

Andrea Sanna's Resume

Andrea Sanna was born on November 10th, 1968, in Torino, Italy.

Contacts

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Education

1998 Ph.D. in Computer Engineering
1993 MS degree in Electronic Engineering
1987 High school diploma in Electronic

Current Position

Associate professor with tenure at the Department of Control and Computer Engineering - Politecnico di Torino

Professional Experiences

2000-2010 Researcher at the 2nd School of Engineering of the Politecnico di Torino - Vercelli
1998 Post-doc scholarship at the Politecnico di Torino

Academies

Senior member of the ACM

Research interests

Research activity of A. Sanna mainly concerned the following topics: computer graphics, scientific visualization, virtual reality, image processing, parallel/distributed architectures, and human-machine interfaces.

Computer graphics research has been devoted to display 3D objects by means of different kinds of rendering algorithms on different categories of devices. The Ray tracing algorithm has been deeply investigated and A. Sanna proposed innovative solutions for multiprocessor and distribute high performance architectures. On the other hand, the visualization of complex geometries on "thin" devices such as smart-phones, PDAs, tablet PCs by means of the remote visualization paradigm plays a key role for the research of A. Sanna. The Graphics User Interface design it also involved in this context; GUI re-using and graphics element detection/classification are the main topics of a deep investigation concerning the control of remotely running applications.

The scientific visualization mainly concerned the representation, by means of texture synthesis, of vector fields. In particular, novel methodologies, derived from the well known LIC algorithm, were proposed in order to display a set of adjunctive scalar values to vector field representations. Procedural textures (for instance, bump mapping) are combined with traditional streamline computational techniques in order to present the user an enriched data representation.

From the point of view of distributed architectures, it is worthwhile to mention the research activity related to the design of peer-to-peer solution for searching, retrieving, and displaying complex data

and metadata. Also solutions to bridge the gap between P2P and mobile devices have been proposed. On the other hand, also grid approaches to support high performance rendering have been deeply investigated both at the application level (for instance implementing a distributed version of the ray tracing algorithm) and the network level (by proposing high performance implementation of message passing libraries such as Gamma).

A. Sanna was involved in several research activities concerning image processing. For instance, he proposed a novel contrast enhancement algorithm (CMBFHE) that exploits efficient filtering techniques based on cascaded multistep binomial smoothing masks to achieve exactly the same results of other algorithms known in the literature, but with a highly reduced computational complexity. Moreover, A. Sanna presented a novel algorithm for ego-motion compensation of airborne carried FLIR cameras. Telemetry data received from the autopilot of the aircraft are used to predict the motion of the platform; in this way, it is possible to identify more accurately smaller regions where candidate targets have to be searched for. Experimental results show that the proposed solution can improve performance of automatic target tracking algorithms both in terms of accuracy/robustness and in terms of processing speed. Human-machine interface research has been mainly devoted to use consumer electronics (such as mobile devices or sensors usually used for entertainment) to design and implement new interaction paradigms. These novel HMI solutions have been applied to control applications as well as mobile platforms such as robots and UAVs. In particular, a lot of work has been devoted in using depth sensors to detect hand and body poses also for directly animating virtual characters.

Teaching

Teaching activities mainly concerned the following courses:

- Computer animation
- Fundamental of computer graphics
- Operating systems
- Computer sciences
- Computer architectures

Projects

Andrea Sanna has been involved in several national and international projects. In particular, he is the team leader in the following project:

- OASIS: Openly Accessible Services and Interacting Society (EU co-funded project under the Competitiveness and Innovation framework Programme CIP ICT PSP - N°297210). Project budget 3.810.214€, research unit budget 239.232€.
- Nuvola3D: technology for 3D cloud computing (a regional project). Project budget 625.652,50€, research unit budget 144.982,50€.
- EASE-R3: Integrated framework for a cost-effective and ease of Repair, Renovation and Re-use of machine tools within modern factory (EU co-funded project under the FoF.NMP.2013-8 Innovative strategies for renovation and repair in manufacturing - FP7). Project budget 6.146.989,10€, research unit budget 465.687,90€.

Editorial Boards

- 2005- present Journal of Systemics, Cybernetics and Informatics ISSN: 1690-4524
- 2007- present The Ergonomics Open Journal ISSN: 1875-9343
- 2007- present The Open Cybernetics & Systemics Journal ISSN: 1874-110X
- 2009- present The International Journal of Mobile Human Computer Interaction (IJMHCI) ISSN: 1942-390X

Awards

- Best Paper: 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, UCMedia 2009, Venice (ITA), Dec. 9-11 2009. pp. 169-178

Supervision of Doctoral Student Projects

2008	Research activity project of the Ph.D. student Gianluca Paravati	The research activity of G. Paravati will mainly concern the design and the implementation of Quality of Experience managers for 3D object visualization applications and image processing techniques for the target tracking.
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Roles in organization

- Member of the Department Council (2001-2002 and 2004-2009)
- Researchers representative at the 2nd School of Engineering (Vercelli) 2001-2003.
- Member of the board for the entrance tests at the Politecnico di Torino 2002-03.

Some reviewing activities

- IEEE Transactions on Computer (2003).
- IEEE Transaction on Multimedia (2007).
- IEEE Transaction on Instrumentations and Measurements (2009 and 2012).
- IEEE Transaction on Visualization and Graphics (2012).
- International Journal of Mobile Human Machine Interface (2009-2012).
- Computer Methods Programs Biomedicine, Elsevier, (2007).
- International Journal of Human Computer Studies, Elsevier, (2003).
- Courses of the ACM Siggraph (2002, 2003 and 2004).
- International Conference WSCG (1998, 1999, 2000, 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012).
- International Conference IEEE Visualization (2000).
- International Conference ETFA (2005 - 2009).
- International Conference World Multi-conference on Systemics, Cybernetics and Informatics (2005 and 2006).
- International Conference Computing, Communications and Control Technologies (2004, 2005, 2008, 2009 and 2010).

Publications

In press

Celozzi C., Lamberti F., Paravati G., Sanna A.

Enabling human-machine interaction in projected virtual environments through camera tracking of imperceptible markers. In: INTERNATIONAL JOURNAL OF HUMAN-COMPUTER INTERACTION. - ISSN 1044-7318

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), Las Vegas (NV), January 11-14, 2013.

Sanna A., Lamberti F., Paravati G., Domingues Rocha F.

A Kinect-based interface to animate virtual characters. In: JOURNAL ON MULTIMODAL USER INTERFACES. - ISSN 1783-7677

Sanna A., Lamberti F., Paravati G., Manuri F.

A Kinect-based natural interface for quadrotor control. In: ENTERTAINMENT COMPUTING. - ISSN 1875-9521

2012

Sanna A., Lamberti F., Paravati G., Demartini C. (2012)

Automatic assessment of 3D modeling exams. In: IEEE TRANSACTIONS ON LEARNING TECHNOLOGIES, vol. 5:1, pp. 2-10. - ISSN 1939-1382

Paravati G., Lamberti F., Sanna A., Celozzi C. (2012)

High-performance solutions for adaptive and customizable streaming of interactive content to mobile devices. In: Multimedia services and streaming for mobile devices. Challenges and innovations / MACIAS E., SUAREZ A. IGI Global (USA), Hershey, PA, pp. 154-180. ISBN 9781613501443

Lamberti F., Sanna A. (2012)

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), Las Vegas (NV), January 12-16, 2012. pp. 514-515

Sanna A., Lamberti F., Paravati G., Henao Ramirez E.A., Manuri F. (2012)

A Kinect-based natural interface for quadrotor control. In: 4th International ICST Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN2011), Genoa (IT), May 25-27, 2011. pp. 48-56

Paravati G., Lamberti F., Sanna A., Henao Ramirez E., Demartini C. (2012)

An immersive visualization framework for monitoring, simulating and controlling smart street lighting networks. In: 5th International ICST Conference on Simulation Tools and Techniques (SIMUTOOLS2012), Desenzano (Italy), March 19-23, 2012. pp. 17-26

Paravati G., Donna Bianco M., Sanna A., Lamberti F. (2012)
A multi-touch solution to build personalized interfaces for the control of remote applications. In: UCMedia 2010, 2nd International ICST Conference on User Centric Media, Palma de Mallorca (ES), 1–3 September 2010. pp. 10-19

2011

Celozzi C., Lamberti F., Paravati G., Sanna A. (2011)
Controlling generic visualization environments using handheld devices and natural feature tracking. In: IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 57:2, pp. 848-857. - ISSN 0098-3063

Lamberti F., Sanna A., Demartini C. (2011)
How to move your own applications into the cloud by exploiting interfaces automation and accessibility features. In: IEEE International Conference on Cloud Computing and Intelligence Systems (CCIS2011), Beijing (China), September 15-17, 2011. pp. 368-372

Lamberti F., Sanna A., Paravati G. (2011)
Improving robustness of infrared target tracking algorithms based on template matching. In: IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, vol. 47:2, pp. 1467-1480. - ISSN 0018-9251

Celozzi C., Lamberti F., Paravati G., Sanna A. (2011)
Interacting with displays through mobile device cameras using scale-invariant features matching. In: 29th IEEE International Conference on Consumer Electronics (ICCE2011), Las Vegas (NV), January 9-12, 2011. pp. 123-124

Lamberti F., Sanna A., Henao Ramirez E., Demartini C. (2011)
LITES: Illuminazione stradale intelligente a LED per il risparmio energetico. In: AICA 2011 Smart Tech & Smart Innovation, Torino (IT), November 15-17. pp. 1-10

Lamberti F., Sanna A. (2011)
Migrating desktop applications to the Internet: A novel virtualization paradigm based on Web operating systems. In: JOURNAL OF WEB ENGINEERING, vol. 10:3, pp. 234-272. - ISSN 1540-9589

Gatteschi V., Lamberti F., Sanna A., Demartini C. (2011)
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), Stara Lesna (Slovakia), 27-28 October, 2011. pp. 57-61

Gatteschi V., Lamberti F., Sanna A., Demartini C. (2011)
Using taxonomies and ontologies to define occupation and education-driven European qualifications. In: IADIS INTERNATIONAL JOURNAL ON COMPUTER SCIENCE AND INFORMATION SYSTEMS, vol. 6 n. 1, pp. 30-44. - ISSN 1646-3692

Lamberti F., Sanna A., Henao E. (2011)

Web-based 3D visualization for intelligent street lighting. In: 16th ACM International Conference on 3D Web Technology, Paris (France), 20-22 June, 2011. pp. 151-154

Paravati G., Sanna A., Lamberti F., Ciminiera L. (2011)

An adaptive control system to deliver Interactive Virtual Environment content to handheld devices. In: JOURNAL ON SPECIAL TOPICS IN MOBILE NETWORKS AND APPLICATIONS, vol. 16 n. 3, pp. 385-393. - ISSN 1383-469X

Paravati G., Sanna A., Lamberti F. (2011)

An image feature descriptors-based recovery activation metric for FLIR target tracking. In: IADIS International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing (CGVCVIP 2011), Rome (Italy), 24-26 July, 2011. pp. 67-74

Paravati G., Sanna A., Lamberti F., Ciminiera L (2011)

An open and scalable architecture for delivering 3D shared visualization services to heterogeneous devices. In: CONCURRENCY AND COMPUTATION, vol. 23:11, pp. 1179-1195. - ISSN 1532-0626

Gatteschi V., Lamberti F., Sanna A., Demartini C. (2011)

A ranking tool exploiting semantic descriptions for the comparison of EQF-based qualifications. In: JOURNAL OF UNIVERSAL COMPUTER SCIENCE, vol. 17:7, pp. 1060-1077. - ISSN 0948-695X

Paravati G., Sanna A., Lamberti F., Celozzi C. (2011)

A reconfigurable multi-touch framework for teleoperation tasks. In: 16th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA2011), Toulouse (France), 5-9 September, 2011. pp. 1-4

Paravati G., Pralio B., Sanna A., Lamberti F. (2011)

A reconfigurable multi-touch remote control system for teleoperated robots. In: 29th IEEE International Conference on Consumer Electronics (ICCE2011), Las Vegas (NV), January 9-12, 2011. pp. 153-154

2010

Celozzi C; Paravati G; Sanna A; Lamberti F. (2010)

A 6-DOF Artag-based Tracking System. In: 28th IEEE International Conference on Consumer Electronics, Las Vegas, NV, USA, 10-13 November, January 9-13, 2010. pp. 243-244

Celozzi C; Paravati G; Sanna A.; Lamberti F (2010)

A 6-DOF Artag-based tracking system. In: IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 56:1, pp. 203-210. - ISSN 0098-3063

Paravati G; Sanna A; Lamberti F; Ciminiera L. (2010)

An Adaptive Control System for Interactive Virtual Environment Content Delivery to Handheld

Devices. In: 1st International Conference, UCMedia 2009, Venice (ITA), Dec. 9-11 2009. pp. 169-178

Paravati G; Celozzi C; Sanna A; Lamberti F. (2010)
A Feedback-Based Control Technique for Interactive Live Streaming Systems to Mobile Devices. In: IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 56:1, pp. 190-197. - ISSN 0098-3063

Paravati G.; C. Celozzi; A. Sanna; F. Lamberti (2010)
A Feedback-based control technique for delivering M-JPEG streams to mobile devices. In: 28th IEEE International Conference on Consumer Electronics, Las Vegas, USA, January 9-13, 2010. pp. 447-448

Fiorella D; Sanna A; Lamberti F. (2010)
Multi-touch User Interface Evaluation for 3D Object Manipulation on Mobile Devices. In: JOURNAL ON MULTIMODAL USER INTERFACES, vol. 4:1, pp. 3-10. - ISSN 1783-7677

Paravati G; Sanna A; Lamberti F; Ciminiera L. (2010)
On Quality of Experience in Remote Visualization on Mobile Devices. In: INTERNATIONAL JOURNAL OF MOBILE HUMAN COMPUTER INTERACTION, vol. 2, n. 1, pp. 1-20. - ISSN 1942-390X

De Amici S., Sanna A., Lamberti F., Pralio B. (2010)
A Wii Remote-based infrared-optical tracking system. In: ENTERTAINMENT COMPUTING, vol. 1:3-4, pp. 119-124. - ISSN 1875-9521

Gatteschi V., Lamberti F., Sanna A., Demartini C. (2010)
A semantic matchmaking system for job recruitment. In: I-KNOW2010, Proceedings of the 10th International Conference on Knowledge Management and Knowledge Technologies, Graz (AT), 1-3 September, 2010. pp. 50-59

Gatteschi V.; Lamberti F.; Sanna A.; Demartini C.G. (2010)
A semantic-based approach for aligning occupational and educational qualifications in the EQF perspective. In: Proceedings of the IADIS International Conferences Informatics 2010, Wireless Applications and Computing 2010 and Telecommunications, Networks and Systems 2010, Freiburg (Germany), 26-28 July 2010. pp. 3-10

2009

Paravati G; Sanna A; Pralio B; Lamberti F. (2009)
A Genetic Algorithm for Target Tracking in FLIR Video Sequences Using Intensity Variation Function. In: IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol. 58:10, pp. 3457-3467. - ISSN 0018-9456

Sanna A; Pralio B; Lamberti F.; Paravati G (2009)
A Novel Ego-Motion Compensation Strategy for Automatic Target Tracking in FLIR Video Sequences taken from UAVs. In: IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC

SYSTEMS, vol. 45:2, pp. 723-734. - ISSN 0018-9251

Lamberti F.; Sanna A; Demartini C (2009)

A Relation-Based Page Rank Algorithm for Semantic Web Search Engines. In: IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, vol. 21 n. 1, pp. 123-136. - ISSN 1041-4347

Giakoumis D; Lazaridis M; Trnkoczy J; Axenopoulos A; Paravati G; Sanna A.; Lamberti F; Tzovaras D; Hassapis G (2009)

Search and retrieval of objects over a distributed P2P network for mobile devices. In: IEEE WIRELESS COMMUNICATIONS, vol. 16 n. 5, pp. 42-49. - ISSN 1536-1284

2008

Sanna A; Lamberti F. (2008)

3D Visualization on Mobile Devices. In: Handbook of Research on User Interface Design and Evaluation for Mobile Technology / LUMSDEN J. IGI Global, NEW YORK, NY, pp. 556-573. ISBN 9781599048710

Lamberti F; Bettiol S; Mallia M; Sanna A; Demartini C.G. (2008)

Definition of a Formal and Unified Model for a Smart Card based European-wide Electronic Seaman's Book. In: INTERNATIONAL JOURNAL OF COMPUTERS, vol. 2:2, pp. 111-118. - ISSN 1998-4308

Demartini C; Bettiol S; Lamberti F.; Mallia M; Sanna A (2008)

The European Seaman's Smart Card: a Prototype of a Distributed System Allowing Secure Access to a Unified Representation of Maritime Records. In: NON SPECIFICATO, Istanbul, 27-30 May, 2008. pp. 151-156

Lamberti F.; Sanna A (2008)

Extensible GUIs for Remote Application Control on Mobile Devices. In: IEEE COMPUTER GRAPHICS AND APPLICATIONS, vol. 28:4, pp. 50-57. - ISSN 0272-1716

Paravati G.; Sanna A; Lamberti F; Ciminiera L (2008)

A Novel Approach to Support Quality of Experience in Remote Visualization on Mobile Devices. In: Eurographics 2008, Hersonissos, Crete, April 14-18. pp. 223-226

Daras P; Tzovaras D; Dobravec S; Trnkoczy J; Trapfoener R; Malavazos C; Sanna A; Franz J; Ploskas N; Wintterle G.J; Paravati G.; Kastrinogiannis T; Gumz M (2008)

VICTORY - A 3D Search Engine over P2P and wireless P2P Networks. In: ACM 4th International Wireless Internet Conference (WICON 2008), Hawaii, USA, November 17-19, 2008.

Trnkoczy J; Dobravec S; Tasi J.F; Daras P; Tzovaras D; Sanna A; Paravati G.; Trapfoener R; Franz J; Kastrinogiannis T; Malavazos C; Ploskas N; Gumz M; Geramani K; Wintterle G. J (2008)

VICTORY - a multimodal, cross-platform and distributed multimedia repository. In: Third International ICST Conference on Scalable Information Systems, Vico Equense, Italy, June 2008.

2007

Zunino C; Pompili I; Sanna A.; Ciminiera L (2007)
A brokerage system for solar data archives. In: SOFTWARE-PRACTICE & EXPERIENCE, vol. 37, pp. 881-896. - ISSN 0038-0644

Lamberti F; Sanna A. (2007)
A streaming-based solution for remote visualization of 3D graphics on mobile devices. In: IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS, vol. 13, pp. 247-260. - ISSN 1077-2626

2006

Lamberti F.; Montrucchio B; Sanna A (2006)
CMBFHE: a novel contrast enhancement technique based on cascaded multistep binomial filtering histogram equalization. In: IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 52 n. 3, pp. 966-974. - ISSN 0098-3063

2005

Maniezzo M.; Sanna A. (2005)
A Deep Evaluation of Design Issues and Performances of PVM, MPICH and mpiGAMMA Libraries. In: WANGJÌ WANGLÙ JÌSHÙ XUÉKAN, vol. 6, pp. 345-358. - ISSN 1607-9264

Sanna A.; Pralio B. (2005)
An Innovative Tool for Simulating and Controlling Mini Air Vehicles. In: WSEAS TRANSACTIONS ON INFORMATION SCIENCE AND APPLICATIONS, vol. 10, pp. 1659-1666. - ISSN 1790-

Sanna A. (2005)
Mini-aereo automatico contro le calamità. .

Demartini C., Pralio B., Quagliotti F., Sanna A. (2005)
Minipiattaforme volanti per il controllo del territorio: ambienti di simulazione. In: 5° Convegno Tecnico Scientifico MIMOS, Torino (ITA), Novembre 2005.

Sanna A; Pralio B. (2005)
Simulation and Control of Mini UAVs. In: 5th WSEAS International Conference on Simulation, Modeling and Optimization (SMO'05), Corfu, GREECE, August 2005.

Lamberti F.; Sanna A. (2005)
A solution for displaying medical data models on mobile devices. In: WSEAS TRANSACTIONS ON INFORMATION SCIENCE AND APPLICATIONS, vol. 2, pp. 258-264. - ISSN 1790-0832

Lamberti F.; Sanna A. (2005)
A solution for displaying medical data models on mobile devices. In: WSEAS International Conference SEPADS'05, 13-15 Febbraio.

2004

Lamberti F.; Montrucchio B; Sanna A. (2004)

BBFHE: Block-based Binomial Filtering Histogram Equalization. In: WSEAS TRANSACTIONS ON INFORMATION SCIENCE AND APPLICATIONS, vol. 1, pp. 1591-1596. - ISSN 1790-0832

Sanna A.; Milani M. (2004)

CDFast: an Algorithm Combining Different Bounding Volume Strategies for Real Time Collision Detection. In: The 8th world multi-conference on systemics, cybernetics and informatics, luglio 2004. pp. 144-149

Sanna A.; Zunino C.; Ciminiera L. (2004)

Distributed JXTA-based architecture for searching and retrieving solar data. In: FUTURE GENERATION COMPUTER SYSTEMS, vol. 21 n. 3, pp. 349-359. - ISSN 0167-739X

Zunino C.; Sanna A. (2004)

A JXTA-based architecture for 3D distributed visualization: D3D. In: International Conference on Computing, Communications and Control Technologies, 14-17 agosto. pp. 188-193

Sanna A.; Ciminiera L.; Zunino C.; Lamberti F. (2004)

Un'infrastruttura distribuita basata su JXTA per la visualizzazione remota di modelli 3D. In: XLII Congresso annuale AICA, Benevento 28-30 settembre. pp. 155-165

Zunino C.; Sanna A. (2004)

Una architettura peer-to-peer per la visualizzazione 3D distribuita. In: Virtuality.

Sanna A.; Zunino C.; Lamberti F. (2004)

A distributed architecture for searching, retrieving and visualizing complex 3D models on Personal Digital Assistants. In: INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES, vol. 60 n. 5-6, pp. 701-716. - ISSN 1071-5819

2003

Zunino C.; Lamberti F.; Sanna A. (2003)

A 3D Multiresolution rendering engine for PDA devices. In: SCI. pp. 538-542

Sanna A.; Fornaro C. (2003)

IMoViS a system for mobile visualization of intrusion detection data. In: INFORMATION & SECURITY, vol. 2, pp. 235-249. - ISSN 1311-1493

Sanna A.; Zunino C.; Bentley R.D.; Piccinelli G. (2003)

Improving Communication Through Active Brokerage: the EGSO Data Grid. In: Conference on Communications in Computing (CIC'03).

Sanna A.; Maniezzo M. (2003)

Low latency and high throughput message passing solutions. In: RTLIA. pp. 9-12

Sanna A.; Zunino C.; Lamberti F. (2003)

Mobile Virtual Reality (MVR): un nuovo modello di realtà virtuale. In: *Virtuality*.

Pralio B.; Quagliotti F.; Sanna A (2003)

Progetto e Sviluppo di Simulatori di Volo per Applicazioni Didattiche. In: 3° Convegno Tecnico Scientifico MIMOS, Torino, Novembre 2003.

Pompili I.; Zunino C.; Sanna A.; Piccinelli G. (2003)

A Web Services based system for data grid. In: *EOOWS*.

Lamberti F.; C. Zunino; A. Sanna; A. Fiume; M. Maniezzo (2003)

An accelerated remote graphics architecture for PDAs. In: *ACM SIGGRAPH Web3D 2003 Symposium (WEB3D2003)*, Saint Malo (FR), March 9-12, 2003. pp. 55-62

A. Sanna; T. Stefanuto; C. Zunino; Lamberti F.; P. Montuschi (2003)

An architecture for remote monitoring-management of distributed applications. In: *CCCT 2003*, Orlando, FL (USA), July 2003. pp. 182-186

Carpegna Y.; Pissardo M.; Sanna A.; Demartini C.G.; Montrucchio B. (2003)

A grid computing-based architecture for on demand movie rendering. In: *Seventh Multi-Conference on Systemics, Cybernetics and Informatics*, Orlando, 27 Jul 2003 - 30 Jul 2003. pp. 7-12

Pissardo M.; Carpegna Y.; Montrucchio B.; Sanna A.; Demartini C. (2003)

A grid computing-based architecture for on demand movie rendering. In: *Virtuality*.

Lamberti F.; Montrucchio B; Sanna A; Zunino C (2003)

A web-based architecture enabling multichannel telemedicine applications. In: *JOURNAL OF SYSTEMICS, CYBERNETICS AND INFORMATICS*, vol. 1. - ISSN 1690-4524

2002

Sanna A.; Zunino C.; Montrucchio B.; Montuschi P. (2002)

Adding a scalar value to texture-based vector field representations by local contrast analysis. In: *Eurographics/IEEE TCVG Symposium on Data Visualization 2002*, 2002. pp. 35-41

Sanna A; Montrucchio B; Zunino C; Montuschi P. (2002)

Enhanced vector field visualization by local contrast analysis. In: *WSCG'2002 The 10-th International Conference in Central Europe on Computer Graphics, Visualization a*, 2002. II389-II396

A. Sanna; C. Zunino; Lamberti F. (2002)

HAVS: a human animated VRML-based virtual shop for e-commerce. In: *Proc. 6th World Multiconference on Systemics, Cybernetic and Informatics, SCI2002*. pp. 24-29

Lamberti F.; Sanna A (2002)

A Java web-based multichannel architecture for distributed system monitoring. In: *WANGJì WANGLÙ JìSHÙ XUÉKAN*, vol. 3, pp. 235-244. - ISSN 1607-9264

Sanna A.; Zunino C. (2002)

La Realtà Virtuale e il Commercio Elettronico: le tecnologie per portare il 3D sul web. In: *Virtuality 2002.*

Montrucchio B; Lamberti F; Sanna A; Montuschi P. (2002)

Measuring isotropic local contrast: a circular mask based approach. In: *WSCG'02 The 10-th International Conference in Central Europe on Computer Graphics, Visualization and, 2002.* pp. 83-90

Lazzarino O.; Sanna A.; Zunino C.; Lamberti F. (2002)

A PVM-based parallel implementation of the REYES image rendering architecture. In: *LECTURE NOTES IN COMPUTER SCIENCE*, pp. 165-173. - ISSN 0302-9743

Lamberti F; Montrucchio B.; Sanna A; Zunino C (2002)

A Web-based architecture enabling multichannel telemedicine applications. In: *6th World Multi-conference on Systemics, Cybernetics and Informatics (SCI2002), Orlando, FL (USA), 14-18 July, 2002.* pp. 257-262

Zunino C; Lamberti F; Sanna A; Montrucchio B. (2002)

A Wireless Architecture For Performance Monitoring And Visualization On PDA Devices. In: *6th World Multi-conference on Systemics, Cybernetics and Informatics (SCI2002), Orlando, FL (USA), 14-18 July, 2002.* pp. 143-148

2001

Sanna A.; Montrucchio B. (2001)

3D technologies for e-commerce on the Web. In: *SOFTWARE FOCUS*, vol. 2, pp. 157-163. - ISSN 1529-7942

Sanna A.; Montrucchio B.; Montuschi P.; Demartini C.G. (2001)

3D-dvshop: a 3D dynamic virtual shop. In: *The 6th Eurographics Workshop on Multimedia, 2001.* pp. 33-42

Sanna A; Montrucchio B. (2001)

Ambienti Virtuali 3D. In: *COMPUTER GAZETTE*, vol. Anno XVI, No. 1, pp. 62-63. - ISSN 1123-4253

Sanna A; Montrucchio B.; Montuschi P (2001)

B2LIC: an algorithm for mapping two scalar values on texture-based representations of vector fields. In: *WSCG'2001, Plzen, CZ, February 5-9, 2001 .* pp. 138-145

Sanna A; Montrucchio B.; Zunino C; Montuschi P (2001)

La realtà virtuale e la visualizzazione scientifica: strumenti e tecniche per migliorare la comprensione dei dati. In: *Virtuality 2001, Torino, 29-31 ottobre 2001.*

Montrucchio B.; Montuschi P.; Sanna A.; Sparavigna A. (2001)

Visualizing Vector Fields: the Thick Oriented Stream-Line Algorithm

(TOSL). In: COMPUTERS & GRAPHICS, vol. 25 n. 5, pp. 847-855. - ISSN 0097-8493

Zunino C; Montrucchio B.; Sanna A; Demartini C (2001)

A distributed visualization environment for scientific visualization based on Jini technology. In: SCCG'2001, Budmerice, April 25-28, 2001. pp. 95-101

2000

Sanna A; Montrucchio B. (2000)

Adding a scalar value to 2D vector field visualization: the BLIC (Bumped LIC). In: Eurographics'2000, Aug. 2000. pp. 119-124

Sanna A.; Montrucchio B.; Montuschi P.; Maggiora M. (2000)

Informatica grafica e multimedialità. .

Fornaro C.; Sanna A. (2000)

Public Key Watermarking for Authentication of CSG Models. In: COMPUTER AIDED DESIGN, vol. 32, pp. 727-735. - ISSN 0010-4485

A. Sanna; B. Montrucchio; Arina R. (2000)

Visualizing Unsteady Flows by Adaptive Streaklines. In: WSCG'2000 The 8-th International Conference in Central Europe on Computer Graphi, February 2000. pp. 84-91

Sanna A; Montrucchio B.; Montuschi P (2000)

A survey on visualization of vector fields by texture-based methods. In: RECENT RESEARCH DEVELOPMENT IN PATTERN RECOGNITION / PANDALAI S.G. TRANSWORLD RESEARCH NETWORK, pp. 13-27. ISBN 8186846611

1999

A. Sanna; B. Montrucchio; Arina R.; L. Massasso (1999)

A 3D Fluid-Flow Visualizer for Entry Level Computers. In: WSCG'99 The 7-th International Conference in Central Europe on Computer Graphics, February 1999. pp. 249-256

Sanna A.; Montrucchio B.; Arina R. (1999)

On Time-Varying Flow Fields: a streakline-based visualization method. In: Eurographics'99 Short Papers and Demos Proceedings. pp. 30-33

Sanna A.; Montrucchio B.; Sparavigna A. (1999)

A Parallel Algorithm of Texture Analysis for Liquid Crystal Investigation. In: PATTERN RECOGNITION LETTERS, vol. 20, pp. 183-190. - ISSN 0167-8655

Sanna A. (1999)

Proteggere i modelli 3D mediante watermarking. In: COMPUTER GAZETTE, vol. 11, pp. 63-65. - ISSN 1123-4253

Sparavigna A; Sanna A; Montrucchio B.; Strigazzi A (1999)

Streamline Image Analysis: a new tool for investigating defects in nematic liquid crystals. In: LIQUID CRYSTALS, vol. 26-10, pp. 1467-1478. - ISSN 0267-8292

1998

Sanna A.; Montuschi P. (1998)

An Efficient Algorithm for Ray Casting of CSG Animation Frames. In: THE JOURNAL OF VISUALIZATION AND COMPUTER ANIMATION, vol. 9 n. 4, pp. 229-242. - ISSN 1049-8907

Sanna A.; Montuschi P. (1998)

An Efficient Algorithm for Ray Casting of CSG Animation Frames. In: The Sixth International Conference on Computer Graphics and Visualization. II323-II330

Sanna A.; Rossi M.; Montuschi P. (1998)

Fast Ray Tracing of CSG Models. In: CSG'98, Ammerdown, UK, April. pp. 65-80

Sanna A.; Montuschi P.; Rossi M (1998)

A Flexible Algorithm for Multiprocessor Ray Tracing. In: COMPUTER JOURNAL, vol. 41 n. 7, pp. 503-516. - ISSN 0010-4620

Fornaro C.; Sanna A. (1998)

Fondamenti di Informatica - Raccolta di lucidi. .

1997

Sanna A. (1997)

Fondamenti di Informatica - Raccolta di lucidi. .

Sanna A.; Montuschi P.; Fisone A.; Montrucchio B. (1997)

A New Algorithm for the Rendering of CSG Scenes. In: COMPUTER JOURNAL, vol. 40 n. 9, pp. 555-564. - ISSN 0010-4620

Cena G.; Ciminiera L.; Montuschi P.; Sanna A. (1997)

A Q-coder Algorithm with Carry Free Addition. In: 13th IEEE Symposium on Computer Arithmetic. pp. 282-290

Sanna A.; Montuschi P.; Rossi M. (1997)

Two Algorithms for Fast Ray Tracing of Complex Scenes. In: The Fifth International Conference in Central Europe on Computer Graphics and Vi, Plzen, Czech Republic. III465-III474

1996

Sanna A.; Montuschi P.; Montrucchio B. (1996)

A Parallel Algorithm for Image Rendering and Its Implementation. In: ELECTRONICS LETTERS, vol. 32

n. 14, pp. 1275-1277. - ISSN 0013-5194
Web of Science: 1

Sanna A.; Montuschi P. (1996)
Rendering of Animated Sequences. In: The 13th IEEE Asilomar Conference on Signals, Systems & Computers, Pacific Grove, CA, USA. pp. 135-139

1995

Sanna A.; Montuschi P. (1995)
Location of Visual Sensors in Orthogonal Environments. In: Second IEEE Asian Conference on Computer Vision, Concorde Hotel, Singapore. III412-III416

Sanna A.; Montuschi P. (1995)
On the Computation of Groups of Bounding Boxes for Fast Test of Objects Intersection. In: Fourteenth Annual IEEE International Phoenix Conference on Computer and Communic, Scottsdale, AZ. pp. 684-690

Sanna A.; Montuschi P. (1995)
Spatial Bounding of Complex CSG Objects. In: IEE PROCEEDINGS. COMPUTERS AND DIGITAL TECHNIQUES, vol. 142 n. 6, pp. 431-439. - ISSN 1350-2387

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