Curriculum Vitae

Personal information

First name(s) / Surname(s) | Achille Pattavina

Institution | Politecnico di Milano

Department | Dept. of Electronics and Information

Address(es) | Piazza Leonardo da Vinci 32, 20133 MILANO MI, Italy

Nationality Italian

Work experience

Dates November 1995 to present

Occupation or position held Full Professor of Telecommunications

Main activities and responsibilities | Teaching, research on telecommunications networks, project management

Name and address of employer | Politecnico di Milano, piazza Leonardo da Vinci 32, 20133 Milano, Italy

Type of business or sector | Education and research

Dates November 1994 to October 1995

Occupation or position held Full Professor of Telecommunications

Main activities and responsibilities | Teaching, research on telecommunications networks, project management

Name and address of employer | University of Catania, Piazza Università 2, Catania, Italy

Type of business or sector | Education and research

Dates November 1991 to October 1994

Occupation or position held | Associate Professor of Telecommunications

Main activities and responsibilities Teaching, research on telecommunications networks, project management

Name and address of employer | Politecnico di Milano, piazza Leonardo da Vinci 32, 20133 Milano, Italy

Type of business or sector | Education and research

Dates | July 1983 to October 1991

Occupation or position held University researcher

Main activities and responsibilities | Research on telecommunications networks

Name and address of employer | University La Sapienza, Piazzale Aldo Moro 5, 00185 Rome, Italy

Type of business or sector | Education and research

Dates | September 1981 to July 1983

Occupation or position held Professor of Telecommunications

Main activities and responsibilities | Teaching

Name and address of employer | Italian Air Force base, Pratica di mare, Rome, Italy

Type of business or sector | Government

Education and training

Dates 1979

Title of qualification awarded | Specialization diploma in Engineering of Computer and Automatic Control Systems

Principal subjects/occupational skills | Computer Science, Control Systems

Name and type of organisation University La Sapienza, Rome, Italy

providing education and training | Public university.

Dates 1978

Title of qualification awarded | Dr. Eng. degree in Electronics Engineering, full marks *cum laude*

Principal subjects/occupational skills | Mathematics, Physics, Electronics, Telecommunications, Computer Science

Name and type of organisation providing education and training

University La Sapienza, Rome, Italy Public university.

Personal skills and competences

Research attainments and competences

He has undertaken research and experimental activity on the following subjects:

- Switching theory in interconnection networks.
- Design and analysis of communication networks.
- Optical networks and switching systems.
- Traffic analysis and characterization.

He participated to the research activities of several European and Italian projects

He has long-time teaching experience in industry, with courses on various subjects of telecommunications.

Organisational attainments and competences

- Editor-in-Chief of the journal European Transactions on Telecommunications, published by John Wiley & Sons (2000-2010)
- Technical program co-chair of the *IEEE International Conference on Cloud Networking* (CLOUDNET 2016), Pisa, Italy, Oct. 2016.
- General co-chair of the Design of reliable Communication Networks (DRCN 2016), Paris, France, Mar. 2016.
- General chair of the *European Conference on Networks and Optical Communications* (NOC 2014), Milano, Italy, June 2014.
- Technical program co-chair of the 2013 IEEE/CIC International Conference on Communications in China (ICCC), Xi'An, P.R. China, Aug. 2013.
- Technical program co-chair of the *Next Generation Networking and Internet Symposium* of IEEE ICC 2010, Capetown, South Africa, May 2010.
- Technical program co-chair of *the Optical Systems and Networks Symposium* of IEEE GLOBECOM 2007, Washington, DC, Dec. 2007.
- Technical program chair of the *IEEE/IFIP 9th Conference on Optical Network Design and Modelling* (ONDM 2005), Milano, Italy, Feb. 2005.
- Coordinator of the Politecnico di Milano research unit in the IP project <u>COMBO</u> (*COnvergence of fixed and Mobile BrOadband access/aggregation networks*), 2013-2016, funded by the European Commission in the 7th Framework Programme.
- Coordinator of the Politecnico di Milano research unit in the IP project <u>STRONGEST</u> (*Scalable Tunable and Resilient Optical Networks Guaranteeing Extremely-high Speed Transport*), 2010-2012, funded by the European Commission in the 7th Framework Programme.
- Coordinator of the Politecnico di Milano research unit in the Networks of Excellence <u>e-Photon/One</u>, 2004-06, and <u>e-Photon/One+</u>, 2006-2008, (*Optical Networks: Towards Bandwidth Manageability and Cost Efficiency*), and <u>BONE</u> (Building the Future Optical Network in Europe), 2008-2010, funded by the European Commission in the 6th and 7th Framework Programme.
- Coordinator of the Politecnico di Milano research unit in the IP project <u>MUPED</u> (*Multi-Partner European Test Beds for Research Networking*), 2004-2007, funded by the European Commission in the 6th Framework Programme.
- Coordinator of the Politecnico di Milano research unit in the projects <u>IntEleCT</u> (*Internationalisation of Electronic Communications Training*), 2009-2011, funded by the European Commission in the Leonardo da Vinci Programme
- Coordinator of the Politecnico di Milano research unit in the projects <u>INCERT</u> (*International Certificates of Excellence in Selected Areas of ICT*) and <u>TRAIN2CERT</u> (*Vocational Training for Certification in ICT*), 2006-2009, funded by the European Commission in the Leonardo da Vinci Programme
- Coordinator of the project PRIN <u>MIMOSA</u> (*Experimental Measurements and Traffic Models in Multiservice Networks*), 2006-2007, and of the project PRIN <u>BESOS</u> (*Bandwidth efficiency and Energy Saving by sub-lambda Optical Switching*), 2010-2011, co-funded by the Italian Ministry of Education, University and Research (MIUR).
- Coordinator of the Politecnico di Milano research unit in the national projects IPPO (IP Packet Optical Networks), 2001-2002, TANGO (Traffic models and Algorithms for Next Generation IP networks Optimization), 2003-2004, ADONIS (Algorithms for Dynamic Optical Networks based on Internet Solutions), 2003-2004, WONDER (WDM Optical Network DEmonstrator over Rings), 2004-2005, co-funded by the Italian Ministry of Education, University and Research (MIUR).
- Responsible of research contracts between Politecnico di Milano and private companies.

Other competences

- Senior Member of the IEEE (since 1993).
 Editor of IEEE Transactions on Communications (1994-2011).
 Member of the Technical Program Committee of many IEEE conferences.
 Teacher of courses in telecommunications in industries and consortia.
 Invited lecturer of tutorials on switching and networks in IEEE and non-IEEE conferences.
 Full CV and publications available at http://home.deib.polimi.it/pattavina/

List of the most important publications

Books:

- A. Pattavina, Switching Theory, Architectures and Performance in Broadband ATM Networks, John Wiley & Sons, 1998.

 - A. Pattavina, *Reti di Telecomunicazioni*, McGraw-Hill, 2003 (in Italian).
- A. Pattavina, Reti di Telecomunicazioni. Networking e Internet, Second edition, McGraw-Hill, 2007
- A. Pattavina, Internet e Reti, 2018 (in Italian).