

Biographical notes

Michele Pagano was born in Lerici (Italy) in 1968. He received laurea (cum laude) in Electronics Engineering in 1994 and a Ph.D. in Electronics Engineering in 1998, both from the University of Pisa. From 1997 to 2007 he has been “Researcher” at the Dipartimento di Ingegneria dell’Informazione of the University of Pisa, and since December 2007 he is associate professor at the same Department (confirmed in December 2010).

Currently he is the official instructor of the courses of “Telematics” (Bachelor Degree), “Performance of Multimedia Networks” and “Network Security” (Master Degree) in the laurea course in Telecommunication Engineering at the University of Pisa as well as of the course of “Architectures, Components and Network Services” (in English) in the framework of the Master Degree program in Computer Science and Networking, a joint initiative (Laurea Interateneo) of University of Pisa and Scuola Superiore Sant’Anna. Moreover, in the framework of the Network of Excellence (NoE) EuroNGI (Design and dimensioning of the Next Generation Internet), in collaboration with Prof. Sandrine Vaton (ENST Bretagne), in June 2006 and in October 2006 he gave a Joint PhD Course on “IP traffic characterization, data analysis and statistical methods: Bayesian Methods in Teletraffic Theory”. Furthermore, in the framework of the international interuniversity co-operation projects, he gave a short course on “Large Deviation Theory and Rare Event Simulation” (September 2003) at the State University of Petrozavodsk (PetrSU), and, since 2009, he gives a course on “Advances in Network Performance Analysis” at PetrSU and People’s Friendship University of Russia (PFUR). Finally, in 2014 he gave a course on “Traffic modelling” at the Silesian University of Technology in Gliwice and at the Tomsk State University.

His research interests are related to statistical characterization of traffic flows and to network performance analysis, mainly in the framework of architectures able to support Quality of Service. In this scenario the research activity deals with analytical approaches for performance evaluation as well as the use of discrete event simulation to better characterize network behaviour and protocols (mainly using NS-2). In particular, in the specific framework of Rare Event Simulation, Importance Sampling techniques and applications of Large Deviation Theory have been investigated. In the last years he extended his research interests to statistical traffic classification and network security issues (mainly in the framework of anomaly-based Intrusion Detection Systems), and to Green Networking (energy efficiency of current network devices and planning of energy-aware routing algorithms).

He has co-authored around 180 papers published in international journals and presented in leading international conferences.

He was a member of the Technical Committee of several international congresses and local organizer of RESIM2000. As a member of the Research Unit of Pisa, he has been involved in the activities of the Networks of Excellence EuroNGI and EuroFGI, and in several national and international projects in the field of telecommunication networks, in particular being the local coordinator

for the 2006 PRIN (Research projects of national interest) RECIPE (Robust and Efficient traffic Classification in IP nEtworks) and the 2008 PRIN EFFICIENT (Energy eFFicient teChnologIEs for the Networks of Tomorrow).

In 2006/2007 he has been supervisor (together with Prof. Gennady Aleksey Mikhailov) of Dr. Mikhail Alexander Marchenko in the framework of the INTAS Fellowship Grant for Young Scientists for a research project on “Developing the efficient parallel Monte Carlo algorithms for modeling spatially inhomogeneous coagulation and their adaptation to GRID environment”. Moreover, in 2005/2008 he participated to research cooperation projects between University of Pisa and PetrSU and since 2009 he has been the principal investigator in two cooperation projects, namely “Design and Deployment of Next Generation Internet” (years 2009/2010) and “Modelling Next Generation Internet” (years 2011/2012), funded by the University of Pisa, with the participation of the following Russian universities: PetrSU, PFUR and TvSU.

He is a member of the IITiS PAN (Institute of Theoretical and Applied Informatics of the Polish Academy of Sciences) International Advisory Board (in the framework of Computer networks modeling and performance evaluation) and in the years 2011/2013 he was an invited speaker at the CN (Computer Networks) Conference, the first and oldest in Poland on the subject of computer networks. Finally, in 2011/2013 he has been supervisor of Pawel Foremski in the framework of the project “Multilevel traffic classification in the Internet”, funded by the Polish National Science Centre.