

# Curriculum Vitae Europass



#### Personal information

First name / Surname Pasquale PACE

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Web site https://sites.google.com/site/paskpace/

Nationality Italian

Date of birth 06/01/1975

Gender Male

**Current occupation** 

Assistant Professor at "Department of Computer Engineering, Modeling, Electronics and Systems (DIMES) – UNIVERSITY OF CALABRIA.

# Work experience

Date

12-2003 → 10-2012

Occupation or position held

Research fellow within the Department of Electronics, Computer and System Sciences (D.E.I.S.) - University of Calabria – ITALY

Main activities and responsibilities

- Collaborative protocols for managing aerial and terrestrial networks of mobile robots
- Smartphone-centric systems for collecting and managing biomedical and environmental monitoring data
- IoT technologies for Smart Cities.
- Design of techniques for multimedia video contents delivery over wireless networks
- Design of Advanced wireless multimedia systems (Terminal Mobility Handling, Mobility Management, Resource Management, Admission Control, Call Management, Medium Access Control)
- Green wireless communications
- Multimedia sensors networks
- Image and Video processing techniques
- Video Perceived Quality of Service (PQoS) estimation over wireless networks
- Design of transport layer protocols for heterogeneous Wireless Mesh Networks
- Design of localization techniques for mobile wireless terminals
- Cognitive networks and Software Defined Radio systems
- Cost and business models for resource sharing in wireless networks
- Design of cost and business models for evaluation of multimedia broadcast services over integrated satellite-terrestrial networks

Name and address of employer

DEIS-UNICAL (Department of Electronics, Computer and System Sciences – University of Calabria) – Via P. Bucci 42C -87036 – Rende (CS)- ITALY.

Type of business or sector University research

Date 01/2001 - 11/2003

Occupation or position held Professional collaboration with DEIS - UNICAL

Main activities and responsibilities Design, analysis and performance evaluation of algorithms for connection admission control and

protocols for resource management of EuroSkyWay Satellite Communications System.

Pagina 1/13 - Curriculum vitae of PACE Pasquale Name and address of employer

DEIS-UNICAL (Department of Electronics, Computer and System Sciences - University of Calabria) - Via P. Bucci 42C -87036 - Rende (CS) - ITALY

Type of business or sector

University research

# **Education and training**

Date

12/2005

Title of qualification awarded

PhD degree in Computer Science Engineering: obtained from University of Calabria (Italy) with a thesis entitled "Connection Admission Control and routing issues over Multilayered Satellite-Hap Networks supporting DVB-RCS"

Name and type of organisation providing education and training

University of Calabria - ITALY

12/2000

Title of qualification awarded

Master Degree in Computer Science Engineering: obtained from University of Calabria (Italy), with a thesis entitled "Performance analysis of Connection Admission Control algorithms for GEO ATM-Satellite Systems with on-board processing".

Name and type of organisation providing education and training

University of Calabria - ITALY

# Personal skills and competences

Mother tongue

Italian

Other language

Self-assessment
European level (*)
Inglese

	Understanding				Speaking				Writing
	Listening		Reading	Spoken interaction			Listening	• • • • •	
C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user
(')C	ommon European	Fram	ework of Reference	re foi	Languages				

In 2009 I obtained the First Certificate in English (FCE) from University of Cambridge ESOL Examinations.

Social skills and competences

Strong organizational and interpersonal skills, aptitude for teamwork and problem-solving. Very conducive to teamwork and to compare with other people to draw on new knowledge.

Good management capacity and coordination of research activities acquired in both national and international scientific working contexts.

Excellent teaching skills acquired through the teaching of undergraduate and master's degree at the Faculty of Engineering and professional courses in colleges.

Technical skills and competences

Excellent knowledge of both wireless and wired computer networks, ability to design structured cabling networks simple and complex, in-depth knowledge of different communication network protocols such as GSM, GPRS, UMTS, DVB-Satellite, Wi-Max and Wi-Fi

Excellent knowledge of computer basic and advanced programming environments such as advanced object-oriented. Excellent knowledge of simulation environments for computer networks such as NS2 and GLOMOSIM.

Good Knowledge of image and video processing techniques to improve quality in content delivery networks.

Computer skills and competences

Operating Systems: Windows Professional/Server, Linux (Red Hat, Ubuntu),

Programming languages: C/C++, Java, Visual Basic, Datalog

Programming environments: JDeveloper, Eclipse, Microsoft Visual SourceSafe, Microsoft Visual Studio .NET

Database: MySQL, Oracle, Microsoft Access.

Web e Application Server: Apache, Apache Tomcat

Miscellaneous: Matlab, Labview, VB Script, Shell Script, Office.

Pagina 2/13 - Curriculum vitae of **PACE Pasquale**  Driving licence B

### **University Teaching**

Date 2014 - 2015

> Professor of "DIGITAL SIGNAL PROCESSING AND MULTIMEDIA", a master's course in the Telecommunication Engineering master course at the University of Calabria.

Date 2013 - 2014

> Professor of "DIGITAL SIGNAL PROCESSING AND MULTIMEDIA", a master's course in the Telecommunication Engineering master course at the University of Calabria.

Date 2012 - 2013

> Professor of "DIGITAL SIGNAL PROCESSING AND MULTIMEDIA", a master's course in the Telecommunication Engineering master course at the University of Calabria.

Contract professor of "DIGITAL SIGNAL PROCESSING AND MULTIMEDIA", a master's course in the Telecommunication Engineering master course at the University of Calabria.

Date | 2010 - 2011

Contract professor of "DIGITAL SIGNAL PROCESSING AND MULTIMEDIA", a master's course in the Telecommunication Engineering master course at the University of Calabria.

Contract professor of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Computer Engineering degree course at the University of Calabria.

Date 2009 - 2010

> Contract professor of "TELECOMMUNICATIONS", a master's course in the Media Education master course at the University of Calabria.

> Contract professor of "COMPUTER SCIENCE" at the Pharmacy Faculty and Engineering Faculty for Introductory Universities Studies at the University of Calabria.

> Teaching assistant of "TELECOMMUNICATION NETWORKS", a master's course in the Computer Engineering master course at the University of Calabria.

2008 - 2009 Date

> Contract professor of "COMPUTER SCIENCE" at the Engineering Faculty for Introductory Universities Studies at the University of Calabria.

> Teaching assistant of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Computer Engineering degree course at the University of Calabria.

> Teaching assistant of "LABORATORY OF TELECOMMUNICATION NETWORKS", a master's course in the Telecommunication Engineering master course at the University of Calabria.

2007 - 2008 Date

> Contract professor of "TELECOMMUNICATION NETWORKS", a master's course in the Computer Engineering master course at the University of Calabria.

Date: 2006 - 2007

> Contract professor of "TELECOMMUNICATION NETWORKS", a master's course in the Computer Engineering master course at the University of Calabria.

Date 2005 - 2006

> Contract professor of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Electronic Engineering degree course at the University of Calabria.

Date

Teaching assistant of "TELECOMMUNICATION SYSTEMS", an undergraduate course in the Computer Engineering degree course at the University of Calabria

Date | 2003 - 2004

**Teaching assistant** of "RADIOMOBILE NETWORKS I", a master's course in the Computer Engineering master course at the University of Calabria.

**Teaching assistant** of "IP NETWORKS AND INTERNETWORKING", a master's course in the Computer Engineering master course at the University of Calabria

**Teaching assistant** of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Electronic Engineering degree course at the University of Calabria

Date 2002 - 2003

**Teaching assistant** of "TELECOMMUNICATION SYSTEMS", an undergraduate course in the Electronic Engineering degree course at the University of Calabria

**Teaching assistant** of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Computer Engineering degree course at the University of Calabria

Date | 2001 – 2002

**Teaching assistant** of "BASICS OF TELECOMMUNICATIONS", an undergraduate course in the Electronic Engineering degree course at the University of Calabria.

# Professional Teaching in high schools and industries

Date 04/2010

Project PON 2007 – 2013 - "Contract professor of "COMPUTER NETWORKS I", a course for college students at the Technical High School FERMI - Castrovillari (CS).

Date | 02/2010

Project PON 2007 – 2013 - "Contract professor" of "COMPUTER SCIENCE", a course for college students at the Business High School PITAGORA - Castrovillari (CS).

Date 04/2007

Contract professor of "WIRELESS COMMUNICATION NETWORKS", a Master's course for industrial researchers and technicians, in the framework of PILOT (Piattaforma di Interoperabilità per la LOgistica ed i Trasporti) organized by Etnoteam, Università della Calabria and Università "Mediterranea" di Reggio Calabria and the Italian Ministry for Education, University and Research (MIUR).

Date 04/2004

Contract professor of "BASICS OF NETWORKS", a course for Teacher Training on Information Technology and Communication at the Business High School "G. Pezzullo"- Cosenza.

Date 02/2003

Project FSE-POR Calabria 2000-2006 - Contract professor of "BASICS COMPUTER SCIENCE", a course for college students at the Business High School PITAGORA - Castrovillari (CS).

Date | 10/2002

Project I.F.T.S. PON - Contract professor of "INTERRUPT AND PROCESSES", a course for Technical Specialists in Networking and Routing at Technical High School - Polistena (RC).

#### International Mobility

Date

03/2005 - 09/2005

Occupation or position held

Visiting researcher at CCSR (Centre for Communication Systems Research) University of Surrey – Guildford - United Kingdom under the supervision of Prof. Barry Evans, director of CCSR and of Prof. Zhili Sun.

I get involved on IST/FP6 MAESTRO (Mobile Applications & SErvices based on Satellite & Terrestrial inteRwOrking project) project and I carried out research on Cost and Demand Sensitive models for evaluation of SDMB (Satellite Digital Multimedia Broadcast) service over integrated satellite-terrestrial UMTS networks

Date | 10/2005 - 04/2006

Occupation or position held

Visiting researcher at BWNLab (Broadband & Wireless Networking Laboratory) Georgia Institute for Technology – Atlanta – USA under the supervision of Prof. Ian Akyildiz.

I worked on a new adaptive and responsive transport protocol for Wireless Mesh Networks..

# Participation in national and international research projects

Date

2013→

Project overview and position held

→ National projects PON01\_03096 - MC3CARE

Project Title: MC3- CARE - Mobile Continuos Connected Comprehensive - Care

Project coordinator: Prof. Gianluca ALOI, University of Calabria;

Topics: In the era of mobile society, increasingly based on mobile communication and social networks, the Mobile Health follows the person in his living environment, understood as the work environment, road environment, leisure environment and living environment. Within this context the research project aims at proposing a forum in which to analyze organizational processes and new scenarios of interaction between citizens, health care institutions and many others involved in delivering health services. The citizen becomes the focal point of the new health ecosystem and collaborates and shares information with not only health professionals but also with other citizens. The model being proposed by MC3-Care is aimed, therefore, not only to citizens-patients but is open to all those who want to improve the relationship with their health, quicker and easier interaction with the social and health institutions.

Date 2011-2013

Project overview and position held

→ National projects in the framework of the PRIN program (Italy)

Project Title: STEM-Net: Stem devices for wireless auto-organizing networks

Project coordinator: Prof. Emanuele VITERBO, University of Calabria;

Topics: The project aims to study, analyze and implement network solutions for multi-hop wireless communications devices based on the use of stem cells capable of self-configure and self-organize in order to accomplish a specific task. <a href="http://stemnet.deis.unical.it/stemnet/">http://stemnet.deis.unical.it/stemnet/</a>

Position held: Member of the local Telecommunication research unit directed by Prof. Gianluca Aloi, University of Calabria;

→ National projects PON01\_02149 - KOM4T me

Project Title: Knowledge Management 4 infoTelematic in Mobility Environment

Project coordinator: Infomobility.it S.p.A.;

Topics: The project aims to design a platform of knowledge management well suited for in-car infotainment applications. Particular attention will be paid with respect to the integration of innovative methods for locating mobile users: in this respect the research team headed by University of Calabria, will take charge of one phase of research to develop a system location software based on GSM, which will be integrated within the platform to provide comprehensive data-feed on the degree of road congestion.

Position held: Member of the local Telecommunication research unit directed by Prof. Gianluca Aloi

Date 2009-2010

Project overview and position held

→ National private/public laboratory funded by the Italian Ministry of Education and Scientific Research (Italy)

Project Title: OPENKNOWTECH: Laboratory of Open Source technologies for the integration, management and delivery of data, processes and knowledge

Project coordinator: Prof. Domenico Saccà, University of Calabria;

Topics: The projects aims to create an open-source software technology laboratory, which will be distributed and federated among the private/public participants, and will offer differentiated services depending on the participants needs/roles.

Position held: Member of the local Telecommunication research unit directed by Prof. Emanuele Viterbo.

Date 2006-2008

Pagina 5/13 - Curriculum vitae of PACE Pasquale

#### Project overview and position held

## → National projects in the framework of the PRIN program (Italy)

Project Title: NADIR: Design and assessment of protocols and distributed algorithms for Quality of Service mesh networks

Project coordinator: Prof. Luciano Lenzini, University of Pisa;

Topics: The project is aimed at promoting research in the field of Wireless Mesh Networks (WMN), based on either standard or emerging technologies. Such infrastructures have been recently devised to allow mobile users an ubiquitous, QoS-based access to networks, such as the Internet, or metropolitan networks, or corporate networks of private and public companies.

Position held: Member of the local Telecommunication research unit directed by Prof. Giorgio Ventre, University of Naples;

# → National Program for Research (PNR), Law 297/99, Industrial Research and Pre-competitive Development

Project Title: A new Multi-Technology Location-Aware Wireless System for Interactive Fruition of Multimedia art-historical content s

Project coordinator: Prof. Roberto Musmanno, University of Calabria;

Topics: The GITA project wants to intervene in the context of the fruition of archaeological sites, experimenting an integrated, modern and technologically innovative system in order to present multimedia content through standard handheld devices (Phones, PDA, Smartphone, ...), and through innovative devices (see-through glasses for outdoor Augmented Reality), in an interactive mode also customizing the needs of individual users visiting at a given site;

The main results expected from the project are summarized as follows:

- Study, integration and testing of an innovative mobile device (see-through glasses) for use in "outdoor Augmented Reality" through techniques based on the location of mobile users;
- Study and experimentation with techniques such as "Remote Augmented Reality" and "Intelligent Virtual Guide" to the use of Virtual Reality Center;
- Study and testing of a Wireless Connection system for transmitting real-time data between service center and mobile device users visiting the site;

Position held: Member of the local Telecommunication research unit.

#### Date

## 2002-2004

#### Project overview and position held

#### → National projects in the framework of the PRIN program (Italy)

Project Title: Integration of Satellite Systems and High Altitude Platforms in Heterogeneous Communications Networks (SHINES).

Project coordinator: Prof. Marina Ruggieri, University of Rome - Tor Vergata;

Topics: Integration of Satellite/HAPs platforms for future generation communications systems, peculiarly for:

- · adaptive quality of service management for multimedia applications,
- · analysis of traffic models for packet switching systems,
- · analysis of propagation models and channel estimation.

Position held: Member of the local Telecommunication research unit.

#### Date

#### 2000-2002

#### Project overview and position held

### → National projects in the framework of the PRIN program (Italy)

Project Title: Code Division Multiple Access for Broadband Mobile Terrestrial-Satellite Integrated Systems (CABIS);

Project coordinator: Prof. Marina Ruggieri, University of Rome - Tor Vergata;

Topics: Analysis of techniques for supporting broadband multimedia services in terrestrial/satellite integrated radiomobile systems through the usage of CDMA technique.

The research focused on:

- ad-hoc techniques for traffic and users' mobility management (handover intra- and inter- segment),
- definition of new qualitative parameters based on adaptive QoS principles, different from the classical parameters used for measuring the quality offered to the users.
- · integration of IP traffic in systems with satellite access networks.

Position held: Member of the local Telecommunication research unit.

→ Participant to the Partnership of a European Project funded by ESA (European Space Agency)- Program: EuroSkyWay Artes 3 Phase II;

Project Title: Ka-Band GEO System Technology and Demonstrator, Phase II;

Project coordinator: Alenia Spazio, Roma

Topics: Prosecution of activities of phase I, design and simulation of MAC (Medium Access Control) techniques and study of the signaling issues. Design and simulation of the Network Control Centre functionality related to the CAC (Connection Admission Control) and of the functionality of TRM (Traffic Resource Management) on-board the Satellite.

Position held: Member of the local Telecommunication research unit.

#### Award

I have been awarded by my Regional Ministry (CALABRIA) a voucher of 2750€ in order to attend the IEEE international conference ISWCS'08 as the author and the presenter of a technical contribution [C24].

### Scientific Publications

#### INTERNATIONAL JOURNALS

- R1. G. Aloi, L. Bedogni, L. Bononi, O. Briante, M. Di Felice, V. Loscri, P. Pace, F. Panzieri, G. Ruggeri, A. Trotta, "STEM-NET: How to deploy a self-organizing network of mobile end-user devices for emergency communication", COMPUTER COMMUNICATIONS, Volume 60, pages, 12-27, April 2015. IF 1,69
- R2. G. Aloi, M. Di Felice, V. Loscri, P. Pace, G. Ruggeri, "Spontaneous Smartphone Networks as a User-Centric solution for the Future Internet", *IEEE COMMUNICATIONS MAGAZINE*, Volume 52, No. 12, pages 26-33, December 2014. IF 4.0
- R3. X. Fu, W. Li, G. Fortino, P. Pace, G. Aloi, W. Russo, "A Utility-Oriented Routing Scheme for Interest-Driven Community-Based Opportunistic Networks", J.UCS - Journal of Universal Computer Science, Volume 20, Issue 13, pages 1829-1854, 2014. IF 0,46
- R4. G. Aloi, L. Bedogni, M. Di Felice, V. Loscri', A. Molinaro, E. Natalizio, P. Pace, G. Ruggeri, A. Trotta. N.R. Zema, "STEM-NET: An Evolutionary Network Architecture for Smart and Sustainable Cities", TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES, Special Issues on Smart Cities, Volume 25, Issue 1, pages 21–40, January 2014. IF 1,35
- R5. S. Costanzo, F. Spadafora, G. Di Massa, A. Borgia, A. Costanzo, G. Aloi, P. Pace, V. Loscri', H.O. Moreno, "Potentialities of usrp-based software defined radar systems" *PROGRESS IN ELECTROMAGNETICS RESEARCH B*, Volume 53, pp. 417-435, 2013. IF 1,22
- R6. P. Pace, G. Aloi, "Managing and Deploying Pervasive Wireless Internet Access through Attractive Connection Sharing and Reselling Mechanisms, " JOURNAL OF NETWORKS, Vol 8, No 2 (2013), 351-364, February 2013, doi:10.4304/jnw.8.2.351-364.
- R7. G. Aloi, R. Musmanno, P. Pace, O. Pisacane, "A Wise Cost-Effective Supplying Bandwidth Policy for Multilayer Wireless Cognitive Networks," *COMPUTERS & OPERATIONS RESEARCH*, Volume 39, Issue 11, November 2012, Page(s) 2836–2847, Available on line 22 February 2012. IF 1,90
- R8. P. Pace, G. Aloi, "WEVCast: Wireless Eavesdropping Video Casting architecture to overcome standard multicast transmission in Wi-Fi networks", accepted for publication in *TELECOMMUNICATION SYSTEMS Journal*, Special Issue on Wireless Multimedia Networks and Security Services, Available on line, 2 July 2011.

- R9. P. Pace, G. Aloi, "Satellite-HAP Network Supporting Multilayered QoS Routing in the Sky", *IETE Journal of Research*, Volume 56, Issue 3, May 2010, Page(s) 163-174.
- R10.E. Natalizio, P. Pace, F. Guerriero, A. Violi, "A reactive and dependable transport protocol for wireless mesh networks", *Journal of Parallel and Distributed Computing*, Volume 70, Issue 5, May 2010, Page(s) 431-442.
- R11.P. Pace, G. Aloi, A. Palmacci, "A Multi-Technology Location-Aware Wireless System for Interactive Fruition of Multimedia Contents", *IEEE TRANSACTIONS ON CONSUMER ELECTRONICS*, Vol. 55, Issue 2, May 2009, Page(s) 342-350.
- R12.P. Pace, E. Viterbo, "Fast and Accurate Video PQoS Estimation over Wireless Networks", EURASIP Journal on Advances in Signal Processing, Special Issue on Wireless Video, Volume 2008, Article ID 548741, 10 pages, 2008. doi:10.1155/2008/548741.
- R13.P. Pace, G. Aloi, "Disaster monitoring and mitigation using aerospace technologies and integrated telecommunication networks", *IEEE Aerospace and Electronic Systems Magazine*, Vol. 23 Issue 4, April 2008, Page(s) 3-9.
- R14.L. Boccia, P. Pace, G. Amendola, G. Di Massa, "Low multipath antennas for GNSS-based attitude determination systems applied to high-altitude platforms", GPS Solutions-The Journal of Global Navigation Satellite Systems, Springer-Verlag, Vol. 12, No. 3, July 2008, Page(s):163-171.
- R15.P. Pace, G. Aloi, "Effective Routing Algorithm for Multilayered Terrestrial-HAP-Satellite Networks" *IEEE COMMUNICATIONS LETTERS*, Vol. 11, No. 6, June 2007, Page(s):510-512.
- R16.P. Pace, Z. Sun, "Demand Sensitive Model for Tuning Price over Satellite Digital Multimedia Broadcast System" *IEEE TRANSACTIONS ON BROADCASTING*, Special Issue on Mobile Multimedia Broadcasting, vol. 53, Issue 1, Part 2, March 2007 Page(s):329 337.
- R17.P. Pace, G. Aloi, "Effective Admission Policy for Multimedia Traffic Connections over Satellite DVB-RCS Network" ETRI Journal – Electronic and Telecommunications Research Institute, vol. 28, No.5, October 2006, Page(s): 593-606.
- R18.P. Pace, G. Aloi, "Multimedia connections handling in a Satellite-HAP multilayered architecture" ASSI Satellite Communications Letters, vol. VI, No 1, February 2006 Page(s): 1-9.
- R19.G. Aloi, P. Pace, S. Marano, "Multimedia GEO Satellite architecture based on DVB-RCS: admission control issue for high interactivity traffic sources", *IETE Journal of Research*, Special Issue on Protocols for Resource, Link and Mobility Management for Wireless and Satellite Communication Networks, vol. 52, Nos 2 & 3, March-June 2006 Page(s): 97-104.
- R20.P. Pace, G. Aloi, S. Marano, "Iterative vs Gaussian Admission Scheme for Satellite DVB-RCS Systems" ASSI Satellite Communications Letter, vol. II, No 2, April 2005 Page(s): 1-10.
- R21.A. lera, A. Molinaro, P. Pace, S. Marano, "Dimensioning and effective handling of signalling channels in a multimedia GEO Satellite platform", *IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY*, Volume 54, Issue 2, March 2005 Page(s):550 567.

# **INTERNATIONAL CONFERENCES**

- C1. P. Pace, F. Vitelli "A reliability-based resource sharing scheduler for mobile and fixed users in Community Networks" IEEE International Conference on Communications (ICC), London, Great Britain June 8-12, 2015.
- C2. P. Pace, G. Aloi, G. Fortino "An Application-Level Framework for UAV/Rover Communication and Coordination", IEEE International Conference on Computer Supported Cooperative Work in Design (CSCWD), Calabria, Italy May 6-8, 2015.
- C3. G. Aloi, G. Caliciuri, G. Fortino, P. Pace "A smartphone-centric approach for integrating heterogeneous sensor networks", International Conference on Body Area Networks – BODYNETS, London, Great Britain Sep. 29-Oct. 1, 2014.
- C4. A. Furfaro, P. Pace, A. Parise, L. Molina Valdiviezo, "Modelling and Simulation of a Defense Strategy to Face Indirect DDoS Flooding Attacks", International Conference on Internet and Distributed Computing Systems, IDCS 2014, Italy, September 22-24, 2014.
- C5. G. Aloi, G. Caliciuri, V Loscri', P. Pace, "Energy-efficient and accurate fingerprinting-based localization system for Smartphones," Proceedings of IEEE On line GREENCOM, 29-31 October 2013

- G. Aloi, G. Caliciuri, V Loscri', P. Pace, "Accurate and energy-efficient localization system for Smartphones: a feasible implementation," Proceedings of IEEE Personal Indoor Mobile and Radio Communications (PIMRC), 8-11 September, London-UK, 2013. 89
- P. Pace, G. Aloi, O. Pisacane, "Effective supplying bandwidth policies for wireless cognitive networks: A logistics approach," Proceedings of IEEE Personal Indoor Mobile and Radio Communications (PIMRC), 8-11 September, London-UK, 2013.  $C_{i}$
- V. Loscri', P. Pace, Rosario Surace, "Multi-objective evolving neural network supporting SDR modulations management," Proceedings of IEEE Personal Indoor Mobile and Radio Communications (PIMRC), 8-11 September, London-UK, 2013. జ్ర
- "Smartphones Like Stem Cells: Cooperation and Evolution for Emergency Communication in Post-Disaster Scenarios," in Proc. of IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom 2013), July 3-5, 2013, Batumi, Georgia. M. Di Felice, L. Bedogni, A. Trotta, L. Bononi, F. Panzieri, G. Ruggeri, G. Aloi, V. Loscri', P. Pace හු
- C10.M. Di Felice, A. Trotta, L. Bedogni, L. Bononi, F. Panzieri, G. Ruggeri, V. Loscri', P. Pace, "STEM-Mesh: Self-Organizing Mobile Cognitive Radio Network for Disaster Recovery Operations," in Proc of the 9th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC 2013), July 1-5, 2013, Cagliari, Italy.
- C11.G. Aloi, V. Loscri, P. Pace, G. Ruggeri, M. Di Felice, F. Panzieri, E. Natalizio, "STEM-Net: An Evolutionary Architecture for Highly-Reconfigurable Wireless Networks," in Proc of the IEEE Future Network and Mobile Summit (FNMS 2013), July 3-5, 2013, Lisbon, Portugal.
- C12.P. Pace, "Green Antenna Switching to Improve Energy Saving in LTE Networks," Proceedings of IEEE GreenCom, 26-28 September 2012.
- C13.P. Pace, V. Loscri, "OpenBTS: a step forward in the cognitive direction," Proceedings of IEEE Computer Communications and Networks (ICCCN), International Conference on Corr Germany, July 30 - August 2, 2012.
- C14.P. Pace, G. Aloi, "WEVCast: practical implementation and testing of effective multicast services for Wi-Fi Networks," Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), Paris, France, April 1-4, 2012.
  - Consumption in Multimedia Transmissions", Proceedings of IEEE Personal Indoor Mobile and Radio Communications (PIMRC), Toronto, Canada, 11-14 September 2011. C15.P. Pace, V. Loscri, E. Natalizio, T. Razalindralambo, "Nodes Placement for reducing Energy
- "Software Defined Radar: synchronization issues and practical implementation," Proceedings of International Conference on Cognitive Radio and Advanced Spectrum Management, GogART ISABEL 2011, Barcelona, October 26-29, 2011. C16.G. Aloi, A. Borgia, S. Costanzo, G. Di Massa, V. Loscrì, E. Natalizio, P. Pace, F. Spadafora,
- C17.P. Pace, G. lannitelli, G. Aloi, "Eavesdropping wireless video packets to improve standard multicast transmission in Wi-Fi networks", Proceedings of IEEE International Symposium on Wireless Pervasive Computing (ISWPC), Modena, Italy, 5-7 May 2010.
- C18.P. Pace, G. Aloi, "Routing and Scalability Issues for Multi-layered Satellite-HAPs Networks", Proceedings of Advances in Satellite and Space Communications (SPACOMM), Athens, 13-19 June 2010.
- P. Pace, G. Aloi, M. Molè, "Encouraging wireless connection sharing by means of an attractive pricing strategy", Proceedings of IEEE Personal, Indoor and Mobile Radio Communications Symposium 2009 (PIMRC'09), Tokyo, Japan, September 2009. C19.P. Pace,
  - C20.P. Pace, M. Molè, G. Aloi, "Attractive pricing mechanism for connection sharing and coverage extension of wireless networks", Proceedings of IEEE International Symposium on Wireless Communication Systems 2009 (ISWCS'09), Siena, Italy, September 2009.
- C21.P. Pace, "Call Handling Strategies for HAP System Supporting 3G Mobile Communications", Proceedings of International Workshop on Aerial & Space Platforms: Research, Applications, Vision IEEE GLOBECOM 2008, New Orleans, LA, USA, December 2008.
- Fruition of Historical and Artistic Contents", Proceedings of IEEE IFIP Network Control conference (Netcon 2008), United Arab Emirates, November 2008. C22.P. Pace, G. Aloi, A. Palmacci, "New Wireless Communication Architectures for Interactive

- C23.P. Pace, G. Aloi, A. Palmacci, "GITA: New Architectures for Interactive Fruition of Historical and Artistic Contents on Wireless Multi-Technology Platform", Proceedings of Multimedia in Ubiquitous Computing and Security Services (MUCASS 2008) in conjunction with The International Symposium on Ubiquitous Multimedia Computing (UMC 2008), Hobart, Australia, October 2008.
- C24.P. Pace, G. Aloi, "Effective Prediction Scheme for Bandwidth Allocation in Interactive Satellite Terminals", Proceedings of IEEE International Symposium on Wireless Communication Systems 2008 (ISWCS'08), Reykjavik, Iceland, October 2008.
- C25.P. Pace, M. Belcastro, E. Viterbo, "Fast and accurate PQoS estimation over 802.11g wireless networks", Proceedings of IEEE International Conference on Communications (ICC), Beijing, China, May 2008.
- C26.P. Pace, E. Natalizio, "Dynamic Fair Power Sharing Admission Control for HAP-UMTS communication system", Proceedings of the 16th IST Mobile and Wireless Communications Summit, Budapest, 1-5 July, 2007.
- C27.V.C. Gungor, P. Pace, E. Natalizio, "AR-TP: An Adaptive and Responsive Transport Protocol for Wireless Mesh Networks," Proceeding of IEEE International Conference on Communications (ICC), Glasqow, Scotland, June 2007.
- C28.P. Pace, G. Aloi, "Multilayered architecture supporting efficient inter HAP-Satellite routing", Proceedings of IEEE Vehicular Technology Conference (VTC Spring), Dublin Ireland, April 22-25, 2007.
- C29.P. Pace, E. Natalizio, "Wireless Communication Networks via Aerial Platforms: Dynamic Fair Power Sharing Admission Control for UMTS real time traffic sources", Proceedings of the 14th IEEE International Conference On Telecommunications (ICT), Penang, Malaysia, May 14-17, 2007.
- C30.P. Pace, G. Aloi, "HAP-Satellite architecture supporting efficient multilayered routing" Proceedings of the 9th IEEE International Conference on Advanced Communication Technology (ICACT), Phoenix Park, Republic of Korea, February 12–14, 2007
- C31.P. Pace, Z. Sun, "Price discount over Satellite Digital Multimedia Broadcast system through a Demand Sensitive Model" Proceedings of the Wireless Communications and Networking Conference (WCNC), Hong Kong, March 11-14, 2007.
- C32.P. Pace. D. Pace, S. Marano, "An HAP-UMTS integrated system supporting efficient admission control scheme for mixed traffic sources", Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Berlin, Germany, September 11-14, 2005.
- C33.P. Pace, S. Marano, Z. Sun, B. Evans, "Cost Model for Evaluation of SDMB Service over Integrated Satellite-Terrestrial UMTS Networks", Proceedings of the International Workshop on Satellite and Space Communications 2005 (IWSSC 2005), Siena, Italy, September 8-9, 2005.
- C34.P. Pace, G. Aloi, S. Marano, "A multilayered architecture supporting QoS for multimedia traffic connections", Proceedings of the IEEE Vehicular Technology Conference (VTC Spring), Stockholm – Sweden, May, 2005.
- C35.P. Pace, A. Longo, S. Marano, "A system for monitoring volcanoes activities using High Altitude Platform stations", Proceedings of the International Astronautical Congress (IAC), Vancouver – Canada, October, 2004.
- C36.P. Pace, V. Tomaino, S. Marano, "Traffic Management in an integrated Satellite-HAP-Terrestrial system architecture", Proceedings of the International Astronautical Congress (IAC), Vancouver – Canada, October, 2004.
- C37.P. Pace, G. Aloi, F. De Rango, E. Natalizio, A. Molinaro, S. Marano, "An integrated Satellite-HAP-Terrestrial system architecture: resources allocation and traffic management issues". Proceedings of the IEEE Vehicular Technology Conference (VTC Spring), Milano Italy, May, 2004.
- C38.P. Pace, G. Aloi, S. Marano, "Efficient Real-Time Multimedia Connections Handling over DVB-RCS Satellite System". Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM), Dallas Texas USA, November, 2004.
- C39.P. Pace, G. Aloi, S. Marano, "Connection Admission Control for Multimedia Traffic over DVB-RCS Satellite System". Proceedings of the IEEE International Symposium on Wireless Personal Multimedia Communications (WPMC), Abano Terme Italy, September, 2004.

- C40.P. Pace, G. Aloi, S. Marano, "Multimedia Traffic Admission Schemes Comparison for Satellite Systems". Proceedings of the IEEE Vehicular Technology Conference (VTC Fall), Los Angeles -USA, September, 2004.
- C41.P. Pace, G. Aloi, S. Marano, "Performance analysis of Connection Admission Control cheme in a DVB-RCS satellite system". Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Barcelona-Spain, October, 2004.
- C42.P. Pace, A. Molinaro, S. Marano, "Guaranteed Vs Dynamic connections resources assignment and management in a DVB-RCS Satellite System", Proceedings of the IEEE International Symposium on Wireless Personal Multimedia Communications (WPMC), Yokosuka, Kanagawa, October 2003.
- C43.P. Pace, A. Molinaro, A. Iera, S. Marano, "Dedicated Signalling Channel vs Random Access Signalling Channel in Satellite Communications Systems", Proceedings of the IEEE Vehicular Technology Conference (VTC Fall), October 2003.
- C44.P. Pace, A. Molinaro, A. Iera, S. Marano, "Random access techniques for GEO satellite personal communication networks", Proceedings of the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), September 2003.
- C45.P. Pace, A. Molinaro, A. Iera, S. Marano, "On the Performance of Connection Admission Control and traffic management schemes in a "DVB-RCS Suited" Satellite System", Proceedings of the Advanced Satellite Mobile Systems (ASMS), Frascati, Italy, July 2003.
- C46.A. lera, A. Molinaro, P. Pace, S. Marano, "Multimedia Traffic in Broadband Satellite Networks", Proceedings of the IEEE International Conference on Communications (ICC), Anchorage, Alaska, May 2003
- C47.P. Pace, A. Iera, A. Molinaro, S. Marano, "Dynamic access control for multimedia satellites in personal Communications Systems", Proceedings of the IEEE International Conference on Telecommunications, ICT '02, Beijing, China, June 2002.
- C48.P. Pace, A. Iera, A. Molinaro, G. Aloi, S. Marano, "On the Performance of CAC Algorithms in Multimedia Geostationary Satellite Networks", Proceedings of the Wireless Communications and Networking Conference (WCNC), Orlando, USA, March 2002.
- C49.P. Pace, A. Iera, A. Molinaro, G. Aloi, S. Marano, "Differentiated Traffic Management Over Geo-Satellite Networks With On-Board Processing Capability", Proceedings of the IEEE International Conference on Telecommunications (ICT), Bucharest, Romania, June 2001.

#### **NATIONAL CONFERENCES**

- CN1. G. Aloi, V. Loscri, E. Natalizio, P. Pace, A. Scicchitano, "Wireless Mesh Networks", Atti del convegno di ricerca del DEIS (Dipartimento di Elettronica Informatica e Sistemistica), Cetraro, Settembre 2007.
- CN2. P.Pace, E. Natalizio, V.C. Gungor, "An adaptive and responsive transport protocol for wireless mesh networks", Atti del convegno nazionale del gruppo di Telecomunicazioni GTTI – 2007, 18-20 Giugno – Roma.

#### **BOOK CHAPTER**

- B1. P. Pace, and G. Aloi, "Pervasive and interactive use of multimedia contents via multi-technology location-aware wireless architectures", Chapter 5 of "Pervasive Computing and Communications Design and Deployment: Technologies, Trends, and Applications" IGI Global edited by Apostolos Malatras, ISBN10: 1609606116, May 2011.
- B2. P. Pace, G. Aloi, and L. Boccia, "Using Space Technology for Disaster Monitoring, Mitigation and Damage Assessment", Chapter 3 of "Commerce in Space: Infrastructures, Technologies and Applications" - IGI Global - edited by Phillip Olla, ISBN-10: 1599046245, August 2007.
- B3. V.C. Gungor, E. Natalizio, P. Pace, and S. Avallone, "Challenges and Issues in Designing Architectures and Protocols for Wireless Mesh Networks", Chapter 1 of "Wireless Mesh Networks: Architectures, Protocols, Services and Applications", Springer-Verlag, edited by by Dr. K. Leung and Dr. E. Hossain, June 2007 (ISBN: 978-0-387-68838-1).

#### **DELIVERABLES and INTERNATIONAL REPORTS**

TR1. A. Iera, A. Molinaro, G. Aloi, P. Pace, S. Marano "ESW Ground Segment Analysis Report: the SaT Signalling Issue", EuroSkyWay Artes III Phase II Technical Report No. UNICS/ESW/REP/03/01, June 2001.

- TR2. A. Iera, A. Molinaro, G. Aloi, P. Pace, S. Marano "ESW Ground Segment Analysis Report: the CAC Optimisation", EuroSkyWay Artes III Phase II Technical Report No. UNICS/ESW/REP/02/01, June 2001.
- TR3. A. Iera, A. Molinaro, G. Aloi, P. Pace, S. Marano "CAC algorithm trade-off analysis report", EuroSkyWay Artes III Phase II Technical Report No. UNICS/ESW/REP/01/01, March 2001.
- D1. A. Iera, A. Molinaro, G. Aloi, P. Pace, R. Bianco, S.Marano "EuroSkyWay Ground Segment Analysis Report – Final Issue", ESA Deliverable UNICS/ESW/DEL/03/00, Project No. ALS/US/SBC/038/99 - Ka Band GEO System Technology and Demonstrator, March 2001.
- D2. A. Iera, A. Molinaro, G. Aloi, P. Pace, R. Bianco, S. Marano "EuroSkyWay Ground Segment Analysis Report –Issue 2", ESA Deliverable UNICS/ESW/DEL/02/00, Project No. ALS/US/SBC/038/99 Ka Band GEO System Technology and Demonstrator, July 2000.

# **Professional Services**

I am currently Guest Editor for SPECIAL ISSUE on "Smart Wireless Access Networks and Systems For Smart Cities" of the Elsevier Ad Hoc Networks Journal.

#### I have been a TPC-Chair of:

- SWANSITY 2015 Workshop on Smart Wireless Access Networks for Smart City in conjunction with SECON 2015.
- SWANSITY 2014 Workshop on Self-Organizing Wireless Access Networks for Smart City in conjunction with SECON 2014

#### I have been Program Committee Member of :

- ICC 2015 IEEE International Conference on Communications Mobile and Wireless Network Symposium
- LCN 2015 The 40th IEEE Conference on Local Computer Networks
- VTC 2015-Fall IEEE Vehicular Technology Conference -Track on Cellular Networks
- HPCC 2015 IEEE International Conference on High Performance and Communications
- Bodynets 2014, 2015 International Conference on Body Area Networks
- ICCCN 2014 IEEE International Conference on Computer Communications and Networks -Track on Cognitive, Cellular, and Heterogeneous Wireless Networks (CCHN)
- IDCS 2014 International Conference on Internet and Distributed Computing Systems SPINS 2014 - International Workshop on Secure Peer-to-Peer Intelligent Networks & Systems
- SatComNet'14 (International Workshop on Advances in Satellite Communications and Networking
- IEEE Online GreenComm (2013, 2014)
- PIMRC 2013 Track on Mobile and Wireless Networks
- ICCCN 2013 Track on Cognitive, Cellular, and Heterogeneous Wireless Networks (CCHN)
- IEEE International Conference on wireless Communications, Networking and Mobile Computing
  – (WICOM 2013)
- ICACT (International Conference on Advanced Communications Technology) co-sponsored by IEEE ComSoc – 2013.
- GogART ISABEL 2011 Session chairman of "Software Defined Radios & Cooperative/Distributed Sensing".
- IARIA International Conference on Advances in Satellite and Space Communications (SPACOMM 2009 – 2010 – 2011 – 2012 - 2013)
- IEEE Global Telecommunications Conference (GLOBECOM 2006) Symposium on "Satellite and Space Communications"
- IEEE Vehicular Technology Conference (VTC Spring 2004) and chairman of the technical session on "Radio Resources Management"

I am involved in the editorial board of:

- International Journal of Communication Networks and Information Security (IJCNIS)
- Recent Advances in Communications and Networking Technology Bentham Science
- ICACT Transactions on the Advanced Communications Technology.

Moreover, I have been an invited referee for many prestigious international journals, such as:

IEEE Transactions on Vehicular Technology; IEEE Transactions on Wireless Communications; IEEE Communications Letters; Computer Networks; Journal of Network and Computer Applications, Ad Hoc Networks.

In the past years, I have been external referee for IEEE international conferences, such as: ICC, GLOBECOM, WCNC, VTC, PIMRC, ICACT.

Member of the Institute of Electrical and Electronics Engineers (IEEE).

The undersigned is aware that, pursuant to art. 26 of Law 15/68, false statements, false documents, the use of false acts are punishable under the Penal Code and special laws, in addition, the undersigned authorizes the processing of personal data pursuant to Legislative Decree 30 June 2003, no 196 "Code for the Protection of Personal Data".

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