluator of Italian applied industrial research projects (law 46 and 488 – FSRA and FAR (law 297)) for MIUR and for the Italian Industry Ministry (MAP, then named MISE) (FIT and PIA).
- 96-99 Italian Delegate for MIUR at the OECD for the Megascience Forum (Directorate for Science, Technology and Industry (DSTI) of the Committee for Science and Technology Policy (CSTP), as Member of Working Group on Biological Informatics and, in particular, in the Subgroup on Neuroinformatics.
- 00-02 Italian Delegate for MIUR at the OECD for the Global Science Forum (Directorate for Science, Technology and Industry (DSTI) of the Committee for Science and Technology Policy (CSTP), as Member of the Working Group on Neuroinformatics.
- 00- Tenured Full Professor of Bioengineering at the Engineering School of the University of Genoa, Italy.
- 00-01 Evaluator of European R&D Projects during the Vth European Framework Programme - Programme IST - CPA5 sector (smartcards) e CPA12 (application service providers) of the DG INFSO of the European Commission.
- 00-02 Consultant for the Healthcare Authority of the Liguria Region for Healthcare Telematics.
- 02-06 Member of the “Cabina di Regia” of MIUR for the IST (Information Society Technology) area during the VIth European Framework Programme.
- 02-03 Member of the MIUR Evaluation Committee for PON (Italian National Operative Programme – Structural Funds) (call n. 68/2002).
- 02-03 Member of the Working Group with the task of writing a general structural investment plan to meet the minimal structural and technological requirements to make able to function healthcare structures at the Italian Presidency of the Council of Ministers – Secretariat of the permanent Conference for the relationship among the Italian State, the Italian Regions and the autonomous Provinces of Trento and Bolzano.
- 02-06 Italian National Representative of MIUR for the IST area (2nd Thematic Priority - Information Society Technology) at the European Commission during the VIth Framework Programme of the European Union.
- 03- Coordinator and promoter (reference-person) for the Directorate General of the Ministry of Education, University and Research (MIUR) of the European Technology Platforms and of the Italian National Technology Platforms.

- 03-04 Member of the Scientific Committee of the Italian Health Ministry for the study of the features and the criteria to identify Centers of Excellence.
- 03-04 Member for the ICT area to write the Italian National Research Programme 2005-2007 (PNR) at MIUR.
- 03-13 Italian Member for MIUR of the e-Infrastructure Reflection Group (eIRG – GRID).
- 03-08 Evaluator *in itinere* of the Project B.I.G.: “Empowerment of Infrastructures for Bioinformatics and Genomics” (n. MIUR 3078/80) in the PON Programme 2000-2006 (call n. 68/2002).
- 03-04 Member of the MIUR Evaluation Committee for PON (Italian National Operative Programme – Structural Funds) (call n. 901/2003).
- 04 Member of the Evaluation Committee of MIUR for the Call ICT-FAR – Theme 1 (DD MIUR n. 130 of February, the 16<sup>th</sup>, 2004).
- 04-06 Member of the FIRB Committee (Funding Basic Strategic mission-oriented Research) of MIUR.
- 04-08 Member of the Working Group named “Study Group on Bioinformatics” of the Italian Presidency of the Council of Ministers (National Committee for Biosafety and Biotechnologies, C.N.B.B.).
- 04-06 Member of the Working Group at MIUR to define main objectives and specific themes for research projects in the field of road safety and to fight crimes.
- 05-09 President of the Technical and Scientific Committee at MIUR as envisaged by art. 7, comma 2, of the law n. 297 of July, the 27<sup>th</sup>, 1999 for Industrial Research.
- 05 Member of the MIUR Evaluation Committee for PON (Italian National Operative Programme – Structural Funds) (call n. 1575/2004).
- 05 Member of the Working Group of MIUR for the Blue Gene project (supercomputing).
- 05- MIUR Representative in the Working Group made under art. 3 of the MoU of May, the 12<sup>th</sup>, 2005 among Italy, Portugal and Spain on scientific and technological cooperation, with reference to the COTEC Foundation.
- 05- MIUR Representative in the Italian National Support Group for the European Technological Platform WATERBORNE in the maritime domain.
- 05-06 Member of the Evaluation Committee for the Call for Ideas (call MIUR DM n. 1621 of July, the 18<sup>th</sup>, 2005) on Research and Competitiveness.
- 05-06 Member of the Steering Committee ICT of the National Research Council of Italy (CNR).
- 06- Head and Director of the Information and Communication Technology (ICT) Department of the National Research Council of Italy (CNR, Rome, Italy).

- 06-08 Member of the Administration Council of the company Almaviva-CNR.
- 06- Member of the Administration Council of the International Communication Institute (IIC – Genoa, Italy).
- 07-08 President of the Technical and Scientific Committee of the Consortium “Milano Ricerche” (Milan, Italy).
- 07-11 Member of the Administration Council of the High Technology District of the Liguria Region on Intelligent Integrated System (SIIT), (Genoa, Italy).
- 07-11 Member of the Technical and Scientific Committee of the Institute “Emanuele Brignole” for services to disabled and elderly people (Genoa, Italy).
- 07-12 Member of the Technical Committee of the Italian Ministry for Economic Development (MISE), (CT 46/82) for Industrial Research and Innovation.
- 07- Member of the Italian High Advisory Committee for Communications. (Rome, Italy).
- 08-10 Member of the Administration Council of the Consortium “Milano Ricerche” (Milan, Italy).
- 08-13 Expert for the “Progetto di accompagnamento Quadro Strategico Nazionale MIUR-MISE Research and Innovation 2007-2013”.
- 08-11 Member of the Evaluation Committee of the Innovation projects for “Sustainable Mobility” of the Industry 2015 Programme of the Italian Ministry of the Economic Development (MISE).
- 10-13 President of DigitPA, the Italian Public National Institution for the Digitalization of the Public Administration, nominated by the President of the Italian Republic, after unanimous positive opinion of the Italian Parliament (“Camera dei Deputati” e “Senato della Repubblica”), upon indication of the Italian Government in the person of the Minister for Public Administration and Innovation. During this period, promotion and signature of two relevant international three years lasting Memoranda of Understanding (MoU) between Italy and the Republic of Korea (ROK) on ICT at large, in 2011, and, more specifically, on ICT-Maritime in 2012, involving the Italian Minister of Public Administration and Innovation and the Italian Ministries of Economic Development, of Economy and Finance and of Public Education and Research, including the Italian National Custom Agency. For the Republic of Korea, the signature involved the Ministry Of Public Administration and Security (MOPAS) for the MoU on ICT at large, in 2011, and the Ministry of Land, Transport and Maritime (MLTM) for the MoU on ICT-Maritime, in 2012.  
Recognition and appreciation of this international work has been represented in an official letter sent to Prof. Beltrame from Republic of Korea Government Officials.  
Upon initiative of President Beltrame, DigitPA signed also a three year duration MoU with RINA, the Italian Naval Registry, with specific reference, to research and development of ICT solutions in view of the European Directive n. 65/2010 for the realization of the Maritime Single Window (MSW), to become into force in June 2015 in all EU Member States.

The relevant achievements on e-government matter during this mandate, as well as the detailed contents of the two aforementioned MoU, are reported at the website: <http://www.digitpa.gov.it>.

Author of more than 200 scientific publications on peer-reviewed international and national journals and books, and proceedings of international and national conferences, as listed in the following section, and owner of one patent for industrial invention.

Tutor of more than 100 theses of “laurea” in Bioengineering and of about 20 PhD theses in Bioengineering. At the University of Genoa, School of Engineering, DIBRIS Department, is responsible of BIOLAB (Bioengineering and Bioimages Laboratory) (about 10 people at various seniority levels, website: <https://www.bio.dist.unige.it>).

Since 2003 he is acting for the Directorate General for Research at the Italian Ministry of Education, University and Research (MIUR) (and others related Italian Ministries according to the involved sector) as the reference person for the European Technology Platforms (ETP) and for the Italian National Technology Platforms (MERIT (biomedical area), TERIT (telecommunications), PTNM (the National Technological Platform in the maritime-marine area: website: <https://www.mit.gov.it>),

SERIT (security and safety), PHORIT (photonics), HERIT (cultural heritage) and of their relationships with the Research Infrastructures (ESFRI) and related target uses.

Since 2013, he received the honorary distinction of Grande Ufficiale dell’Ordine “Al Merito della Repubblica Italiana”, from the President of the Republic of Italy, Giorgio Napolitano.

## **Contact:**

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