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Education

Politecnico di Torino, Torino, Italy

PhD, Computer Engineering, May 2005

Major areas of study: Mobile computing and distributed services

Dissertation: "Techniques, methodologies and tools for the analysis, specification and development of distributed solutions and information systems in wireless environments"

Advisor: Prof. Claudio Demartini

Politecnico di Torino, Torino, Italy

MS, Computer Engineering, October 2000

Summa Cum Laude

Professional Experience

Coordinator of the Information Systems Commission – Department of Control and Computer Science

Coordinatore Commissione Sistemi Informatici – Dipartimento di Automatica e Informatica

Politecnico di Torino, Torino, Italy

December 2015 to present

Member of the Computer Science Ph.D. Board of Teachers

Collegio Docenti del Dottorato in Ingegneria Informatica e dei Sistemi

Politecnico di Torino, Torino, Italy

January 2011 to present

Responsible for the Graphics and Intelligent Systems / Ubiquitous Computing Lab

Dipartimento di Automatica e Informatica

Politecnico di Torino, Torino, Italy

July 2006 to present

Member of the Coordinating Commission of the Management Engineering Board

Commissione Coordinamento del Collegio di Ingegneria Gestionale

Politecnico di Torino, Torino, Italy

October 2012 to December 2015

Assistant Professor

Ricercatore / Ricercatore Confermato

Dipartimento di Automatica e Informatica

Politecnico di Torino, Torino, Italy

July 2006 to October 2014

Research Assistant

Dipartimento di Automatica e Informatica

Politecnico di Torino, Torino, Italy

January 2005 to July 2006

Summer Visiting Researcher

Department of Electrical Engineering and Computer Science

University of California at Irvine, Irvine, CA, USA

August 2003 to September 2003

Research Assistant

Dipartimento di Automatica e Informatica
Politecnico di Torino, Torino, Italy
February 2001 to December 2001

Research Consultant

Dipartimento di Automatica e Informatica
Politecnico di Torino, Torino, Italy
October 2000 to December 2000

Research Areas in Brief

Current research activities mainly focus on computer graphics, human-machine interaction and intelligent computing.

A key topic addressed in the field of computer graphics has been represented by distributed and mobile architectures for remote visualization. After having been exploited for years in extremely specialized domains, the explosion of cloud computing transformed remote visualization in a key component for the development of heterogeneous systems and services ranging from industrial manufacturing to online gaming.

In this field, works have been aimed at developing algorithms and frameworks for delivering interactive graphics contents to limited-resource devices, by considering both networking and encoding-based optimization methods as well as user experience-oriented approaches. More recent works have proposed a novel paradigm to achieve the virtualization goal, based on a strict separation of the user interface from the application logic.

Research in this area established a strong link between the computer graphics and the human-machine interaction areas, as studies specifically dealt with experimenting ad-hoc multi-modal interfaces as well as with testing the usability of the typical features of the virtualization approach for the control of remote appliances and applications.

Activities in the area of intelligent computing have been developed mostly in the frame of publicly-funded research projects. In this field, semantics and other information processing techniques have been exploited in the development of automatic matchmaking/recommender systems for job seeking/recruitment, e-learning/e-teaching and curricula/learning content development.

An emerging area of research that is being explored in this context considers the relations with the computer graphics and human-computer interaction, with the particular aim of designing intelligent user interfaces both for professional as well as for entertainment applications.

Further areas addressed by research activities encompass the fields of computer arithmetic, distributed systems, computer vision and image processing.

Refereed Journal Publications

1. Lamberti F., Manuri F., Paravati G., Piumatti G., Sanna, A., Using semantics to automatically generate speech interfaces for wearable virtual and augmented reality applications. *IEEE Transactions On Human-machine Systems*, **in press**, ISSN: 2168-2291.
2. Gatteschi V., Lamberti F., Montuschi P., Sanna A., Semantics-based intelligent Human-Computer Interaction, *IEEE Intelligent Systems*, vol. 31:4, pag. 11-21, **2016**, ISSN: 1541-1672, doi: 10.1109/MIS.2015.97.
3. Montuschi P., Gatteschi V., Lamberti F., Sanna A., Demartini C., A semantic recommender system for adaptive learning, *IEEE IT Professional*, vol. 17:5, pp. 50-58, **2015**, ISSN: 1520-9202, doi: 10.1109/MITP.2015.75.
4. Lamberti F., Santomo R., Sanna A., Montuschi P. Intensity variation function and template matching-based pedestrian tracking in infrared imagery with occlusion detection and recovery, *Optical Engineering*, vol. 54:3, art. 033106, pp. 1-19, **2015**, ISSN: 0091-3286, doi: 10.1117/1.OE.54.3.033106.
5. Lamberti F., Sanna A., Carlevaris G., Demartini C. Adding pluggable and personalized natural control capabilities to existing applications, *Sensors*, vol. 15:2, pp. 2832-2859, **2015**, ISSN: 1424-8220, doi: 10.3390/s150202832.
6. Sanna A., Lamberti F., Paravati G., Carlevaris G., Montuschi P., Virtual character animations from human body motion by automatic direct and inverse kinematics-based mapping, *EAI Endorsed Transactions on Creative Technologies*, vol. 2:2, art. 6, **2015**, ISSN: 2409-9708.
7. Lamberti F., Manuri F., Sanna A., Paravati G., Pezzolla P., Montuschi P., Challenges, opportunities and future trends of emerging Techniques for Augmented Reality-based maintenance, *IEEE Transactions on Emerging Topics in Computing*, **vol. 2:4**, pp. 411-421, **2014**, ISSN: 2168-6750, doi: 10.1109/TETC.2014.2368833.
8. Lamberti F., Sanna A., Paravati G., Computer-assisted analysis of painting brushstrokes: Digital image processing for unsupervised extraction of visible features from van Gogh's works. *EURASIP Journal on Image*

and Video Processing, Springer, vol. 53, pp. 1-17, **2014**, ISSN: 1687-5281, doi: 10.1186/1687-5281-2014-53.

9. Lamberti F., Sanna A., Paravati G., Carlevaris G., Automatic grading of 3D computer animation laboratory assignments, *IEEE Transactions on Learning Technologies*, vol. 7:3, pp. 280-290, **2014**, ISSN: 1939-1382, doi: 10.1109/TLT.2014.2340861.
10. Montuschi P., Gatteschi V., Lamberti F., Sanna A., Demartini C., Job recruitment and job seeking processes: How technology can help. *IEEE IT Professional*, vol. 16:5, pp. 41-49, **2014**, ISSN: 1520-9202, doi: 10.1109/MITP.2013.62.
11. Lamberti F., Sanna A., Paravati G., Belluccini L., IVF³: Exploiting Intensity Variation Function for high performance pedestrian tracking in FLIR imagery, *Optical Engineering*, vol. 53:2, art. 023105, pp. 1-15 **2014**, ISSN: 0091-3286, doi: 10.1117/1.OE.53.2.023105.
12. Sanna A., Lamberti F., Paravati G., Domingues Rocha F., A Kinect-based interface to animate virtual characters. *Journal on Multimodal User Interfaces*, Springer, vol. 7, pp. 269-279, **2013**, ISSN: 1783-7677, doi: 10.1007/s12193-012-0113-9.
13. Sanna A., Lamberti F., Paravati G., Manuri F., A Kinect-based natural interface for quadrotor control. *Entertainment Computing*, Elsevier, vol. 4, pp. 179-186, **2013**, ISSN: 1875-9521, doi: 10.1016/j.entcom.2013.01.001.
14. Celozzi C., Lamberti F., Paravati G., Sanna A., Enabling human-machine interaction in projected virtual environments through camera tracking of imperceptible markers. *International Journal of Human-Computer Interaction*, Taylor & Francis, vol. 29:8, pp. 549-561, **2013**, ISSN: 1044-7318, doi: 10.1080/10447318.2012.729455.
15. Lamberti F., Sanna A., Paravati G., Montuschi P., Gatteschi V., Demartini C., Mixed marker-based/marker-less visual odometry system for mobile robots. *International Journal of Advanced Robotic Systems*, InTech, vol. 10, pp. 1-11, **2013**, ISSN: 1729-8806, doi: 10.5772/56577.
16. Gandino F., Lamberti F., Paravati G., Bajard J.C., Montuschi P., An algorithmic and architectural study on Montgomery exponentiation in RNS. *IEEE Transactions on Computers*, vol. 61:8, pp. 1071-1083, **2012**, ISSN: 0018-9340, doi: 10.1109/TC.2012.84.
17. Sanna A., Lamberti F., Paravati G., Demartini C., Automatic assessment of 3D modeling exams. *IEEE Transactions on Learning Technologies*, vol. 5:1, pp. 2-10, **2012**, ISSN: 1939-1382, doi: 10.1109/TLT.2011.4.
18. Gatteschi V., Lamberti F., Demartini C., van Wezel R., Bettiol S., Exploiting semantics for constructing and comparing occupational and educational-driven qualifications: The TIPTOE project. *Journal of Universal Computer Science*, Graz University of Technology, vol. 18:1, pp. 5-24, **2012**, ISSN: 0948-695X, doi: 10.3217/jucs-018-01-0005.
19. Lamberti F., Sanna A., Paravati G., Improving robustness of infrared target tracking algorithms based on template matching. *IEEE Transactions on Aerospace and Electronic Systems*, vol. 47:2, pp. 1467-1480, **2011**, ISSN: 0018-9251, doi: 10.1109/TAES.2011.5751271.
20. Paravati G., Sanna A., Lamberti F., Ciminiera L., An adaptive control system to deliver Interactive Virtual Environment content to handheld devices. *Journal on Special Topics in Mobile Networks and Applications*, Springer, vol. 16, pp. 385-393, **2011**, ISSN: 1383-469X, doi: 10.1007/s11036-010-0255-5.
21. Celozzi C., Lamberti F., Paravati G., Sanna A., Controlling generic visualization environments using handheld devices and natural feature tracking. *IEEE Transactions on Consumer Electronics*, vol. 57:2, pp. 848-857, **2011**, ISSN: 0098-3063, doi: 10.1109/TCE.2011.5955232.
22. Gatteschi V., Lamberti F., Sanna A., Demartini C., A ranking tool exploiting semantic descriptions for the comparison of EQF-based qualifications. *Journal of Universal Computer Science*, Graz University of Technology, vol. 17:7, pp. 1060-1077, **2011**, ISSN: 0948-695X, doi: 10.3217/jucs-017-07-1060.
23. Paravati G., Sanna A., Lamberti F., Ciminiera L., An open and scalable architecture for delivering 3D shared visualization services to heterogeneous devices. *Concurrency and Computation: Practice and Experience*, Wiley, vol. 23:11, pp. 1179-1195, **2011**, ISSN: 1532-0626, doi: 10.1002/cpe.1695.
24. Lamberti F., Sanna A. Migrating desktop applications to the Internet: A novel virtualization paradigm based on Web operating systems. *Journal of Web Engineering*, Rinton Press, vol. 10:3, pp. 234-272, **2011**, ISSN: 1540-9589.
25. De Amici S., Sanna A., Lamberti F., Pralio B., A Wii Remote-based infrared-optical tracking system. *Entertainment Computing*, Elsevier, vol. 1:3-4, pp. 119-124, **2010**, ISSN: 1875-9521, doi: 10.1016/j.entcom.2010.08.001.
26. Lamberti F., Andrikos N., Antelo E., Montuschi P., Reducing the computation time in (short bit-width) two's complement multipliers. *IEEE Transactions on Computers*, vol. 60:2, pp. 148-156, **2011**, ISSN: 0018-9340, doi: 10.1109/TC.2010.156.
27. Paravati G., Sanna A., Lamberti F., Ciminiera L., On Quality of Experience in remote visualization on mobile

- devices. *International Journal of Mobile Human Computer Interaction*, IGI Global, vol. 2, n. 1, pp. 1-20, **2010**, ISSN: 1942-390X, doi: 10.4018/jmhci.2010100601.
28. Fiorella D., Sanna A., Lamberti F., Multi-touch user interface evaluation for 3D object manipulation on mobile Devices. *Journal on Multimodal User Interfaces*, Springer, vol. 4:1, pp. 3-10, **2010**, ISSN: 1783-7677, doi: 10.1007/s12193-009-0034-4.
 29. Celozzi C., Paravati G., Sanna A., Lamberti F., A 6-DOF Artag-based tracking system. *IEEE Transactions on Consumer Electronics*, vol. 56:1, pp. 203-210, **2010**, ISSN: 0098-3063, doi: 10.1109/TCE.2010.5439146
 30. Paravati G., Celozzi C., Sanna A., Lamberti F., A Feedback-based control technique for interactive live streaming systems to mobile devices. *IEEE Transactions on Consumer Electronics*, vol. 56:1, pp. 190-197, **2010**, ISSN: 0098-3063, doi: 10.1109/TCE.2010.5439144.
 31. Sanna A., Pralio B., Lamberti F., Paravati G., A novel ego-motion compensation strategy for automatic target tracking in FLIR video sequences taken from UAVs. *IEEE Transactions on Aerospace and Electronic Systems*, vol. 45:2, pp. 723-734, **2009**, ISSN: 0018-9251, doi: 10.1109/TAES.2009.5089552.
 32. Paravati G., Sanna A., Pralio B., Lamberti F., A genetic algorithm for target tracking in FLIR video sequences using Intensity Variation Function. *IEEE Transactions on Instrumentation and Measurement*, vol. 58:10, pp. 3457-3467, **2009**, ISSN: 0018-9456, doi: 10.1109/TIM.2009.2017665.
 33. Giakoumis D., Lazaridis M., Trnkoczy J., Axenopoulos A., Paravati G., Sanna A., Lamberti F., Tzovaras D., Hassapis G., Search and retrieval of objects over a distributed P2P network for mobile devices. *IEEE Wireless Communications*, vol. 16, pp. 42-49, **2009**, ISSN: 1536-1284, doi: 10.1109/MWC.2009.5300301.
 34. Lamberti F., Sanna A., Demartini C., A relation-based page rank algorithm for semantic web search engines. *IEEE Transactions on Knowledge and Data Engineering*, vol. 21, pp. 123-136, **2009**, ISSN: 1041-4347, doi: 10.1109/TKDE.2008.113.
 35. Lamberti F., Sanna A., Extensible GUIs for remote application control on mobile devices. *IEEE Computer Graphics and Applications*, vol. 28:4, pp. 50-57, **2008**, ISSN: 0272-1716, doi: 10.1109/MCG.2008.70.
 36. Pineiro J.A., Bruguera J.D., Lamberti F., Montuschi P., A radix-2 digit-by-digit architecture for cube root. *IEEE Transactions on Computers*, vol. 57:4, pp. 562-566, **2008**, ISSN: 0018-9340, doi: 10.1109/TC.2007.70848.
 37. Lamberti F., Sanna A. A streaming-based solution for remote visualization of 3D graphics on mobile devices. *IEEE Transactions on Visualization and Computer Graphics*, vol. 13, pp. 247-260, **2007**, ISSN: 1077-2626, doi: 10.1109/TVCG.2007.29.
 38. Lamberti F., Montrucchio B., Sanna A., CMBFHE: A novel contrast enhancement technique based on cascaded multistep binomial filtering histogram equalization. *IEEE Transactions on Consumer Electronics*, vol. 52, pp. 966-974, **2006**, ISSN: 0098-3063, doi: 10.1109/TCE.2006.1706495.
 39. Lamberti F. La costruzione della rete: Il progetto H.E.LE.N.. *Studi e Documenti degli Annali della Pubblica Istruzione*, vol. 113-114, pp. 257-269, **2006**, ISSN: 1826-8617.
 40. Di Talia S., Gamba A., Lamberti F., Serini G., Role of repulsive factors in vascularization dynamics. *Physical Review E, Statistical, Nonlinear, and Soft Matter Physics*, APS, vol. 73, **2006**, ISSN: 1539-3755, doi: 10.1103/PhysRevE.73.041917.
 41. Sanna A., Zunino C., Lamberti F., A distributed architecture for searching, retrieving and visualizing complex 3D models on Personal Digital Assistants. *International Journal of Human-Computer Studies*, Elsevier, vol. 60, pp. 701-716, **2004**, ISSN: 1071-5819, doi: 10.1016/j.ijhes.2003.12.004.
 42. Lamberti F., Gamba A., Montrucchio B., Computer-assisted analysis of in-vitro vasculogenesis and angiogenesis processes. *Journal of WSCG*, vol. 12:1-3, p. 237-244, **2004**, ISSN: 1213-6972.
 43. Lamberti F., Montrucchio B., Sanna A., Zunino C., A web-based architecture enabling multichannel telemedicine applications. *Journal of Systemics, Cybernetics and Informatics*, vol. 1, **2003**, ISSN: 1690-4524
 44. Montrucchio B., Lamberti F., Sanna A., Montuschi P., Measuring isotropic local contrast: A circular mask based approach. *Journal of WSCG*, vol. 10, pp. 83-90, **2002**, ISSN: 1213-6972.
 45. Lamberti F., Sanna A., A Java web-based multichannel architecture for distributed system monitoring. *Journal of Internet Technology*, vol. 3, pp. 235-244, **2002**, ISSN: 1607-9264.

Journal Editorials

46. Sanna A., Lamberti F., Rokne J., Special Issue on INTETAIN 2015. *Entertainment Computing*, vol. 18, pag. 55-56, **in press**, ISSN: 1875-9521, doi: <http://dx.doi.org/10.1016/j.entcom.2016.09.003>.
47. Lamberti F., Paravati G., Di Salvo A., Service robotics, Guest Editors' Introduction, *IEEE Computing Now*, Monthly Theme, vol. 9:10, **2016**.
48. Lamberti F., Sanna A., Rokne J., Sensors for entertainment. *Sensors*, vol. 16, pag. 1-3, **2016**, ISSN: 1424-8220,

doi: 10.3390/s16071102.

49. Laplante P. A., Demartini C., Lamberti F., N. Colin J., Guest Editorial: Special Issue on Emerging Trends in Education - Part I. *IEEE Transactions On Emerging Topics In Computing*, vol. 4:3, pag. 382-384, **2016**, ISSN: 2168-6750, doi: 10.1109/TETC.2016.2526398.
50. Lamberti F., Sanna A., Montuschi P. Entertainment technologies: Past, present, and future trends, Guest Editors' Introduction, *IEEE Computing Now*, Monthly Theme, vol. 8:2, **2015**.
51. Sanna A., Lamberti F., Preface of the Special Issue on Virtual Puppetry, *Entertainment Computing*, Elsevier, vol. 5:4, pp. 269-270, **2014**, ISSN: 1875-9521, doi: 10.1016/j.entcom.2014.10.002.
52. Montuschi P., Sanna A., Lamberti F., Paravati G. Human-Computer Interaction: Present and future trends, Guest Editors' Introduction, *IEEE Computing Now*, Monthly Theme, vol. 7:9, **2014**.
53. Sanna A., Lamberti F., Advances in target detection and tracking in Forward-Looking InfraRed (FLIR) imagery, *Sensors*, MDPI, vol. 14:11, pp. 20297-20303, **2014**, ISSN: 1424-8220, doi: 10.3390/s141120297
54. Lamberti F., Gatteschi V., Demartini C., Sanna A., Montuschi P. (2014) Semantics in education, Guest Editors' Introduction, *IEEE Computing Now*, Monthly Theme, vol. 7:4, **2014**.
55. Lamberti F., Sanna A., Special Issue on Remote Visualization. *Computing and Visualization in Science*, Springer, vol. 15:3, pp. 99-100, **2012**, ISSN: 1432-9360, doi: 10.1007/s00791-013-0205-4.

Refereed Book Chapters and Proceedings Editorials

56. Paravati G., Spataro V. M., Lamberti F., Sanna A., Demartini C., A Customizable Virtual Reality Framework for the Rehabilitation of Cognitive Functions. In: Recent Advances in Technologies of Inclusive Well-Being. Eds. Brooks A., Braham S., Kapralos B., Jain L. Springer, pp. 1-20, **in press**.
57. Gatteschi V., Demartini C., Lamberti F., Learning Semantics. In: Encyclopedia of Computer Science & Technology, Taylor & Francis, **in press**.
58. Piumatti G., Lupetti M.L., Lamberti F., Human-Robot Interaction. In: Encyclopedia of Computer Science & Technology, Taylor & Francis, **in press**.
59. Sanna A., Lamberti F., Rokne J., Preface to the Proceedings of the 7th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN2015), pp. 6-6, **2015**, ISBN: 9781631900617, doi: 10.4108/icst.intetain.2015.preface.
60. Gatteschi V., Lamberti F., Demartini C., On the use of semantic technologies to support education, mobility and employability. In: Semantic Hyper/Multi-media Adaptation: Schemes and Applications, Springer, vol. 418, p. 127-150, **2012**, ISBN: 9783642289767, doi: 10.1007/978-3-642-28977-4_4.
61. Paravati G., Lamberti F., Sanna A., Celozzi C., High-performance solutions for adaptive and customizable streaming of interactive content to mobile devices. In: Macias E., Suarez A. Eds. Multimedia Services and Streaming for Mobile Devices. Challenges & innovations, IGI Global, pp. 154-180, **2012**, ISBN: 9781613501443, doi: 10.4018/978-1-61350-144-3.ch008.
62. Sanna A., Lamberti F., 3D Visualization on mobile devices. In: Lumsden J. Ed. Handbook of Research on User Interface Design and Evaluation for Mobile Technology, pp. 556-573, **2008**, IGI Global, ISBN: 9781599048710.
63. Morra L., Delsanto S., Lamberti F., Methods for neural-network-based segmentation of magnetic resonance images. In: Akay M. Ed. Handbook of Neural Engineering, pp. 173-192, **2007**, IEEE Press and John Wiley and Sons, ISBN: 9780470056691, doi: 10.1002/9780470068298.ch10.

Refereed Conference Publications

64. Manuri F., Sanna A., Lamberti F., Paravati G., Vocal One Switch (VOS) selection interfaces for Virtual and Augmented Reality hands-free tasks. In: Proc. Proc. Smart Tools and Apps in computer Graphics (STAG2016), ACM, pp. 1-8, **in press**.
65. Gatteschi V., Lamberti F., Paravati G., Raso A., Demartini C., Which Learning Outcomes Should I Acquire? A Bar Chart-based Semantic System for Visually Comparing Learners' Acquirements with Labor Market Requirements. In: Proc. 40th Annual International Computers, Software & Applications Conference (COMPSAC2016), Symposium on Computer Education and Learning Technologies (CELT), IEEE, pp. 1-6, **in press**.
66. Bazzano F., Gentilini F., Lamberti F., Sanna A., Paravati G., Gatteschi V., Gaspardone M., Immersive virtual reality-based simulation to support the design of natural human-robot Interfaces for service robotic applications. In: Proc. 3rd International Conference on Augmented, Virtual Reality and Computer Graphics, Springer, pp. 1-20, **in press**.

67. Sanna A., Lamberti F., Bazzano F., Maggio L., Developing touch-less interfaces to interact with 3D contents in public exhibitions. In: Proc. 3rd International Conference on Augmented, Virtual Reality and Computer Graphics, LNCS Series, Springer, **in press**.
68. Piumatti G., Sanna A., Gaspardone M., Lamberti F., Spatial Augmented Reality meets robots: Human-Machine Interaction in cloud-based projected gaming environments. In: Proc. 34th IEEE International Conference on Consumer Electronics (ICCE2017), pp. 1-4, **in press**.
69. Lamberti F., Paravati G. VDHM: Viewport-DOM based Heat Maps as a tool for visually aggregating Web users' interaction data from mobile and heterogenous devices, In: Proc. IEEE 4th International Conference on Mobile Services (MS2015), pp. 33-40, **2015**, ISBN: 9781467372831, doi: 10.1109/MobServ.2015.15.
70. Gatteschi V., Lamberti F., Sanna A., Demartini C. An audio and image-based on-demand content annotation framework for augmenting the video viewing experience on mobile devices, In: Proc. IEEE 4th International Conference on Mobile Services (MS2015), pp. 468-472, **2015**, ISBN: 9781467372831, doi: 10.1109/Mob Serv.2015.71.
71. Sanna A., Manuri F., Piumatti G., Paravati G., Lamberti F., Pezzolla P. A flexible AR-based training system for industrial maintenance, In: Proc. 2nd International Conference on Augmented and Virtual Reality 2nd International Conference on Augmented and Virtual Reality, pp. 314-331, **2015**, ISBN: 9783319228877, doi: 10.1007/978-3-319-22888-4_23.
72. Paravati G., Lamberti F., Gatteschi V. Joint traditional and company-based organization of information systems and product development courses, In: 39th Annual International Computers, Software & Applications Conference (COMPSAC2015), Symposium on Computer Education and Learning Technologies (CELT) IEEE, pp. 858-867, **2015**, ISBN: 9781467365635, doi: 10.1109/COMPSAC.2015.83.
73. Gatteschi V., Lisanti A., Venezia G., Lamberti F., Paravati G., Sanna A., Demartini C. New frontiers of delivery services using drones: a prototype system exploiting a quadcopter for autonomous drug shipments, In: Proc. 39th Annual International Computers, Software & Applications Conference (COMPSAC2015), Symposium on Computer Education and Learning Technologies (CELT), pp. 920-927, **2015**, ISBN: 9781467365635 doi: 10.1109/COMPSAC.2015.52.
74. Sanna A., Manuri F., Lamberti F., Paravati G., Pezzolla P. Using handheld devices to support Augmented Reality-based maintenance and assembly tasks, In: 32nd IEEE International Conference on Consumer Electronics (ICCE2015), pp. 178-179, **2015**, ISBN: 9781479975426, doi: 10.1109/ICCE.2015.7066370.
75. Manuri F., Sanna A., Lamberti F., Paravati G., Pezzolla P., A workflow analysis for implementing AR-based maintenance procedures, In: 1st International Conference on Augmented and Virtual Reality - Revised Selected Papers Springer LNCS, pp. 185-200, **2015**, ISBN: 9783319139685, doi: 10.1007/978-3-319-13969-2_15.
76. Gatteschi V., Lamberti F., Demartini C., A graphical approach for comparing qualifications, In: 5th IEEE Global Engineering Education Conference (EDUCON2014), pp. 361-366, **2014**, ISBN: 9781479931903, doi: 10.1109/EDUCON.2014.6826118.
77. Demartini C., Sanna A., Lamberti F., Enhanced reading based on virtualization techniques, In: 32nd IEEE International Conference on Consumer Electronics (ICCE2014), pp.77-78, **2014**, ISBN: 9781479912902, doi: 10.1109/ICCE.2014.6775916.
78. Sanna A., Lamberti F., Paravati G., Carlevaris G., Montuschi P., Automatically mapping human skeletons onto virtual character armatures, In: 5th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN2013), Lecture Notes of the Institute for Computer Science, Social Informatica and Telecommunication Engineering (LNICST), pp. 80-89, **2013**, ISSN: 1867-8211, ISBN: 9783319038919, doi: 10.1007/978-3-319-03892-6_10.
79. Demartini C., Lamberti F., Marchisio M., Pardini C., Patrucco A., The "CSCT Living Lab" for computer science and computational thinking, In: Frontiere Digitali: Dal Digital Divide alla Smart Society (AICA2013), pp. 316-325, **2013**.
80. Lamberti F., Sanna A., Paravati G., Demartini C., Endowing existing desktop applications with customizable body gesture-based interfaces, In: 31st IEEE International Conference on Consumer Electronics (ICCE2013), pp. 558-559, **2013**, ISBN: 9781467313612, doi: 10.1109/ICCE.2013.6487017.
81. Paravati G., Donna Bianco M., Sanna A., Lamberti F., A multi-touch solution to build personalized interfaces for the control of remote applications, In: 2nd International Conference on User Centric Media (UCMEDIA2010), Lecture Notes of the Institute for Computer Science, Social Informatics and Telecommunications Engineering (LNICST), pp. 10-19, **2012**, ISSN: 1867-8211, ISBN: 9783642351440, doi: 10.1007/978-3-642-35145-7_2.

82. Lamberti F., Sanna A., Interleaving local and remote visualization for the energy aware delivery of interactive 3D graphics on mobile devices. In: 30th IEEE International Conference on Consumer Electronics (ICCE2012), pp. 514-515, **2012**, ISBN: 9781457702303, doi: 10.1109/ICCE.2012.6161999.
83. Gatteschi V., Lamberti F., Demartini C., LO-MATCH: A semantic platform for matching migrants' competences with labour market's needs. In: 3rd IEEE Global Engineering Education Conference (EDUCON2012), pp. 994-998, **2012**, ISBN: 9781467314572, doi: 10.1109/EDUCON.2012.6201168.
84. Paravati G., Lamberti F., Sanna A., Henao Ramirez E., Demartini C., An immersive visualization framework for monitoring, simulating and controlling smart street lighting networks. In: 5th International ICST Conference on Simulation Tools and Techniques (SIMUTOOLS2012), pp. 17-26, **2012**, ISBN: 9781450315104, doi: 10.4108/icst.simutools.2012.247739.
85. Sanna A., Lamberti F., Paravati G., Henao Ramirez E.A., Manuri F., A Kinect-based natural interface for quadrotor control, In: 4th International ICST Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN2011), Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering (LNICST), pp. 48-56, **2012**, ISSN: 1867-8211, ISBN: 9783642302138, doi: 10.1007/978-3-642-30214-5_6.
86. Paravati G., Pralio B., Sanna A., Lamberti F., A reconfigurable multi-touch remote control system for teleoperated robots. In: 29th IEEE International Conference on Consumer Electronics (ICCE2011), pp. 153-154, **2011**, ISBN: 9781424487110, doi: 10.1109/ICCE.2011.5722512.
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88. Lamberti F., Sanna A., Henao E., Web-based 3D visualization for intelligent street lighting. In: 16th ACM International Conference on 3D Web Technology (WEB3D2011), pp. 151-154, **2011**, ISBN: 9781450307741, doi: 10.1145/2010425.2010452.
89. Gatteschi V., Lamberti F., Demartini C., Il Quadro Europeo delle Qualifiche come strumento di raccordo tra il mondo del lavoro e quello della formazione. In: Informatica per la Didattica (DIDAMATICA2011), pp. 1-10, **2011**, ISBN: 9788890540622.
90. Paravati G., Sanna A., Lamberti F., Celozzi C., A reconfigurable multi-touch framework for teleoperation tasks. In: 16th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA2011), pp. 1-4, **2011**, ISBN: 9781457700170, doi: 10.1109/ETFA.2011.6059219.
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94. Gatteschi V., Lamberti F., Sanna A., Demartini C., Using tag clouds to support the comparison of qualifications, résumés and job profiles. In: 9th IEEE International Conference on Emerging eLearning Technologies and Applications (ICETA2011), pp. 57-61, **2011**, ISBN: 9781457700514, doi: 10.1109/ICETA.2011.6112585.
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96. Paravati G., Sanna A., Lamberti F., Ciminiera L., An adaptive control system for Interactive Virtual Environment content delivery to handheld devices. In: 1st International Conference on User-Centric Media (UCMEDIA 2009), Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunication Engineering (LNICST), vol. 40, pp. 169-178, **2010**, ISSN: 1867-8211, ISBN: 9783642126291, doi: 10.1007/978-3-642-12630-7_20.
97. Gatteschi V., Lamberti F., Sanna A., Demartini C., A semantic-based approach for aligning occupational and educational qualifications in the EQF perspective. In: IADIS 2010 International Conferences - Informatics, Wireless Applications and Computing, Telecommunications, Networks and Systems, pp. 3-10, **2010**, ISBN: 9789728939199.

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100. Gatteschi V., Lamberti F., Sanna A., Demartini C., A semantic matchmaking system for job recruitment. In: 10th International Conference on Knowledge Management and Knowledge Technologies (I-KNOW2010), pp. 50-59, **2010**.
101. Gatteschi V., Lamberti F., Salassa F., Demartini C., An automatic tool supporting life-long learning based on a semantic-oriented approach for comparing qualifications. In: IADIS International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2009), pp. 354-358, **2009**, ISBN: 9789728924959.
102. Demartini C., Bettiol S., Lamberti F., Mallia M., Sanna A., The European seaman's smart card: A prototype of a distributed system allowing secure access to a unified representation of maritime records. In: 7th International Conference on Telecommunications and Informatics (TELE-INFO'08), pp. 151-156, **2008**, ISBN: 9789606766640.
103. Bernardi P., Gandino F., Lamberti F., Montrucchio B., Rebaudengo M., Sanchez E.R., An anti-counterfeit mechanism for the application layer in low-cost RFID devices. In: 4th European Conference on Circuits and Systems for Communications, pp. 227-231, **2008**, ISBN: 9781424424191, doi: 10.1109/ECCSC.2008.4611682.
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108. Cubillos C., Lamberti F., Demartini C., National qualification systems integration using ontologies. In: IFIP International Federation for Information Processing, Education for the 21st Century - Impact of ICT and Digital Resources, pp. 285-289, **2006**, ISBN: 9780387346274, doi: 10.1007/978-0-387-34731-8_32.
109. Lamberti F., Montrucchi B., Gamba A., Quantitative analysis of vascular structures geometry using neural networks. In: IEEE Workshop on Signal Processing Systems (SIPS2005), pp. 378-383, **2005**, ISBN: 0780393333, doi: 10.1109/SIPS.2005.1579897.
110. Montrucchio B., Lamberti F., Gamba A., Serini G., Tracking endothelial cells during blood vessel networks assembly using active contours. In: IEEE Workshop on Signal Processing Systems (SIPS2005), pp. 384-389, **2005**, ISBN: 0780393333, doi: 10.1109/SIPS.2005.1579898.
111. Lamberti F., Montrucchio B., Segmentation of in-vitro endothelial cell networks. In: IEEE International Symposium on Biomedical Imaging: From Nano to Macro (ISBI2004), pp. 129-132, **2004**, ISBN: 0780383885, doi: 10.1109/ISBI.2004.1398491.
112. Gardiol W., Monge F., Ferrero Giacominetto G., Lamberti F., Montrucchio B., Multi-channel visualization and management on mobile devices of a cluster-based distributed application. In: 8th World Multiconference on Systemics, Cybernetic and Informatics (SCI2004), vol. 2, pp. 28-32, **2004**, ISBN: 9806560132.
113. Lamberti F., Zunino C., Sanna A., Fiume A., Maniezzo M., An accelerated remote graphics architecture for PDAs. In: ACM SIGGRAPH Web 3D 2003 Symposium (WEB3D2003), pp. 55-62, **2003**, ISBN: 1581136447, doi: 10.1145/636593.636602.
114. Sanna A., Stefanuto T., Zunino C., Lamberti F., Montuschi P., An architecture for remote monitoring-management of distributed applications. In: Computer, Communication and Control Technologies **2003** (CCCT2003), vol. 2, pp. 182-186, 2003, ISBN: 9806560051.
115. Morra L., Lamberti F., Demartini, C. A neural network approach to unsupervised segmentation of single-channel MR images. In: 1st International IEEE EMBS Special Topic Conference on Neural Engineering, pp. 515-518, **2003**, ISBN: 0780375793, doi: 10.1109/CNE.2003.1196876.

116. Delsanto S., Lamberti F., Montrucchio B., Automatic ocular artifacts rejection based on independent component analysis and eyeblink detection. In: 1st International IEEE EMBS Special Topic Conference on Neural Engineering, pp. 309-312, **2003**, ISBN: 0780375793, doi: 10.1109/CNE.2003.1196822.
117. Lamberti F., Montrucchio B., Ubiquitous real-time monitoring of critical-care patients in intensive care units. In: 4th Annual IEEE EMBS Special Topic Conference on Information Technology Applications in Biomedicine (ITAB2003), pp. 318-321, **2003**, ISBN: 0780376676, doi: 10.1109/ITAB.2003.1222542.
118. Lamberti F., Demartini C., Low-cost home monitoring using a Java-based embedded computer. In: 4th Annual IEEE EMBS Special Topic Conference on Information Technology Applications in Biomedicine (ITAB2003), pp. 342-345, **2003**, ISBN: 0780376676, doi: 10.1109/ITAB.2003.1222549.
119. Lazzarino O., Sanna A., Zunino C., Lamberti F., A PVM-based parallel implementation of the REYES image rendering architecture. Lecture Notes in Computer Science, pp. 165-173, **2002**, ISSN: 0302-9743, doi: 10.1007/3-540-45825-5_31.
120. Sanna A., Zunino C., Lamberti F., HAVS: A human animated VRML-based virtual shop for e-commerce. In: 6th World Multiconference on Systemics, Cybernetic and Informatics (SCI2002), vol. 12, pp. 24-29, **2002**.
121. Lamberti F., Montrucchio B., Sanna A., Zunino C., A web-based architecture enabling multichannel telemedicine applications. In: 6th World Multi-conference on Systemics, Cybernetics and Informatics (SCI2002), vol. 13, pp. 257-262, **2002**.
122. Zunino C., Lamberti F., Sanna A., Montrucchio B., A wireless architecture for performance monitoring and visualization on PDA devices. In: 6th World Multi-conference on Systemics, Cybernetics and Informatics (SCI2002), vol. 15, p. 143-148, **2002**.
123. Lamberti F., Fiume A., Montrucchio B. Interactive teleradiology: Design and development of a wireless architecture enabling user mobility. In: 2nd European Medical and Biological Engineering Conference (EMBEC2002), vol. 3, p. 1396-1397, **2002**, ISBN: 3901351620.
124. Lamberti F., Morra L., Bosca A., Design of an integrated, patient-based clinical database system based on the CEN/TC251 'VITAL' ENV standard. In: 2nd European Medical and Biological Engineering Conference (EMBEC2002), pp. 1378-1381, **2002**, ISBN: 3901351620.
125. Lamberti F., Montrucchio B., Demartini C., A wireless-based architecture for medical teleconsulting. In: 16th EURASIP Conference (BIOSIGNAL2002), pp. 454-456, **2002**, ISBN: 8021421207.
126. Lamberti F., Montrucchio B., Demartini C., Modelling of a GPRS-based mobile telemedicine system for real time monitoring and collaborative diagnosis. In: 4th International Workshop on Biosignal Interpretation (BSI2002). pp. 493-496, **2002**.

Public Grants

- LITES "LED-based intelligent street lighting for energy saving", G.A. 238916 EC Competitiveness and Innovation Framework Programme - ICT – PSP (European project, 2010-2015), leader of the Politecnico di Torino research unit.
- WUIT "Web user interest tracking", G.A. 201-76C, Regione Piemonte, bando Misura I.1.3 Poli di Innovazione – ICT (National project, 2012), leader of the Politecnico di Torino research unit.
- TIPTOE "Testing and implementing EQF and ECVET principles in trade organizations and education", G.A. NL/08/LLP-LdV/TOI/123011 (European project, 2008-2010), leader of the Politecnico di Torino research unit.

Private Grants

- "Sviluppo di processi innovativi in ambito assicurativo supportati da soluzioni tecnologiche emergenti" ("Development of innovative processes in the insurance industry supported by emerging technologies"), 2016, contract leader for the Dipartimento di Automatica e Informatica, Politecnico di Torino.
- "Trusted Digital & Healthy Life", 2015, contract leader for the Dipartimento di Automatica e Informatica, Politecnico di Torino.
- "Tecniche di interazione uomo-macchina naturali per la robotica di servizio" ("Natural human-machine interaction techniques for service robotics"), 2015, contract leader for Politecnico di Torino.
- "Studio e sviluppo di soluzioni innovative per lo streaming di contenuti audio/video interattivi su architettura di rete P2P" ("Study and development of innovative solutions for streaming audio/video contents on P2P network architectures"), 2013, contract leader for Politecnico di Torino.
- "Mobile e sanità digitale" ("Mobile and digital health"), 2013, contract leader for the Dipartimento di Automatica e Informatica, Politecnico di Torino.

- “Studio e sviluppo di soluzioni innovative di streaming di contenuti multimediali interattivi” (Study and development of innovative solution for streaming interactive multimedia contents”), 2012, contract leader for Politecnico di Torino.
- “Analisi dei modelli di risparmio energetico nell’ambito dei progetti SIRE” (“Analysis of the energy saving models in the frame of SIRE projects”), 2011, contract leader for Politecnico di Torino.

Participation to Other Funded Project Activities

- EASE-R3 “Integrated framework for a cost-effective and ease of Repair, Renovation and Re-use of machine tools within modern factory” (G.A. 608771 FP7-2013-NMP-ICT-FOF)
- MOTORBRAIN “Nanoelectronics for Electric Vehicle Intelligent Failsafe PowerTrain” (G.A. 270693 ENIAC-JU)
- OASIS “Openly accessible services for an interacting society” (G.A. 297210 EC Competitiveness and Innovation Framework Programme - ICT - PSP)
- TAMTAM “Exploiting the TIPTOE platform by transferring ECVET and EQF semantic tools in a multi-sectoral perspective” (2011-1-IT1-LEO05-01969)
- MATCH “Informal and non-formal competences matching devise for migrants’ employability and active citizenship” (510739-LLP-1-2010-1-ITGRUNDTVIG-GMP)
- Piattaforma tecnologica innovativa per l’Internet of Things (Regione Piemonte, “Regolamento di Esenzione 2009”)
- NQF-SQF “Common grounds for referencing NQFs and SQFs to the SQF” (EACEA-LLP-KA1EQF)
- WAYS “Ways to sustainability” (137951-LLP-2007-DE-KA1EQF) 24 Ricercatore
- VETAS “VET stakeholders of the automotive sector” (142793-LLP-1-2008-1-DE-LEONARDO-LNW)
- EQF-SECTOR “Study on the relation between sectoral qualifications and the European Qualifications Framework (EQF)” (2008-0157/AO/ECVL/TSK JB/SectoralQualifications/010/08)
- GAL-PMI “Anticipando Galileo: prodotti e servizi a supporto della mobilità e della sicurezza” (Regione Piemonte, DOCUP 2000-2006 Misura 3.4 Obiettivo 2)
- VICTORY “Audio-visual content search and retrieval in a distributed P2P Repository” (IST-6-044985-STREP)
- SESAMO “Simulating the implementation and supporting the start-up by exploiting HELEN and BEATRIC semantic models regarding ECVET” (LLP-LDV/TOI/2007/IT/188)
- ORSA MINORE “Organizzazione delle certificazioni con applicazione di smart card nei mestieri e nelle innovazioni del mare” (I/06/B/F/PP-154178)
- EASCMF “European automotive sector competence meta-framework: a contribution to the support of compatibility of a sector related qualification framework with national structures and the EQF” (2006-4584/001-001)
- ECVET Connexion “Study on the feasibility of an ECVET system for apprentices” (EAC/64/05 2005-4996/001-001 PIL-PILOTP)
- VET PROFESSIONAL “Vocational education training to professionals for an European solid space of collaboration and learning” (I/05/B/F/PP-154149)
- EXPERO “Expectations and perceptions of quality in VET” (I/05/B/F/PP-154171)
- HELEN “The European learning network” (I/04/B/F/NT-154056)

Involvement in Journal Editorial Boards

- IEEE Transactions on Emerging Topics in Computing, Special Issue on *Computing Education & Learning Technologies* (ISSN 2168-6750), Co-Guest Editor (<http://www.computer.org/portal/web/tetc>), in progress.
- IEEE Consumer Electronics Magazine (ISSN 2162-2248), Associate Editor (Advanced User Interaction and Augmented/Virtual Reality), May 2015-present.
- IEEE Transactions on Emerging Topics in Computing (ISSN 2168-6750), Associate Editor (Educational Computing), March 2015-present.
- IEEE Computing Now, Monthly Theme on *Entertainment Technologies: Past, Present, and Future Trends*, Co-Guest Editor (<http://www.computer.org/web/computingnow/archive/february2015>).
- IEEE Transactions on Emerging Topics in Computing, Special Issue on *Emerging Trends in Education* (ISSN

2168-6750), Co-Guest Editor (<http://www.computer.org/portal/web/tetc>), in progress.

- Sensors, Special Issue on *Sensors for Entertainment* (ISSN 1424-8220), Co-Guest Editor (http://www.mdpi.com/journal/sensors/special_issues/SE), in progress.
- Entertainment Computing, Special Issue on *7th International Conference on Intelligent Technologies for Interactive Entertainment* (ISSN 1875-9521), Co-Guest Editor (<http://www.journals.elsevier.com/entertainment-computing/call-for-papers/>), in progress.
- Sensors (ISSN 1424-8220), Member of the Editorial Board, November 2014 to present.
- IEEE Computing Now, Monthly Theme on *Human-Computer Interaction: Present and Future Trends*, Co-Guest Editor (<http://www.computer.org/portal/web/computingnow/archive/september2014>).
- IEEE Computing Now, Monthly Theme on *Semantics in Education*, Co-Guest Editor (<http://www.computer.org/portal/web/computingnow/archive/april2014>).
- Sensors, Special Issue on *Detection and Tracking of Targets in Forward-Looking InfraRed (FLIR) Imagery* (ISSN 1424-8220), Co-Guest Editor (http://www.mdpi.com/journal/sensors/special_issues/FLIR).
- Entertainment Computing, Special Issue on *Virtual Puppetry: New Frontiers of Digital Character Animation* (ISSN 1875-9521), Co-Guest Editor (<http://www.sciencedirect.com/science/article/pii/S1875952114000378>).
- Encyclopedia of Computer Science and Technology, Taylor & Francis, Member of the Editorial Advisory Board (<http://www.tandfencys.com/ecst/>), May 2013 to present.
- Computing and Visualization in Science, Special Issue on *Remote Visualization* (ISSN 1432-9360), Co-Guest Editor (<http://link.springer.com/journal/791/15/3/page/1>).
- The Open Virtual Reality Journal (ISSN 1875-323X), Member of the Editorial Advisory Board, February 2009 to present.
- Journal of Systemics, Cybernetics and Informatics (ISSN 1690-4524), Member of the Editorial Advisory Board, June 2003 to 2012.

Involvement in Conference Activities

- 5th IEEE International Conference on Mobile Services (IEEE MS 2016), Member of the Technical Program Committee, March 2016-present.
- 3rd International Conference on Augmented Reality, Virtual Reality and Computer Graphics (SALENTO AVR 2016), Co-Chair Special Track on “Natural Interfaces for Virtual, Augmented and Mixed Reality”, Member of the Technical Program Committee, December 2015-present.
- 8th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN 2016), Member of the Technical Program Committee, October 2015-present.
- 40th IEEE Annual International Computer, Software & Applications Conference (COMPSAC 2016), Member of the Program Committee of the Symposium on Security, Privacy and Trust in Computing (SEPT) and of the Symposium on Computer Education and Learning Technologies (CELT), October 2015-present.
- 23rd IEEE Symposium on Computer Arithmetic (IEEE ARITH 23), Member of the Technical Program Committee, August 2015-present.
- 4th IEEE International Conference on Mobile Services (IEEE MS 2015), Member of the Technical Program Committee, March 2015-June 2015.
- 4th International Conference on Advances in Computing, Communications and Informatics (ICACCI 2015), Member of the Program Committee of the Special Session on Big Data Search and Mining, January 2015-August 2015.
- 39th IEEE Annual International Computer, Software & Applications Conference (IEEE COMPSAC 2015), Member of the Program Committee of the Symposium on Computer Education and Learning Technologies (CELT), December 2014-July 2015.
- 7th International Conference on Intelligent Technologies for Interactive Entertainment, General Co-Chair and Technical Program Committee Chair (invited), 2015 edition.
- DIDAMATICA 2011, Informatica per la didattica, Member of the Organizing Committee, 2011.
- Industrial Simulation Conference, Member of the International Program Committee, Virtual Reality and Graphical Simulation area, 2004 to present.
- 17th IEEE Symposium on Computer Arithmetic, Member of the International Program Committee, 2004-2005.
- International Journal of Mobile Human Computer Interaction (ISSN 1942-390X), Member of the Editorial

Review Board, March 2009 to present.

- 1st International IEEE EMBS Conference on Neural Engineering, Co-Chair Session 7.2.3 - Brain Imaging I, March 2003.
- 1st International IEEE EMBS Conference on Neural Engineering, Theme Chair, Brain Imaging, February 2003.

Awards

- Top Reviewer IEEE Transactions on Computers (May 2014).
- Young Researchers' Publications Grant 2011 and 2010, Politecnico di Torino (August 2011, December 2010).
- Best paper at UCMEDIA2009. Paravati G., Sanna A., Lamberti F., Ciminiera L., An adaptive control system for interactive virtual environment content delivery to handheld devices. In: User Centric Media 2009, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering LNICTS, vol. 40, pp. 169-178 (December 2009).
- Best student paper at BIOSIGNAL2002. Lamberti F. Montrucchio B., Demartini C., "A wireless-based architecture for medical teleconsulting", 16th EURASIP Conference, pp. 454-456, 2002 (June 2002).
- Best entrepreneurship idea "Miglior idea imprenditoriale - Concorso Galileo Ferraris - Dall'idea all'impresa innovativa", Sportello Unico della Città di Torino, ISMB, Provincia di Torino, Camera di Commercio di Torino, I3P Torino (December 2001).

Reviewing

Journals: Applied Optics, Circuits, Systems & Signal Processing, Computer Standards and Interfaces, Computers and Education, Concurrency and Computation: Practice and Experience, IEEE Transactions on Aerospace and Electronic Systems, IEEE Transactions on Computers, IEEE Transactions on Image Processing, International Journal of Mobile Human Computer Interaction, IEEE Transactions on Multimedia, IEEE/ACM Transactions on Networking, Journal of Systemics, Cybernetics and Informatics, Journal of Systems and Software, Pattern Recognition, Sensors, Signal Processing, Signal Processing: Image Communication, SPIE Optical Engineering.

Conferences: IEEE Emerging Technologies and Factory Automation (2007), IEEE Annual International Computer, Software & Applications Conference (2015), IEEE International Conference on Optimization of Electrical and Electronic Equipment (2010), IEEE Pacific Visualization Symposium (2011), IEEE Symposium on Computer Arithmetic (2004-2013), Industrial Simulation Conference (2005-2011), International Conference on Computer Graphics, Visualization and Computer Vision (2004).

Teaching Activities

Teacher for the following courses belonging to BS and MS curricula at Politecnico di Torino, Italy: *Animazione virtuale (Virtual animation)*, 2012-13, *Computer graphics*, 2010-11, *Informatica grafica (Computer graphics)*, 2014-15, 2013-14, 2012-13 and 2011-12, *Ingegneria del software (Software engineering)*, 2011-12, *Innovative IT services*, 2012-13, *Ipermedia e sviluppo web (Ipermedia and web development)*, 2013-14, *Programmazione a oggetti (Object oriented programming)*, 2014-15, 2013-14 and 2012-13, *Servizi ICT Innovativi (Innovative ICT services)*, 2014-15, 2013-14, *Sistemi informativi B (Information systems B)*, 2012-13, 2011-12, 2010-11, 2009-10 and 2008-09, and *Reti di Calcolatori (Computer networks)*, 2010-11, 2009-10, 2008-09 and 2007-08.

Teacher assistant for the following courses belonging to BS, MS and PhD curricula at Politecnico di Torino, Italy: *Algoritmi e programmazione avanzata (Algorithms and advanced programming)*, 2005-06 and 2004-05, *Aritmetica digitale (Digital Arithmetic)*, 2012-13 and 2009-10, *Computer graphics*, 2009-10, 2008-09, 2007-08 and 2006-07, *Fondamenti/Elementi di informatica (Fundamentals/Elements of computer science)*, 2007-08, 2006-07, 2005-06, 2004-05 and 2002-03, *Gestione dell'innovazione e sviluppo prodotto ICT (Innovation management and ICT product development)*, 2011-12, 2009-10 and 2008-09, *Informatica grafica e multimedialità (Computer graphics and multimedia)*, 2008-09, 2007-08, 2006-07 and 2005-06, *Realtà virtuale e computer animation (Virtual reality and computer animation)*, 2010-11, 2009-10, 2008-09, 2007-08, 2006-07 and 2005-06, *Reti di calcolatori (Computer networks)*, 2006-07, 2005-06 and 2004-05, *Servizi informatici innovativi (Innovative IT services)*, 2011-12, *Sistemi informativi B (Information systems B)*, 2007-08, 2006-07, 2005-06, 2004-05, 2003-04 and 2002-03, *Tecniche e linguaggi di programmazione (Programming languages and techniques)*, 2005-06, 2003-04, 2002-03 and 2001-02.

Supervision of BS, MS and PhD Students

- Supervisor or co-supervisor for 56 (8 in progress) BS and 73 (13 in progress) MS thesis works since 2004.
- Supervisor for the PhD of Dr. Cesare Celozzi, Politecnico di Torino, 2009-2011 (“Human-Machine Interfaces for Virtual Reality Based on Consumer Electronics”).
- Supervisor for the PhD of Dr. Giovanni Piumatti, Politecnico di Torino, 2014-... (“Multimodal Interfaces for Human-Robot Interaction”).
- Supervisor for the PhD of Dr. Federica Bazzano, Politecnico di Torino, 2015-... (“Natural Interfaces for Adjustable Autonomy in Service Robotics”).

Professional Memberships and Services

- IEEE Senior Member (IEEE Computer Society, since 2002).
- Secretary/Treasurer for the IEEE Computer Society, Italy Chapter (since October 2015).
- External Reviewer for the NSERC, Natural Sciences and Engineering Research Council of Canada (since December 2015).