

MORABITO FRANCESCO CARLO

update: 01/04/2016

IEEE Member since 26 years (#00842864), Senior Member since 2000
Member of Computational Intelligence Society, Circuits and Systems Society, Signal-Processing Society,
Engineering and Medicine Society



PERSONAL RECORD

Date of Birth: June 7, 1959
Place of Birth: Cannitello V.S.G., RC, Italy
Citizenship: Italian
Married, 2 children, Giuseppe and Valeria

SCHOLASTIC TRAINING

1985 University of Naples, Italy, "Laurea" Electronic Engineering Degree, Summa cum Laude

SCIENTIFIC PUBLICATIONS

Editor or co-editor of 15 books, author or co-author of 20 book chapters, author or co-author of more than 300 peer-reviewed journal or conference papers, inventor of 2 international and 1 national patents
Scopus Database metrics (31 December 2015): h-index:19; g-index:27; Citations: 1196; Publications 212
He published papers on 6 different IEEE journals.

INTERNATIONAL SCIENTIFIC SOCIETIES MEMBERSHIP

IEEE (Institute of Electrical and Electronic Engineers): 26 years; Member (1989-2000), Senior Member (2000-todate)
INNS (International Neural Network Society): Member (1992-2006), Senior Member (2006-todate)
SIREN (Italian society of Neural Networks): Member (1989-todate); President (2008-2014)

RECENT ACTIVITIES WITHIN IEEE CIS

Member of IEEE-CIS Italy since its foundation

Organization of conference:

Industrial Computational Intelligence: from Research to Market, 26 May 2014,
http://neurolab.ing.unirc.it/portale/events/2014/from_research_to_applications/

Lectio Magistralis, 13 May 2014, Prof. Leon Chua
http://neurolab.ing.unirc.it/portale/events/2014/Chua_RC_lectio_magistralis/

Lectio prof. Lipo Wang, 25 May 2015
<http://neurolab.ing.unirc.it/portale/events/2015/lipowang/>

IEEE Distinguished Lecturer Program, 3 July 2015
<http://neurolab.ing.unirc.it/portale/events/2015/mitra/>

FIELDS OF RESEARCH

Electrical Engineering, Computational Neural Engineering, Neuroscience, Nonlinear Dynamics and Complexity, Machine Learning, Wavelet Analysis, Empirical Mode Decomposition, Multivariate and Multiscale Analysis, Thermonuclear Controlled Fusion, Non-Destructive Testing and Evaluation, Electromagnetics, Biomedical Signal Processing, Signal Processing for Cultural Heritage, Imaging and Tomographic Techniques.

PROFESSIONAL EXPERIENCE

Registered Professional Engineer since 1986

Industry Position:

Consultant Researcher Radar Department, Selenia Spa (nowadays Selex Sistemi Integrati), 1985-1987
Researcher Radar System Analysis Department Selenia Spa, 1987-1989

University Service:

Computer Centre Director, University of Reggio Calabria, 1989-1991
Researcher Electrical Engineering, Faculty of Engineering, Univ. Reggio Calabria, 1991-1998
Assistant Professor Systems Theory, Univ. Reggio C, 1995 - 1996
Assistant Professor Electrical Engineering, Univ. Reggio C, 1996-1997
Associate Professor Electrical Engineering, Univ. Reggio C, 1998-2001
Full Professor Electrical Engineering, University Mediterranea of Reggio C, 2001-todate

President Council of Electronic Engineering, Univ. Reggio C, 1998-2001
Ph.D. Committee Member Electronic Engineering, Univ. Reggio C, 1999 -2001
Ph.D. Committee Member Biomedical Engineering, Univ. Reggio C, 2001 -2004
Ph.D. Committee Member Information Engineering, Univ. Reggio C, 2004 -2013
Ph.D. Committee Member Civil, Energy, Environmental and Security Engineering, Univ. Reggio Cal., 2013-todate
Inner Evaluation Committee Member, University of Reggio Calabria, 2000-2001
Dean of the Faculty of Engineering, 2001–2008
Member Bylaws Committee, 2011-2012
Vice-Rector for International Relations and Institutional Relationships, 2012-todate
University Delegate within European University association (EUA), 2013-todate

Professor of Electrical Engineering, University of Cosenza, Italy, 2011
Ph. D. Lecturer 3rd cycle course “Intelligent Interfaces and Systems”, EPFL, Lausanne, Switzerland, 1999
International Referee of Ph.D. Thesis (Technikon Natal University, Durban, SouthAfrica), 1998

TEACHING ACTIVITY

Faculty of Engineering of the University Mediterranea:
Electrical Engineering (Information Engineering, Electronic Engineering, Telecommunications Engineering, “Laurea, BS”);
Circuits and Algorithms for Digital Signal Processing (Electronic Engineering, Telecommunications Engineering, “Laurea Magistrale, MS”)
Nonlinear Circuits and Complex Networks (Electronic Engineering, Telecommunications Engineering “Laurea Magistrale, MS”)
Neural Networks and Fuzzy Systems (Post-Degree Course in Environmental Engineering)
Neural Networks and Fuzzy Systems (Post-Degree Course in Biomedical Engineering).
Electrical Engineering (Computer Engineering, University of Cosenza, “Laurea”)
Environmental Signal Processing (Environmental Engineering, “Laurea Magistrale, MS”)

OTHER DIDACTIC/TEACHING EXPERIENCE

Member Steering Committee and Chair Master Course in Biomedical Engineering, October 2002
Member Committee Evaluation Ph.D. Courses with University of Reggio Calabria, Messina, Napoli “Federico II” and Salerno
Member Committee Evaluation Professorship, University Roma Tor Vergata, 2007
Member Committee Evaluation Researcher, University Pavia, Messina, Padova, 2012, 2014, 2015
Director Post-Degree Master Course, MAMETEK (Biomedical Engineering), Medalics, University “Dante Alighieri”, Italy, 2012-2014
Lecturer National School of Ph.D. in Electrical Engineering “Ferdinando Gasparini”, Course in “Neural Networks and Machine Learning”
Leader of ERASMUS Projects (University of Barcellona, Girona and Valladolid, Spain)
Leader of Cooperation Agreement with National Industries: ST Microelectronics, Ital-TBS, Telespazio, Alenia Marconi, Thales Alenia Space
Lecturer EU Project TELMA, Tecnici Esperti per Laboratori Metrologici Accreditati, PON Misura III.1, Miglioramento delle risorse umane nel settore della ricerca e dello sviluppo tecnologico, Università di Napoli “Federico II”, May 2003
Lecturer at the Erice, Intl. School on Neural Nets “Eduardo R. Caianiello” on Granular Computing, December 2010
Lecturer at the Erice, Intl. School on Mathematics “Guido Stampacchia” on Optimization, Machine Learning and Bioinformatics, September 2011
Lecturer at the ETH Zurich, Switzerland, October 2010 and March 2014
Lecturer at the Korea University Seoul and at the KAIST Daejeon, South Korea, February 2012
Lecturer at Chongqing University, China, 2014
Lecturer at the University of Parma, Italy, 2014
Coordinator of Master Course “Expert in Supply Chain Management”, PON Regioni Obiettivo 1 “Ricerca scientifica, Sviluppo tecnologico, Alta Formazione”, Misura III.4, Corsi Post-Laurea Professionalizzanti, CEFRIIS Gioia Tauro
Coordinator of the Scientific Committee Master Course Master “Gestione Sostenibile e Monitoraggio delle Zone Costiere per la Mitigazione del rischio Ambientale mediante Tecnologie innovative – GECOS”, PON Regioni Obiettivo 1 “Ricerca scientifica, Sviluppo tecnologico, Alta formazione”, Misura III.1, Innova Reggio
Leader MIUR Project “Messaggeri della Conoscenza”, in collaboration with Imperial College, London, UK and CERN, Geneva, CH, 2012-2014.
Tutor of more than 10 Ph.D. students
Supervisor of more than 150 Degree Thesis in Electrical and Electronic Engineering
Member of the Italian Conference of Deans of the Engineering Faculties (2001-2008)

INTERNATIONAL APPOINTMENTS

Foreign Member Royal Academy of Doctors, Barcelona, Spain, February 24, 2004 - todote

Gold Medal “Henry Coanda”, Inventica, 2002, Rumanian Academy of Science, Iasi, Rumania, September 2002, for his leadership in the field of Neural Networks and Fuzzy Systems

Award for Leadership in Research, AEDEM 2001

Governor of the International Neural Network Society (INNS) 2000-2002; Secretary of INNS 2003 and 2004; Governor 2004-2006, 2007-2009, and 2010-2012; Chair of Italy Regional SIG of INNS since 1997 (www.inns.org)

Organizer and General Chair of scientific meeting at the University of Reggio C., Italy, in the field of Neural Networks and Neuroscience: “Emergence of Significance in the Brain”, Prof. Walter Freeman, December 2002; “Brain Based Devices”, Prof. Gerald M. Edelman, Nobel Prize Laureate, September 2003; Symposium “Human Brain Diagnoses”, December 2000 (Prof. C. Gilbert, Dr. S. Koslow, Prof. H. Szu, Prof. M. McKeown); “Brain, Intelligence and Technology”, October 2011

Italy Representative in the Intl. Associations AMSE (Association for Modelling and Simulation in Enterprise and Engineering), Lyon, France (<http://www.amse.modeling.com/ind2.php?cont=01ams&menu=/menu1.php&pag=/represen.php&vis=1>) and SIGEF (Intl. Association for Fuzzy Management), Spain (<http://gandalf.fcee.urv.es/sigef/english/govern/frame2.html>)

President of SIREN (Società Italiana di Reti Neuroniche), founded by Prof. Eduardo R. Caianiello, Vietri S/M, Salerno, Italy, 2008, former Member Steering Committee and Scientific Committee SIREN, organizer of the Italian Workshop on Neural Networks (WIRN) (www.associazionesiren.org), Chair WIRN 2008-2015

Scientific reviewer national research projects Italian Ministry of University and Research, PRIN, MIUR, National Evaluation of Research, CIVR, CILEA and Italian Space Agency

Plenary Lecturer ISEM Tokyo, Japan, May 2001; Keynote Speaker MS’2002 Girona, Spain, June 26, 2002; MS20010, Barcelona, Spain, July 2010; Lecturer IJCNN 2001, Washington DC, USA; Tutorial Speaker IJCNN 1999 and 2001, SPIE Conference, Baltimore, Maryland, May 2013; Washington DC, USA; Tutorial Lecturer WCCI 2014 Beijing, China; Tutorial Lecturer EANN 2014, Sofia, Bulgaria

Editorial Board Member International Conferences COMPUMAG and CEFC, IEEE Magnetics Society
Program Committee Member IJCNN (Intl. Joint INNS-IEEE Conference on Neural Networks) 1999-2012
Tutorial Co-Chair IJCNN 1999, 2000, 2001, 2003, 2005; INNS Liaison IJCNN 2000, IJCNN 2010
Nomination Committee Chair, INNS, 2010-2012
Program Committee Member IEEE-ICIA 2008, Zhang JiaJieCity, Hunan, China
European Liason IEEE IJCNN Barcelona, Spain, 2010
International Liason IEEE IJCNN Dallas, Usa, 2013
Plenary Chair, IEEE-IJCNN 2015

CHAIR/ CO-CHAIR for International Conferences

AMSE-ISIS’97 (International Symposium on Intelligent Systems), September 1997
AEDEM2001 (Engineering Aspects of New Economy), September 2001
AMSE-MCMS2003 (Mediterranean Conference on Modelling and Simulation), June 2003
SIGEF 2004 (Information Technologies for the Fuzzy Economy), November 2004
organized at the Faculty of Engineering of Reggio Calabria (Italy)
ICIA-IEEE South Korea 2007
Vice-Chairman Conference AMSE-ISIS’98, Minsk, Belarus
Member Advisory Committee SSCC’98 Durban, South Africa, 1998
WIRN 2009, Vietri S/M, Salerno, 28-30 May 2009
WIRN 2010, Vietri S/M, Salerno, 27-29 May 2010
WIRN 2011, Vietri S/M, Salerno, 3-5 June 2011
WIRN 2012, Vietri S/M, Salerno, 17-19 May 2012
WIRN 2013, Vietri S/M, Salerno, 23-25 May 2013
WIRN 2014, Vietri S/M, Salerno 15-16, May 2014
WIRN 2015, Vietri S/M, Salerno, 20-22, May 2015
NoLisp (NonLinear Signal Processing) 2015, Vietri S/M, Salerno, 18-19, May 2015
IEEE International Conference on Emerging Technologies & Factory Automation, Cagliari, Italy, 2013

REFEREE FOR INTERNATIONAL JOURNALS

Plos One
Nuclear Fusion
International Journal of Intelligent Systems
IEEE Transactions on Magnetics

IEEE Transactions on Machine Learning and Neural Networks
IEEE Transactions on Plasma Science
IEEE Transactions on Systems, Man and Cybernetics
IEEE Transactions on Antennas and Propagation
IEEE Transactions on Industrial Electronics
IEEE Transactions on Instrumentation and Measurement
International Journal of Applied Electromagnetics and Mechanics
International Journal of Forecasting
Information Sciences
Alzheimer's Research and Therapy
AMSE Journals
COMPEL
Entropy
Sensors
Data & Knowledge Engineering
Computer & Structures
Intern. Journal of Neural Systems
Computers in Medicine and Biology
Biomedical signal Processing & Control
IEE Proceedings
IEE Proceedings Science, Measurement & Technology
IET Circuits, Devices and Systems
Image and Vision Computing
Computer & Structures
Signal Processing
EURASIP Journal on Signal Processing
Meteorology and Atmospheric Physics
Renewable Energy
Fuzzy Sets and Systems
Fresenius Environmental Bulletin
Parlar Scientific Publications (PSP)
Intl. Journal of Waste Management
Neural Networks
Neural Computing and Applications
Non Destructive Testing & Evaluation
Sensors and Actuators
Advances in Artificial Intelligence

Referee for Book Chapters

Referee for Encyclopedia of Biomedical Engineering, M. Akay Editor, Wiley, June 2006

PROGRAM COMMITTEE MEMBER FOR INTERNATIONAL CONFERENCES

ESANN
EANN
ICANN
Compumag
CEFC
E'NDE
ISEM
IJCNN
AMSE
SOCINFO
IEEE SETIT
IEEE International Electric Machines and Drives Conference (IEMDC)
ASE BigData
IEEE IMEKO 2013
IEEE MEMEA 2012

EDITORIAL BOARD MEMBER/ASSOCIATE EDITOR FOR THE JOURNALS

Neural Networks
Intl. Journal of Neural Systems
Renewable Energy
Intelligent Decision Technology

International Journal on Chaos Theory and Applications
International Journal of Computer, Systems and Signal
International Journal of Information Acquisition
International Journal of Computing & Information Technology
Recent Patents on Computer Science
Applied Computational Intelligence and Soft Computing
AMSE Journals
Fuzzy Economic Review
Micro and Nano Sensing
Guest Editor: IEEE Sensors, 2013; Neural Networks 2013

PROGRAM/SCIENTIFIC COMMITTEE MEMBER for International Conferences (among others)

ICNNAI 2002, 2nd Intl. Conf. on Neural Networks and Artificial Intelligence, Minsk, Belarus, 2002
ECIT'2002, Iasi City, Romania, July 17-20, 2002, 2nd Joint Conf. on Intelligent Systems and Technologies
E'NDE 1997, Electromagnetic Non-Destructive Evaluation, Reggio Calabria, Italy
MS'99, Intl. Conf. in Modelling and Simulation, Santiago de Compostela, Spain, 17-19 May 1999
MS 2000, Intl. Conf. in Modelling and Simulation, Las Palmas de Gran Canaria, Spain, September 23-25, 2000
MS 2001, Intl. Conf. in Modelling and Simulation, Girona, Spain, June 2001
MS 2002, Intl. Conf. in Modelling and Simulation, Victoria University, Melbourne, Australia, 2002
MS 2003-2012
World Congress of Sport Management, Barcellona, Spain, May 2003
SPIE Conference on Wavelets, Neural Networks and Independent Component Analysis, 21-25 April 2003, Orlando, Florida USA, and for 2007-2012 Conferences
SPIE Conference on Defense, Security and Sensing, Conference 7343, ICA, Wavelets, Neural Networks, Biosystems, and Nanoengineering VII, Orlando, Florida, 13-17 April 2009
SPIE Conference on Independent Component Analysis, Compressive Sampling, wavelets, neural net, Biosystems and Nanoengineering XI, 2014, Baltimore, Maryland United States
SIGEF Congress Napoli 2002, Leon 2003
SIGEF Intl. Congresses 2007-2012
EDS'98, Brno, Czech Republic
CCM'98 Lyon, France, 1998
IIA'98, SOCO'98, SCFM'98
WILF'99, Italian Workshop on Fuzzy Logic
EANN 2009, 2010, 2011, 2012, 2013, 2014 European Conference on Artificial Neural Networks, London, UK
ESANN 2013
Fifth International Conf. on Engineering Comp. Technology, Las Palmas (Gran Canaria), Spain, September 2006

Member Refereeing Committee ICANN

Member Reviewing Committee ISEM'95, '97, '99, '01; Special Session Organizer, May 2001, Tokyo, Japan
Session Chairman (among others) ITHURS'96, AMSE-CSS'96, CCM'98; SSCC'98; IJCNN1999, IJCNN2000, IJCNN2001, IJCNN 2002, IJCNN 2003, IJCNN 2005, IJCNN 2015
Member Advisory Committee SSCC'98 Durban, South Africa, 1998
Member Organizing Committee E'NDE'97

INTERNATIONAL RESEARCH ACTIVITIES

Visiting Researcher Max-Planck Institut fuer Plasmaphysik, NET Team, Asdex-Upgrade, ITER Joint Team, Garching bei Muenchen, Germany, 1993-95, 1999, and 2001
Member Scientific Investigators Program ADNI (<http://adni.loni.ucla.edu/research/active-investigators/?PIid=2783>)

INVITED/PLENARY LECTURES (among others):

Plenary Opening Lecturer International Symposium on Neural Networks and Fuzzy Systems, AMSE-SYS '95, Brno, Czech Republic
Invited Speaker SPIE's 3165 Conf. on Applications of Soft Computing, San Diego, CA, July 1997
Invited Speaker Intl. Conf. on Simulation and Modelling, Las Palmas, Canary Islands, September 2000
Invited Speaker, ISEM, Tokyo, Japan, 2001
Invited Speaker Intl. Conf. on Simulation and Modelling, Girona, Spain, June 2001
Invited Speaker Intl. Conf. on Simulation and Modelling, Terni, Italy, 2007
Italian Congress of Electrical Engineers Researchers, Lecce, Italy, 18 June 2009
Invited Lecturer at the ETH Zurich, Institut of Neuroinformatics, 29 October 2010
Invited Lecturer at the Korea University, Seoul, South Korea, February 2012
Invited Lecturer at the Korean Advanced Institute for Science and technology, KAIST, Daejeon, South Korea, February 2012
Invited Lecturer at the ETH Zurich, Institut of Neuroinformatics, March 2014

Invited Lecturer at the Chongqing University, China, April 2014
Tutorial Lecturer WCCI 2014 Beijing, China, July 2014

Founder and “Award Committee Chair” International Scientific Prize “E.R. Caianiello”

(Awardees: Prof. Shun-Ichi Amari, 1997; Prof. Harold Szu, 1999; Prof. Teuvo Kohonen, 2000; Prof. Torsten Wiesel, Nobel Prize Laureate, 2001; Prof. Gerald Edelman, Nobel Prize Laureate, 2003; Prof. Edoardo Boncinelli, 2010; Prof. Hojjat Adeli, 2014; Prof. Giacomo Rizzolatti, Brain Prize, 2014)

Research Leader Cooperation Agreements of Research EURATOM European Community Projects, partnership: ENEA-CREATE Consortium (Italy), ITER-Team (Germany, Japan), ASDEX-Upgrade Team (Germany) and JET Team (UK)

Member of the Province Committee of Culture, February 2003

“Trapezomata” Award for Scientific Activity, Reggio Calabria, July 2003

“Anassilaos” Award for Research, 2005

Representative of University Mediterranea in the Joint Committee University- National Council of Researches (2002)

Member Steering Committee Project CNR-Poli d’Innovazione, Regione Calabria, 2010 –2014.

COORDINATION OF RESEARCH ACTIVITIES

- 1) Senior Researcher Responsible for the ENEA/EURATOM/CREATE scientific agreement on “Plasma Disruption Prediction with Fuzzy Neural Techniques”, ASDEX-Upgrade, Max-Planck Institut fuer Plasmaphysik, Garching bei Muenchen, Germany
- 2) Senior Researcher Responsible for the ENEA/EURATOM/CREATE scientific agreement on “Plasma Diagnostics and Sensor Optimization with Neuro-Fuzzy Systems”, 2000-2001
- 3) Senior Researcher Responsible for the ENEA/EURATOM/CREATE scientific agreement on “Disruption Prediction in JET”, JET, Abingdon, UK, 2002
- 4) Leader Research Project EURATOM-ENEA-CREATE Association, Magnetic Diagnostics, “Gaps Estimation in ITER”, ITER, 2003
- 5) Research Project Leader European Project, “Monitoring of Urban Data Pollution with Neural Networks”, SMAURN 1997
- 6) Local Unity Leader Italian Research Project MURST, “Multidimensional Data Analysis with Neural Networks: Electromagnetics”, PRIN 1998
- 7) Local Unity Leader Italian Research Project MURST, “Environmental Data Processing with Neural Networks”, PRIN 2000
- 8) Responsible for Unit Research of the National Project MIUR/PRIN (Research Projects of National Interest) “MADEND” 2002 (Neural Networks and Circuits for Non Destructive Testing in Industry)
- 9) Local Unity Leader Italian Research Project MIUR, “Methods and Applications of Non-Destructive Electromagnetics Diagnostics, AMDE”, PRIN 2004
- 10) Local University Research Project (RdB, former 60%) Leader 1997-2008
- 11) PRIT Projects, University of Reggio Calabria, 2003-2006
- 12) Scientific Leader and Coordinator of National Project on the Generation of University Spin-Off, “A Neuro-Fuzzy Chip for the Processing of Urban Pollution Data”, MIUR, Dipartimento per lo sviluppo e il potenziamento dell’attività di Ricerca, through the “Parco Scientifico e Tecnologico della Calabria”, CALPARK, March 2003, (154.937,00 €)
- 13) Scientific Leader and Coordinator of National Research Project “Integrated Systems for Monitoring and Control of Electromagnetic Pollution”, funded by the Italian Ministry of Environment, January 2003, (153.387,00 €);
- 14) Unity Leader Project Italian Ministry of Health on “EEG Artefact Reduction”, 2014
- 15) Scientific Coordinator (2) MIUR Projects “Messaggeri della Conoscenza”, 2012-2014
- 16) Leader EU Sub-Program Application n°17, “Computational Intelligence Methods for Biomedical ICT in Neurological Diseases” within “Connect2SEA”, 7th EU Framework Program, 2015

Partner of the VI Framework Program EU project ExCoSys, on Engineering Systems of Exponential Complexity

Partner of the VII Framework Program EU project (Space) MAGSET, MAGnetic Sensor for Tachymetry

Referee for Swiss National Research Foundation, 1998

Referee for Shota Rustaveli Georgian Academy of Science, 2011-2014

Referee for Projects University of Padua, Italy, 2008-2013

Referee for PRIN Projects, MIUR

Referee for Marie Curie Program 2013

Referee for James Cook Research Fellowships, New Zealand, 2013

Referee for Projects SIR, MIUR, 2014-2015