

CURRICULUM VITAE



INFORMAZIONI PERSONALI

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Nazionalità italiana
Data di nascita

ESPERIENZA LAVORATIVA

- Date (da – a) Dal 1995 al 1998 Ricercatore Universitario presso Università degli studi di Catania
Dal 1998 al 2002 Professore Associato presso Università degli studi di Messina
Dal 2002 Professore Ordinario di Sistemi di Elaborazione delle Informazioni (ING-INF/05) presso l'Università degli studi di Messina
- Tipo di impiego Docente di sistemi di elaborazione delle informazioni
- Principali mansioni e responsabilità Didattica, ricerca, coordinamento gruppo di ricerca ad oggi costituito da 4 Prof. Associati, 1 Ricercatore, 3 Assegnisti, 2 PhD, 5 Contrattisti
1994-1995 – Visiting Professor presso la Duke University, North Carolina (USA)
2015 - Visiting Professor presso Indian Institute of Information Technology, Allahabad.
2016 - Visiting Professor presso University of Innopolis (Russia).

ISTRUZIONE E FORMAZIONE

- Date (da – a) 1988 Università di Catania - Laurea in Ingegneria Elettrotecnica
1992 Università di Palermo – Dottore di ricerca in Ingegneria elettronica ed Informatica

CAPACITÀ E COMPETENZE PERSONALI

Acquisite nel corso della vita e della carriera ma non necessariamente riconosciute da certificati e diplomi ufficiali.

Revisore per la Comunità europea di progetti per il 4, 5, 6 e 7 programma quadro
Valutatore progetti PRIN
Responsabile di numerosi progetti di ricerca sia a carattere regionale che nazionale
Responsabile di unità di ricerca in progetti sia nazionali che internazionali
Consulente informatico per aziende e pubblica amministrazione centrale e locale
Classificato in 4° posizione nella classifica mondiale sulla Individual productivity nell'amb computing come indicato in Leonard Heilig and Stefan Voß, "A Scientometric Analysis of Literature", IEEE Transactions on Cloud Computing, DOI 10.1109/TCC.2014.2321168.

PRIMA LINGUA **Italiano**

ALTRE LINGUE **Inglese**

- Capacità di lettura Ottima
- Capacità di scrittura Ottima
- Capacità di espressione orale Ottima

CAPACITÀ E COMPETENZE
RELAZIONALI

Vivere e lavorare con altre persone, in ambiente multiculturale, occupando posti in cui la comunicazione è importante e in situazioni in cui è essenziale lavorare in squadra (ad es. cultura e sport), ecc.

Attività di docenza e di coordinamento gruppi di ricerca

Autore di oltre 400 pubblicazioni a carattere nazionale ed internazionale.

Relatore di numerose tesi di laurea e tutor di oltre 20 studenti di dottorato.

Di seguito, alcuni dei comitati scientifici e redazionali di cui ha fatto parte:

- *6th International Workshop on Petri Nets and Performance Models (PNPM'95), Durham, North Carolina, Oct 3-6, 1995 (Local arrangement and Financial Chair).*
- *10th European Simulation Multiconference, Budapest, Hungary, June 2-6, 1996.*
- *Evaluation Conference on Inter University Cooperation in Europe in the Field of Computing, Dublin, Ireland, July 1-3, 1996.*
- *5th Int. Conference on Fuzzy Theory and Technology, Durham (USA), March 1-5, 1997.*
- *3th Int. Conference on Computer Science and Informatics, Durham (USA), March 1-5, 1997.*
- *11th European Simulation Multiconference, Istanbul, Turkey, June 1-4, 1997.*
- *5th Annual Conference on the Teaching of Computing, Dublin, Ireland, Aug 26-29, 1997 (Steering committee member).*
- *4th International Conference on Analytical and Numerical Modeling Techniques with application to QoS Modeling, Singapore, Sept. 1-4, 1997.*
- *5th International Conference on Analytical and Numerical Modeling Techniques, Manchester, UK, June 16-19, 1998.*
- *European Simulation Symposium (ESS'99) – Analytical and Numerical Techniques track, Erlangen, Germany, October 24-27, 1999.*
- *IEEE Symposium on Computers and Communications (ISCC2000), Antibe – St. Juan les Pins, 4-6 July 2000.*
- *IEEE Symposium on Computers and Communications (ISCC2001), Ammameth – Tunisia, 2-5 July 2001.*
- *IEEE Petri Nets Performance Models (PNPM01), Aachen – Germania, 11-14 Settembre 2001.*
- *IEEE Symposium on Computers and Communications (ISCC2002), Taormina – Italy, 2-5 July 2002 (Local organizer).*
- *IEEE Symposium on Computers and Communications (ISCC2004), Alessandria d'Egitto – Italy, 1-4 July 2004 (Technical Chair).*
- *IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WOWMOM 2005), Taormina – (Italy) 13-16 July 2005 (Local organization Chair).*
- *International Conference on High Performance Computing and Communications (HPCC05), Sorrento – (Italy) 21-23 September 2005 (program vice chair)*
- *IEEE 20th International Conference on Advanced Information, Networking and Applications (AINA2006), Vienna, 18-20 April 2006.*
- *4th International Conference on Ubiquitous Intelligence and Computing (UIC-07), Hong Kong, July 11-13, 2007 (program co-chair).*
- *13th IEEE Workshop on Dependable Parallel, Distributed and Network-Centric Systems (DPDNS'08), April 14-18, 2008, Miami, Florida (USA) (program chair).*
- *9th IEEE/ACM International Symposium on Network Computing and Applications (NCA10), 15 – 17 July 2010, Cambridge, MA (USA).*
- *Workshop di Informatica Quantitativa (InfQ), 27-29 Giugno 2011, Lipari (Italy) – (General Chair)*
- *IEEE Symposium on Computers and Communications (ISCC2011), Corfu' – Greece, 1-4 July 2011.*
- *IEEE ServiceWave 2011 – Cloud Computing Track, Poznan (Polonia), 26-28 Oct 2011.*
- *IEEE NCA 2012 – Network Computing and Applications, Cambridge (USA), 23-25 Aug, 2012.*
- *13th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing May 13-16, 2012, Ottawa, Canada.*

- 17th IEEE Workshop on Dependable Parallel, Distributed and Network-Centric Systems, May 21-25, 2012, Shanghai, China.
 - International Workshop on Extending Seamlessly to the Internet of Things - esIoT 2012 – July 4-6, Palermo (Italy).
 - 12th IEEE International Symposium on Network Computing and Applications (IEEE NCA13), 22-24 August 2013, Boston (USA)
 - 1th International Workshop on Sensors and Smart Cities (SSC 2014), 5 November 2014, Hong Kong (General Chair)
 - 4th IEEE Symposium on Network Cloud Computing and Applications (NCCA2015), June 11-12, Munich (PC-Co-Chair).
 - IEEE International Conference on Communications (ICC 2016) SAC Internet of Things, 23 May 2016, Kuala Lumpur, Malesia.
 - 10th EAI International Conference on Performance Evaluation Methodologies and Tools (Valuetools 2016), October 2016, Taormina Italy (general Chair).
 - Eighth International Workshop on Software Aging and Rejuvenation (WOSAR 2016), October 23 and October 27, 2016, Ottawa, Canada.
 - Ad-Hoc, Mobile and Wireless Networks: ADHOC-NOW 2017, June 2017, Taormina Italy (general Chair).
 - 4th IEEE SmartComp Conference, June 2018, Taormina Italy (general Chair).
 - 11th IEEE International Conference on Internet of Things (iThings 2018), Halifax (Canada), July 30 – August 3, 2018 (General co-chair).
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- Guest editor of the International Journal on Performance Engineering special issue on “Performance and Dependability Modeling of Dynamic Systems” (2011).
 - Guest editor special issue of ACM SIGMETRICS Performance Evaluation (2011).
 - Guest Editor Special Issue of the EURASIP Journal on Wireless Communications and Networking on “Internet of Things: Convergence of Sensing, Networking, Computing and Web Technologies”.
 - Member of the editorial board of the “Journal of Cloud Computing Advances, Systems and Applications” (JoCCASA).
 - Member of the advisory board of the International Journal on Security in Computer Networks and Distributed Systems (IJSCNDS) - IGI Global.
 - Guest editor IEEE Transactions on Dependable and Secure Computing, special issue on Cloud computing Assessment: metrics, algorithms, policies, models, and evaluation techniques, 2012.
 - Member of the editorial board of the Journal of Parallel & Cloud Computing (PCC), published by THE WORLD ACADEMIC PUBLISHING CO., LIMITED.
 - Member of the Editorial Board of The Scientific World Journal, Hindawi Publishing Corporation.
 - Member of the IEEE Computer Society's Special Technical Community on Sustainable Computing (STC-SC)
 - Member of the Editorial Board of the International Journal of Distributed Sensor Networks (IJDSN), Hindawi Publishing Corporation.
 - Guest Editor of the Hindawi Journal Sensors, special issue on "Sensors and Smart cities" (2015).
 - Guest Editor Journal Sensor and Actuator Networks (JSAN) by Indawi, S.I. on "Toward Flexible and Scalable Sensor Network Systems with Evolving Intelligence", 2016.
 - Guest Editor of the Hindawi International Journal of Distributed Sensor Networks, special issue on "Smart Objects, Infrastructures, and Services in the Internet of Things (SOIS)", 2016.
 - Guest Editor of Performance Evaluation (Nov. 2016) with the best papers from the Valuetools 2016 conference.
 - Guest Editor of the EAI Endorsed Transactions on Cloud Computing Systems, special issue on Cloud and fog computing: Performance Evaluation Methodologies and Tools, April 2017.
 - Member of the Editorial Board of the International Journal of Computer Applications in

Technology (IJCAT), Inderscience Publishers.

- Member of the Editorial board of the Journal of Cloud Computing, Springer.
- Member of the Editorial Board of Sensors, section Sensor Networks, from January 2018.
- Editor IEEE TNSE (Transactions on Network Science and Engineering), Special issue on “...”

CAPACITÀ E COMPETENZE ORGANIZZATIVE

Ad es. coordinamento e amministrazione di persone, progetti, bilanci; sul posto di lavoro, in attività di volontariato (ad es. cultura e sport), a casa, ecc.

- Delegato del Rettore dell'Università di Messina per l'Informatizzazione dell'Ateneo nel periodo 2004-2008.
- Coordinatore del corso di studi in Ingegneria Informatica (2000 - 2012)
- Coordinatore del corso di dottorato di ricerca in Tecnologie avanzate per l'ingegneria dell'informazione (2000 - 2010)
- Responsabile ERASMUS per la Facoltà di Ingegneria di Messina (1998 -)
- Vincitore del CISCO ICT Innovation Award 2005 per la realizzazione della rete integrata voce/dati della nuova facoltà di Ingegneria dell'università di Messina
- Fondatore e responsabile scientifico Inquadro srl, spin-off Università di Messina
- Finalista vincitore del Premio ForumPA 2008 "Protagonista dell'innovazione"
- Fondatore di DHLabs srl, spin-off tra Università di Messina ed Arduino.
- Fondatore e responsabile scientifico di SmartMe.io, spin-off Università di Messina
- Vincitore del Premio G7 Trasporti per la soluzione CarPooling @UniME (Cagliari 21/6/2017)
- Coordinatore del Dottorato Internazionale in Cyber Physical Systems (dal 2017)
- BEST paper Award:
 - Longo F., Rocco Lotrionto A., Scarpa M. and Puliafito A. (2015). Optimizing Routine Maintenance Team Routes. In Proceedings of the 17th International Conference on Enterprise Information Systems ISBN 978-989-758-096-3, pages 535-546. DOI: 10.5220/0005400105350546
 - R. Dautov, S. Distefano, D. Bruneo, F. Longo, G. Merlino, A. Puliafito, "Pushing Intelligence to the Edge with a Stream Processing Architecture", 10th IEEE Int. Conf. on Internet of Things (i-Things 2017), 21-23 June 2017, Exeter (UK).

Responsabile dei seguenti progetti di ricerca Nazionali ed internazionali:

- Progetto CNR-Agenzia 2000 "Metodologie di progetto di server multimediali ad alte prestazioni accessibili in Internet" (2001-2002) (coordinatore nazionale)
- Progetto con la ST-Microelectronics su "Multimedia Messaging Systems" (2001-2002)
- Progetto FIRB RBNE019N8N "Valutazione delle prestazioni dei sistemi complessi: tecniche, metodologie e strumenti" (2002-2005)
- Progetto FIRB "Middleware per servizi evoluti su sistemi distribuiti wired-wireless di grandi dimensioni" (2002-2005)
- Progetto CNR "Infrastrutture software per reti ad hoc orientate ad ambienti difficili" (2002-2005)
- Progetto ISID "Incremento della Sicurezza nei Sistemi Informativi Aziendali" (2002-2005)
- Progetto 297 "Piattaforma mobile a basso consumo per future applicazioni multimediali" da 1.5M€ (2005-2007).
- Progetto TRIGRID "Trinacria GRID Virtual Laboratory" da 3.7M€ (2005-2008), che intende sviluppare una piattaforma ad alta velocità all'interno della Regione Sicilia per lo sviluppo di nuove soluzioni di calcolo basate sul GRID computing.
- Progetto "Ponte digitale" da 4M€ (2005-2007), per la realizzazione di un centro di competenza sulla info-mobilità.
- Progetto PI2S2 "Progetto per l'Implementazione e lo Sviluppo di una e-Infrastruttura in Sicilia basata sul paradigma della grid" da 11M€ (2005-2008).
- Progetto FP7 RESERVOIR da 14 M€, che intende studiare e sviluppare tecniche di virtualizzazione in ambiente Cloud (2009-2011)
- Progetto SET "Sistemi di trasporto eco-efficienti" da 4M€ finanziato dal Ministero dell'Economia sullo studio e realizzazione di un sistema di localizzazione veicolare per il trasporto pubblico (2008-2009).
- Progetto PRIN08 Cloud@Home finanziato dal MIUR sullo studio di sistemi di calcolo basati su una combinazione di Cloud e volunteer computing (2010-2011).
- Progetto FP7 VISION da 15 M€, che intende sviluppare nuove tecniche di gestione dei dati in ambiente Cloud (2010-2012).
- Progetto FP7 COST Euro-TM: Transactional Memories: Foundations, Algorithms, Tools, and Applications (2011-2014) – (Rappresentante italiano nel Management Committee)
- Project POR SIMONE: Cloud-based system for energy monitoring and management (2011-2013).
- Project FP7 CLOUDWave 10 M€, that intends to study how to adapt applications to cloud environments (2013-2016).
- Project PON01 SIGMA 11 M€ on the use of cloud computing to manage multirisk situations (2013-2015)
- Project FP7 "FrontierCities - European Cities driving the Future Internet" (2014-2016)

- Progetto Europeo Horizon2020 Beacon: Enabling Federated Cloud Networking (2015-2017)
- Progetto di internazionalizzazione Research & Mobility con University of Berkeley, Duke University, University of San Diego, Polytechnic of Hong Kong, EPFL (2016-2017)

Vice Presidente del Consorzio InterUniversitario COMETA per il calcolo ad alte prestazioni sino al 2008.

Membro di IRIANC: International Research Institute on Autonomic Network Computing.

Componente della general assembly e del comitato tecnico dei progetti RESERVOIR e Vision-Cloud, finanziati dalla Commissione europea nell'ambito del settimo Programma quadro per lo studio e l'applicazione di nuovi servizi Cloud.

Direttore del laboratorio Wireless ed RFID dell'Università di Messina (in collaborazione con Oracle ed Intel)

Direttore del Center on Information Technology and their Applications (CIAM) dell'Università di Messina (2006-2009 e 2013 ad oggi)

Responsabile dell'iniziativa di Crowdfunding #SmartME per la realizzazione di una infrastruttura di sensori collegata al Cloud all'interno della città di Messina (*smartme.unime.it*). L'obiettivo e' quello di creare un Cyber Physical System di estensione metropolitana in cui sviluppare ed offrire servizi tipo: monitoraggio ambientale, mobilità intelligente e di energy management.

CAPACITÀ E COMPETENZE TECNICHE

*Con computer, attrezzature specifiche,
macchinari, ecc.*

Programmazione, gestione sistemi di calcolo, reti di calcolatori, sistemi wireless, IoT, GRID e Cloud computing.

Ha contribuito a realizzare i seguenti strumenti software:

- WebSPN: tool per lo studio delle reti di Petri non Markoviane che permette la soluzione analitica di modelli estremamente complessi
- MAP: piattaforma ad agenti mobili basata su Java e su meccanismi di sicurezza avanzati
- DAVID: server per video on demand basato su una architettura totalmente distribuita in grado di garantire prestazioni elevate e costi contenuti
- ArgoPerformance: tool grafico per l'analisi delle prestazioni del software basato su UML
- GridVideo: una applicazione basata su Grid per offrire un server di video on demand virtuale.
- WHEREX: middleware per la realizzazione e gestione dell'Internet of Things (in seguito trasformato in prodotto commerciale da Inquadro srl)
- CLEVER: middleware per la realizzazione e gestione di infrastrutture di Cloud computing
- S4T: ambiente di sviluppo per Cyber-Physical Systems in grado di interconnettere l'Internet delle cose al Cloud.

L'attività scientifica e' rivolta principalmente allo studio dei sistemi di calcolo distribuiti e paralleli con particolare attenzione verso la modellazione delle prestazioni e dell'affidabilità, il networking, le architetture orientate ai servizi. Applicazioni specifiche sono state sviluppate sul network management e sulla gestione della qualità del servizio. Si e' occupato di tematiche legate alla gestione della mobilità dell'utente ed alla sicurezza sia nelle reti wireless che ad hoc. Particolare enfasi viene attualmente dedicata allo studio dei sistemi di calcolo Grid e sul Cloud computing ed alla adozione di tali paradigmi per fornire servizi multimediali avanzati all'utente finale, avendo particolare riguardo alla realizzazione di servizi per le PMI e la Pubblica Amministrazione. Interesse specifico riguarda l'Internet delle cose ed i Cyber Physical Systems e le loro applicazioni. L'attività di ricerca riguarda le seguenti aree tematiche:

- Tecniche di modellazione e Valutazione delle Prestazioni
- Affidabilità e tolleranza ai guasti
- Internet delle cose
- Sistemi wireless ed RFID
- GRID e Cloud Computing

Negli ultimi anni particolare attenzione e' stata posta all'integrazione del mondo Cyber con quello fisico contribuendo all'estensione di OpenStack verso l'IoT, con la realizzazione del middleware Stack4Things (S4T). S4T e' alla base del progetto #SmartME.

Main scientific publications

- V.Catania, L.Milazzo, A.Puliafito, and L.Vita, "Enhancing reliability in an industrial LAN: design and performability evaluation," *IEEE Transactions on Industrial Electronics*, vol. 37, pp. 433-441, Dec. 1990.
- V.Catania, A.Puliafito, and L.Vita, "A modular-network architecture for performance enhancement in extended Local Area Network," *IEEE Transactions on Reliability*, vol. 42, pp. 50-62, Mar. 1993.
- V.Catania, A.Puliafito, and L.Vita, "A model for performance evaluation of gracefully degrading systems," *The Computer Journal*, vol. 36, no. 2, pp. 177-185, 1993.
- V.Catania, A.Puliafito, and L.Vita, "High speed data service in distributed systems based on SMDS," *Computer Communications*, vol. 16, pp. 394-402, July 1993.
- V.Catania, A.Puliafito, and L.Vita, "A modelling framework to evaluate performability parameters in gracefully degrading system," *IEEE Transactions on Industrial Electronics*, vol. 40, pp. 461-472, Oct. 1993.
- V.Catania, A.L. Corte, A.Puliafito, and L.Vita, "A simulation study of DQDB metropolitan area network," *Simulation*, vol.62, pp.158-171, Mar. 1994.
- V.Catania, S.Cavaliere, A.Puliafito, and L.Vita, "A parallel VLSI approach to implement network protocols," *Journal of Microcomputer Applications*, vol.17, pp.147-170, Apr. 1994.
- S.Casale, V.Catania, A.Puliafito, and L.Vita, "A remote bridging technique to increase performability in distributed systems," *IEEE Transactions on Industrial Electronics*, vol.41, Apr. 1994.
- V.Catania, A.L. Corte, A.Puliafito, and L.Vita, "A simulation of DQDB behaviour with data and multimedia traffic," *Transactions of the Society for Computer Simulation*, vol.11, Oct. 1994.
- A.Puliafito, "Revision of RAID high-performance, reliable secondary storage by P.M. Chen et al.," *ACM Computing Review*, vol.36, p.252, May 1995.
- V.Catania, A.Puliafito, S.Riccobene, and L.Vita, "Design and performance analysis of a disk array system," *IEEE Transactions on Computers*, vol.44, Oct. 1995.
- R. A. Sanher, K. S. Trivedi, A. Puliafito, *Performance and Reliability Analysis of Computer Systems*. KLUWER ACADEMIC PUBLISHERS, 1995.
- V.Catania, A.Puliafito, G.Ascia, and L.Vita, "A reconfigurable parallel architecture for a fuzzy processor," *Information Sciences*, vol.88, pp.299-315, Jan. 1996.
- V.Catania, I.L. Paglia, A.Puliafito, and L.Vita, "A real time data service in CIM environment," *International Journal of Computer Simulation*, vol.6, no.2, pp.237-268, 1996.
- V. Catania, A. Puliafito, S. Riccobene, L. Vita, *Design and Performance Analysis of a Disk Array System*, IEEE TRANSACTIONS ON COMPUTERS, vol. 44, p. 1236 - 1247, 1995. ISSN: 0018-9340.
- V. Catania, A. Puliafito, S. Riccobene, L. Vita, *Monitoring performance in distributed systems*. Computer Communications, vol. 19, p. 788 - 803, 1996.
- V. Catania, A. Puliafito, S. Riccobene, L. Vita, *An I/O subsystem supporting mass storage functions in parallel systems*, COMPUTER STANDARDS & INTERFACES, vol. 18; p. 117 - 138, 1996.
- F. Bergadano, A. Giallombardo, A. Puliafito, G. Ruffo, L. Vita, *Security agents for information retrieval in distributed systems*. PARALLEL COMPUTING, vol. 22; p. 1719 - 1731, 1997.
- A. Puliafito, O. Tomarchio, S.S. Trivedi L. Vita, *Increasing application accessibility through Java*, IEEE INTERNET COMPUTING, vol. 2; p. 70-77, ISSN: 1089-7801, 1998.
- A. Puliafito, M. Scarpa, K.S: Trivedi, *Petri nets with k simultaneously enabled generally distributed timed Transitions*. PERFORMANCE EVALUATION, vol. 1; p. 32, 1998.
- H. De Meer, A. Puliafito, J.P. Ritcher, O. Tomarchio, *Tunnel Agents for enhanced Internet QoS*, IEEE CONCURRENCY, vol. 6(2), ISSN: 1092-3063, 1998.
- I. Curcio, A. Puliafito, S. Riccobene, L. Vita, *Design and valuation of a Multimedia Storage Server for Mixed Traffic*, ACM MULTIMEDIA SYSTEMS, vol. vol.6, n.6, 1998.
- R. Fricks, A. Puliafito, K.S. Trivedi, *Performance analysis of distributed real-time databases*, PERFORMANCE EVALUATION, vol. 35; p. 145 - 169, 1999.
- Puliafito, O. Tomarchio, L. Vita, "MAP: Design and Implementation of a Mobile Agents Platform", in *Journal of Systems Architecture*, vol.46, n.2, pp.145-162, January 2000.
- Bobbio, A. Puliafito, M. Telek, "A Modeling Framework to Implement Preemption Policies in non-Markovian SPNs", in *Transactions on Software Engineering*, vol.26, n.1, January 2000.
- Puliafito, and O. Tomarchio, "Using Mobile Agents to Implement Flexible Network Management Strategies", *Computer Communications Journal*, vol. 23, pp. 708-719, January 2000.
- de Meer, A. La Corte, A. Puliafito, and O. Tomarchio, "Programmable Agents for Flexible Management in IP Networks", *IEEE Journal on Selected Areas in Communications*, vol.18, n.2, pp.256-267, February 2000.
- S. Palazzo, A. Puliafito, M. Scarpa, "Design and Evaluation of Replicated Databases for Mobile Systems", *Wireless Networks*, vol.6, pp. 131-144, July 2000.

- Puliafito, S. Riccobene, M. Scarpa, "Which paradigm should I use?: An analytical comparison of the client-server, remote evaluation and mobile agents paradigms", in *Concurrency and Computation: Practice & Experience*, vol. 13, pp. 71-94, 2001.
- La Corte, A. Puliafito, O. Tomarchio, "QoS Management in Programmable Networks Through Mobile Agents", in *Microprocessors and Microsystems*, vol. 25/2, pp. 115-120, Maggio 2001.
- S. Papavassiliou, A. Puliafito, O. Tomarchio, Jian Ye, "Mobile Agent Based Approach for Efficient Network management and Resource Allocation: Framework and Applications", in *IEEE Journal on Selected Areas in Communications*, Maggio 2002.
- D. Bruneo, M. Villari, A. Zaia, A. Puliafito, "QoS Management for MPEG4 Flows in Wireless Environment", in *Microprocessors and Microsystems Journal*, vol.27, issue 2, pp.85-92, Marzo 2003.
- Mancuso, M. Guarnera, A. Puliafito, M. Villari, "Digital still cameras and mobile agents: How to create a distributed service for image processing", in *ST Journal*, issue n. 0, pp. 38-51, Luglio 2003.
- V. Getov, Antonio Puliafito, Omer F. Rana, "Computational Grid and Web Services: Concepts, Functionalities, and Comparisons", in proc. *IEEE Int. Conf. on Computational Cybernetics*, Aug. 30 – Sept. 1, 2004 - Vienna, Austria
- M. Scarpa, M. Villari, A. Zaia, A. Puliafito, "A Modeling Technique for the Performance Analysis of Web Searching Application", in *IEEE Transaction on Knowledge & Data Engineering*, vol. 16, no. 11, November, 2004, pp. 1339-1356.
- D. Bruneo, L. Paladina, M. Paone, A. Puliafito, Call Admission Control in Hierarchical Mobile Networks. *IEEE Symposium on Computers and Communications (ISCC05)*. 27-30 Giugno 2005, (pp. 780-785). ISBN/ISSN: 0-7695-2373-0/1530-1346.
- Zaia, D. Bruneo, A. Puliafito, "Using Grid Paradigm for Multimedia Applications", in *Concurrency & Computation: Practice & Experience*. 2006, ISSN: 1532-0626.
- D. Bruneo, A. Zaia, A. Puliafito. Agent-based middleware to access Multimedia Services in a Grid Environment. *Multiagent and Grid Systems*. vol. 1, pp. 41-59, 2005, ISSN: 1574-1702, 2005.
- M.Fazio, M. Villari and A. Puliafito. IP Address Autoconfiguration in Ad Hoc Networks: Design, implementation and Measurements, *Computer Networks Journal*, Elsevier Science Publisher, 2006, ISSN: 1389-1286.
- D. Bruneo, A. Puliafito, M. Scarpa. Mobile Middleware: Definition and Motivations. In: A. Corradi. Mobile Middleware. LONDON: CRC PRESS (UNITED KINGDOM), 2006.
- M.Fazio, M. Villari and A. Puliafito AIPAC: Automatic IP Address Configuration in Mobile Ad Hoc Networks. *Computer Communications Journal*, Elsevier, 2006, vol. 29, pp. 1189-1200 ISSN: 0140-3664.
- S. Distefano, A. Puliafito, M. Scarpa., A Grid-based algorithm for the solution of non-Markovian stochastic Petri nets. *CONCURRENCY AND COMPUTATION*. vol. 18, pp. 1-18 ISSN: 1532-0626, 2006.
- D. Bruneo, L. Paladina, M. Paone, A. Puliafito, Signalling in Cellular IP Regions with QoS Support. *JOURNAL OF UBIQUITOUS COMPUTING AND INTELLIGENCE*. vol. 1, pp. 59-72 ISSN: 1555-132, 2007.
- Ragusa, F. Longo, A. Puliafito - *On The Assessment of the S-sicilia Infrastructure: A Grid-based Business System*. Lecture Notes in Computer Science, p. 113-124, 2008.
- Bruneo, M. Scarpa, A. Puliafito (2008). A GSPN Model to analyze performance parameters in gLite Grids. *17th IEEE International Workshop on Emerging Technologies for Next Generation GRID (ETNGRID '08)* IEEE CS press, Roma, 23-25 Maggio –Best Paper Award.
- V. D. Cunsolo, S. Distefano, A. Puliafito, M. Scarpa, *Cloud@Home: Bridging the Gap between Volunteer and Cloud Computing*. Lecture Notes in Computer Science, vol. 5754/2009, p. 423-432, 2009.
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