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ADDRESS

Università della Campania “L. Vanvitelli”
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EDUCATION

PhD in Information Technology Engineering - February 2003.

University “Federico II” of Naples – Italy.
thesis: “Deployment of Flexible Services over Programmable Networks”.
advisor: prof. G. Ventre. co-advisor: prof. Jon Crowcroft

Laurea Degree in Electronic Engineering – June 1999

University “Federico II” of Napoli - Italy.
thesis “Design and development of an API for the Quality of Service control in video-streaming applications”.
advisor: prof. G. Ventre

CURRENT POSITION

Assistant Professor at Università della Campania “L. Vanvitelli” since 1.9.2006.

WORK HISTORY

From July 1999 to June 2000

Collaboration with Computer Science Department of University of Naples thanks to a fellowship sponsored by Telecom Italia.

Involved in GESTALT (Getting Educational Systems Talking Across Leading Edge Technologies) – IV Framework European project.

February 2000

Grant to attending Usenix 2000 conference in Austin (Texas).

From November 1999 to October 2002

PhD program in Information Technology Engineering at University of Napoli “Federico II”- Italy.

From May 2000 to April 2003

Began a three years collaboration with University of Naples in CADENUS (Creation and Deployment of End-User Services in Premium IP Networks) V Framework European project - IST-1999-11017. Main partners were GMD-FOKUS, Teltec, Telecom Italia, Trinity College Dublin, EPFL.

July 2002

1 month collaboration with prof. Jon Crowcroft at University of Cambridge (UK), founded by COST-263 cooperation on "Quality of future Internet Services". During this collaboration I contributed to a proposal for QoS negotiation and translation at the edge of a wired and a third generation wireless network domain.

From November 2002 to January 2003

3 months fellowship for research activity concerning design, deployment and experimentation of distributed multimedia applications for remote learning over QoS enabled Networks at "Laboratorio Nazionale per l'Informatica e la Telematica Multimediali" in Italy.

From May 2003 to April 2005

Research Fellow at Computer Engineering and Systems Department - University "Federico II" of Napoli.

June 2004

joined the E-Next (Network of Excellence) Program as a member of WorkGroup 4, which aims at investigating "Self Aware and Scalable networks".

From January 2005 to April 2005

Visiting researcher at Electrical and Electronic Engineering Department of Imperial College.

From May 2005 to August 2006

Research Fellow at Electrical and Electronic Engineering Department of Imperial College - LONDON UK, funded by EPSRC program. Member of *Self Aware Network* Project at the same Department and investigator of a research activity concerning a new proposal of measurement based admission control model.

2008 – collaboration at PRIN 2008 project – "Cloud@Home: a new enhanced computing paradigm"

March 2008 – December 2008

Collaboration with GematICA s.r.l., definition of a model to test wireless networks in metropolitan railway environment. The purpose of the model concerned connectivity test and the received quality of service for the final customer.

September 2013 – Ottobre 2014 Collaboration at A7.5 (Diagnosi collaborativa: Progettazione e sviluppo della soluzione applicativa) activity and A7.6 (Diagnosi collaborativa: Verifica e Validazione), Smarthealth 2.0 project, cod. PON04a2_C

Earn the "Abilitazione Scientifica Nazionale" to teach as an Associate Professor in Italian University, sector 01/B1 – Computer Science, on 19.11.2018

RESEARCH ACTIVITY

The research activity deals with the development and the experimentation of protocols and algorithms for the deployment of Quality of Service on computer networks and new models of admission control in self-aware networks. The most recent works are concerned with the application of game theory results to wireless networks, the deployment of sensor networks, the development of protocols for green networking.

TEACHING ACTIVITY

Current courses at Università della Campania "L. Vanvitelli":

from a.a 2017/2018

SISTEMI INFORMATICI PER IL TURISMO, cdl in Scienze del Turismo – 10 CFU – 60 hours

Reti di Calcolatori, cdl Ingegneria Elettronica e Informatica – 6 CFU – 48 hours

INFORMATICA, C.I. Metodologia epidemiologica e statistica, cdl Tecniche della prevenzione nell'ambiente e nei

luoghi di lavoro – 2 CFU – 20 hours

Modulo di INFORMATICA, C.I. Gestione dei flussi informativi in ambito sanitario, cdl Scienze Infermieristiche ed Ostetricie – 1 CFU – 10 hours

Former teacher of several Computer Science courses at Università della Campania, since 2006.
Former lecturer in courses taught at Università Federico II di Napoli, from 1999 to 2005.

PUBLICATIONS

Journals

- [1] S. Avallone, M. D'Arienzo, M. Esposito, A. Pescapè, , S.P. Romano, G. Ventre
“Mtools”
Networking Column on IEEE Network, September/October 2002, vol.16 No. 5 – pag 3.
ISSN 0890 8044
Impact Factor: 2002: 2.538
- [2] M. D'Arienzo, S.P. Romano, R. Canonico, G. Ventre
“Introducing QoS awareness in distributed programming: QTcl”
“Software - Practice and Experience” - John Wiley & Sons - August 2003, vol.33 Issue 10 - pp 901-911.
ISSN 0038-0644
Impact Factor: 2003: 0.718
- [3] R. Chakravorty, I. Pratt, J. Crowcroft, (University of Cambridge), M. D'Arienzo (University of Napoli)
[A Framework for Dynamic SLA-Based QoS Control for UMTS](#)
IEEE Wireless Communication Magazine – October 2003, vol.10 No. 5 – pp 30-37
ISSN 1536-1284
Impact Factor: 2003: 1.583
- [4] M. D'Arienzo, A. Pescapè, G. Ventre
Dynamic Service Management in Heterogeneous Networks
Journal of Network and System Management
Special Issue on Distributed Management of Networks, vol.12 No. 3 September 2004– pp. 349-370
ISSN 1064-7570
- [5] S.P. Romano, S. D'Antonio, M. Esposito, M. D'Arienzo, G. Ventre
“Managing Service Level Agreements in Premium IP Networks: a Business-oriented Approach”
Computer Networks, Elsevier - Volume 46, Issue 6, 20 December 2004, Pages 853-866.
ISSN 1389 1286
Impact Factor: 2004: 1.226 * Copyright ISI Journal Citation Report
- [6] H. Abrahamsson, S. Balon, S. Bessler., S.K. Cerav, M. D'Arienzo, O. Delcourt, J. Domingo-Pascual, I. Gojmerac, G. Leduc, A. Pescapè, S.P. Romano, E. Slavadori, F. Skivèe, H.T. Tran, S. Uhlig, H. Umit.
“An Open Source Traffic Engineering Toolbox”
To appear on Computer Communications - E-Next Special Issue
ISSN 0140 3664
Impact Factor: 2003: 0.508
- [7] E. Gelenbe, G. Sakellari, and M. D' Arienzo
“Admission of qos aware users in a smart network”
ACM Transactions on Autonomous and Adaptive Systems, March 2008
ISSN:1556-4665

- [8] D'ARIENZO M, PESCAPÈ Antonio, ACETO Giuseppe, BOTTA Alessio (2011)
 Unified architecture for network measurement: The case of available bandwidth.
JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, vol. 1, p. 2-14
 ISSN: 1084-8045
- [9] M. D'Arienzo, F. Oliviero, S. P. Romano (2011)
 Greening Ah Hoc Networks through Detection and Isolation of Defecting Nodes
INTERNATIONAL JOURNAL ON ADVANCES IN INTERNET TECHNOLOGY, vol. 4, p. 28-36
 ISSN: 1942-2652
- [10] D'ARIENZO M, Simon Pietro Romano, Francesco Oliviero (2012).
 Can cooperation improve energy efficiency in ad hoc wireless networks?.
COMPUTER COMMUNICATIONS, Volume 35, Issue 14, 1 August 2012, Pages 1707–1714, ISSN: 0140-3664,
 doi: 10.1016/j.comcom.2012.05.004
- [11] Maurizio D'Arienzo, Mauro Iacono, Stefano Marrone , and Roberto Nardone
 “Petri net based evaluation of energy consumption in wireless sensor nodes”
Journal of High Speed Networks
 DOI 10.3233/JHS-130482
- [12] D'Arienzo, Maurizio and Simon Pietro Romano
 “A cooperation-based approach to energy optimization in wireless ad hoc networks.” *ICST Trans. Mobile Communications Applications* 2 (2015): e3.
 doi:10.4108/eai.11-8-2015.150092
- [13] M. D'Arienzo, S.P. Romano
 GOSPF: An energy efficient implementation of the OSPF routing protocol, *Journal of Network and Computer Applications*, Volume 75, November 2016, Pages 110-127, ISSN 1084-8045,
<http://dx.doi.org/10.1016/j.jnca.2016.07.011>.

International Conferences

- [1] R. Canonico, M. D'Arienzo, S.P. Romano e G. Ventre
 “Introducing QoS awareness in Tcl programming: QTcl”
 7th USENIX Tcl/Tk Conference, USENIX Association 2000 – pp 23-30.
- [2] M. D'Arienzo, S.P Romano e G. Ventre
 DiVA: QoS-aware streaming of multimedia content over the Internet.
 IEEE PROMS 2000, IEEE CS Press, Cracow, October 2000 – pp 236-242 .
- [3] M. D'Arienzo, M. Esposito, S.P. Romano e G. Ventre
 “Dynamic SLA-Based Management of Virtual Private Network”
 Lecture Notes in Computer Science – vol. 2170 Springer-Verlang 2001 – pp 642-659.
- [4] R.Maresca, M. D'Arienzo, M.Esposito, S.P.Romano e G.Ventre
 “An Active Network approach to Virtual Private Network”
 ISCC2002 – IEEE CS 2002, pp 502-507.
- [5] R.Canonico, M. D'Arienzo, B.Fadini, S.P.Romano e G.Ventre
 “On the introduction of quality of Service awareness in legacy distributed applications”
 SEKE2002 – ACM 2002, pp 659-664.
- [6] M. D'Arienzo, M.Esposito, S.P. Romano e G. Ventre
 “Active Service Management in QoS enabled network”
 IEEE OpenArch2002 – Short Paper Session - June 2002 – pp. 35-40.
- [7] M. D'Arienzo, A. Pescapè, S.P. Romano e G. Ventre
 “The Service Level Agreement Manager: control and management of phone channel bandwidth on Premium IP Network”

ICCC2002 – ICCC Press, 2002 – pp 421-432.

- [8] S. D'Antonio, M. D'Arienzo, M. Gargiulo, S.P. Romano e G. Ventre
“Service Level Indication: A proposal for QoS monitoring in SLA-based multidomain networks”
IFIP2002, KLUWER 2003, vol. 247 – pp 67-78.

- [9] M. D'Arienzo, M. Esposito, S.P. Romano, G. Ventre
“Automatic SLA Management in SLA-aware architecture”
ICT2003, IEEE CS 2003, pp. 1402-1406.

- [10] R. Chakravorty, J. Crowcroft, I. Pratt, (University of Cambridge) M. D'Arienzo (University of Napoli)
“Dynamic SLA-based QoS Control for Third Generation Wireless Networks: The CADENUS Extension”
ICC2003, IEEE CS 2003, pp 938-943.

Cited in Invited Session:

Lee McKnight, J. Hawison “Towards a Sharing Protocol for Wireless Grids”
International Conference on Computer, Communication and Control Technologies CCCT03-Orlando, Florida(USA)

- [11] S. Avallone, M. D'Arienzo, A. Pescapè, S.P. Romano, G. Ventre
“Analisis and performance evaluation of the real time traffic on Premium IP (PIP) network”
ICOIN 2003, LNCS Springer-Verlang 2003 - vol. II pp. 1000 -1014.

- [12] M. D'Arienzo, A. Pescapè, G. Ventre
“A simulation environment for an experimental analysis of Multiple Traffic scheduling algorithms over GPRS Networks”
CCCT2003, © IIIS International Institute of Informatics and Systemics - vol. III pp 76-83.

- [13] M. D'Arienzo, A. Pescapè, S.P. Romano, G. Ventre
“An Active Platform for Automatic SLA Management and Configuration”
Electronic Proceedings of I2TS – ISBN 85-89264-02-5

- [14] M. D'Arienzo, A. Pescapè, G. Ventre
“Transparent and Automatic SLA Management: moving towards Proactive Networks”
Electronic Proceedings of ICN2004 – ISBN 0 86341 325 0

- [15] S. D'Antonio, M. D'Arienzo, A. Pescapè, S.P. Romano, G. Ventre
“Using Metadata in SLA negotiation over Premium IP Networks”
ICDCSW2004 Workshop 0-7695-2087-1/04 IEEE 2004

- [16] S. D'Antonio, M. D'Arienzo, A. Pescapè, G. Ventre
“An Architecture for Automatic Configuration of Integrated Networks”
NOMS2004 IEEE 2004 pp 351-364.

- [17] M.D'Arienzo, G. Ventre
“Flexible Node Design and Implementation for Self Aware Networks”
SAACS 2005 workshop – IEEE/CS pp. 150-154

- [18] M.D'Arienzo, E. Gelenbe, G. Sakellari
“Admission Control in Self-Aware Networks”
In Globecom 2006 proceedings.

- [19] Antonio Pescape', Maurizio D'Arienzo, Giorgio Ventre
“Transparent Network Configuration for Internet Telephony Traffic”
In Proceedings of IEEE CONTEL 2007 – June 2007 pp 311-316

- [20] E. Gelenbe, G. Sakellari, and M. D' Arienzo
“Controlling access to preserve qos in a self-aware network”
In *Proceedings of the First IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)*, pages 205–213, July 2007

- [21] G. Sakellari, E. Gelenbe, and M. D'Arienzzo
 "Admission of packet flows in a self-aware network"
 In proceedings of *BIONETWORKS 2007 Workshop*, October 2007 pp 1-6
- [22] Massimo Ficco, Maurizio D'Arienzzo, Gianni D'Angelo
 "A Bluetooth Infrastructure for Automatic Services Access in Ubiquitous and Nomadic Computing Environments"
 In Proceedings of ACM MOBIWAC 2007
- [23] Alessio Botta, Giuseppe Aceto, Antonio Pescapè, Maurizio D'Arienzzo
 "UANM: A Unified architecture for experimenting with network measurements"
 In Proceedings of IEEE Symposium on Computer Communications, 2010, Rimini (Italy) pp 174-179
- [24] Maurizio D'Arienzzo, Francesco Oliviero, Simon Pietro Romano
 "Smoothing selfishness by isolating non cooperative nodes in wireless ad hoc networks"
 In Proceedings of Advances in Future Internet, AFIN 2010, Venice (Italy) pp. 11-16
- [25] Maurizio D'Arienzzo
 "Precise QoS metrics monitoring in Self-Aware Networks"
 In Proceedings of VALID 2010, Nice (France)
- [26] Massimo Ficco, Maurizio D'Arienzzo, Gianni D'Angelo
 "A Bluetooth Infrastructure for Automatic Services Access in Ubiquitous and Nomadic Computing Environments"
 In Proceedings of ACM MOBIWAC 2007
- [27] Alessio Botta, Giuseppe Aceto, Antonio Pescapè, Maurizio D'Arienzzo
 "UANM: A Unified architecture for experimenting with network measurements"
 In Proceedings of IEEE Symposium on Computer Communications, 2010, Rimini (Italy) pp 174-179
- [28] Maurizio D'Arienzzo, Francesco Oliviero, Simon Pietro Romano
 "Smoothing selfishness by isolating non cooperative nodes in wireless ad hoc networks"
 In Proceedings of Advances in Future Internet, AFIN 2010, Venice (Italy) pp. 11-16
- [29] Maurizio D'Arienzzo
 "Precise QoS metrics monitoring in Self-Aware Networks"
 In Proceedings of VALID 2010, Nice (France)
- [30] Maurizio D'Arienzzo
 "Towards a fairer energy consumption in wireless ad hoc networks"
 In proceeding of: Computer and Information Sciences II - 26th International Symposium on Computer and Information Sciences, London, UK, 26-28 September 2011
- [31] Maurizio D'Arienzzo, Sabato Manfredi, Francesco Oliviero, Simon Pietro Romano
 "On the Use of Cooperation as an Energy-Saving Incentive in Ad Hoc Wireless Networks"
 Green Communications and Networking
 Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering
 ISSN: 1867-8211 (Print) 1867-822X (Online)
 Volume 51, 2012, pp 148-160
- [32] Maurizio D'Arienzzo, Mauro Iacono, Steafano Marrone, Roberto Nardone
 "Estimation of the Energy Consumption of Mobile Sensors in WSN Environmental Monitoring Applications"
 27th International Conference on Advanced Information Networking and Applications Workshops – 2013
 Barcelona - March 25-28 ISBN: 978-1-4673-6239-9
 DOI Bookmark: <http://doi.ieeecomputersociety.org/10.1109/WAINA.2013.33>
- [33] Maurizio D'Arienzzo, Simon Pietro Romano
 Effects of cooperation on wireless ad hoc network performance
 in Wireless Internet

8th International Conference, WICON 2014, Lisbon, Portugal, November 13-14, 2014, Revised Selected Papers
ISBN 978-3-319-18801-0
DOI 10.1007/978-3-319-18802-7

- [34] D'Arienzo Maurizio and Simon Pietro Romano
A framework for the effective deployment of dynamic wireless sensor network
in proceedings of AFIN 2017 – Advances in Future Internet, Sept 10-14 2017, Rome
ISBN 978-1-61208-583-8

Best paper award

Maurizio D'Arienzo, Francesco Oliviero, Simon Pietro Romano
"Smoothing selfishness by isolating non cooperative nodes in wireless ad hoc networks"
In Proceedings of Advances in Future Internet, AFIN 2010, Venice (Italy) pp. 11-16

Alessio Botta, Giuseppe Aceto, Antonio Pescapè, Maurizio D'Arienzo
"UANM: A Unified architecture for experimenting with network measurements"
In Proceedings of IEEE Symposium on Computer Communications, 2010, Riccione (Italy) pp 174-179

D'Arienzo Maurizio and Simon Pietro Romano
A framework for the effective deployment of dynamic wireless sensor network
in proceedings of AFIN 2017 – Advances in Future Internet, Sept 10-14 2017, Rome
ISBN 978-1-61208-583-8

Deliverable e Technical report:

G. Cortese, R. Fiutem, D. Matteucci (editors), O.Dugeon, D. Sisalem, D. Matteucci, G. Cortese, R. Fiutem, Vallazza, C. Marin, G. Moran, G. Ventre, S.P. Romano, M. D'Arienzo, S. Rao
"End-user services in the Premium IP: Models, Architecture and Provisioning Scenarios"
Deliverable D2.1 CADENUS –IST-1999-11017 – November 2001 pp. 1-89

REVIEWER ACTIVITY

Member of Program Committee of AFIN conference since 2011.
Member of Program Committee of EUROIMSA International Conference from 2004 to 2010.
Reviewer for NGC2002, PHFSN2002, Proms2002, Networking2002, Mascot 2005/2006, Tridentcom2005/2006, Spects2002, 2003 and 2006, Globecom2006 conferences.
Reviewer for "Network Simulation and Performance analysis: Practice and Theory".
Reviewer for IEEE Communications Letters.
Reviewer for Elsevier 'Future Generation Computer Systems'.
Reviewer for "The Computer Journal" since 2010.
Reviewer for CIC2007.
Reviewer for ISPDC 2008, EuroPVM/MPI 2008, SNAPI2008.
Reviewer for ARES 2009, ASIA2009.
Reviewer for Transactions on Parallel and Distributed Systems IEEE Computer Society in 2009.
Reviewer for EuroPar2010,2013.
Reviewer for Journal of Network and Computer application since 2011.
Reviewer for Wireless Communication and Mobile computing since 2014.
Reviewer for IEE Sensor Journal since 2014.