

CURRICULUM VITAE

(synthetic version)

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Roberto Scopigno graduated in Computer Science at the University of Pisa in 1984. He won a selection for a permanent researcher position at CNUCE-CNR (Pisa, Italy) in 1986, became Senior Researcher in 1997 and finally Research Director in 2001 at the Istituto di Scienza e Tecnologie dell'Informazione (ISTI-CNR). ISTI-CNR is a research institute located in Pisa and active on several Computer Science themes. Roberto contributed to the creation and led for several years the Visual Computing Lab (VCLab) of ISTI-CNR. Since April 1st, 2019, Roberto was nominated Director of ISTI-CNR for a four-years term.

Roberto has been involved in Computer Graphics since his graduation in Computer Science. Since 1990 he had joint appointments at the Department of Computer Engineering and at the Department of Computer Science of the University of Pisa, where he taught Computer Graphics courses.

He was Visiting Researcher at the Univ. of Vigo (Spain) in 1993 and Visiting Researcher at the Univ. of California at Santa Cruz (USA) in 1995; he was invited for short stages, seminars and PhD courses by several other international universities.

Roberto has been thesis advisor of twelve PhD students (in Italy and abroad) and more than forty master theses; acted as member of the evaluation committee for several international PhD thesis candidates (MPI & Univ. of Saarbrücken, Univ. of Barcelona, Univ. of Granada, Univ. of Bordeaux, Univ. of Strasbourg, Scuola Normale Superiore, etc.).

He has been engaged in many research projects (25 of them funded by EU and several others funded by national agencies) concerned with the theme of visual information technologies: multiresolution data modelling and rendering, 3D scanning and digitization, surface reconstruction, interactive graphics and virtual reality, scientific visualization, volume rendering. Cultural Heritage (CH) and Computer-Aided Medicine/Surgery are the main fields of application for the methodologies and technologies developed. He secured funds for more than 7.7 M Euro on competitive calls.

These activities have been performed in collaboration with several institutions; major international collaborations include: Stanford University – M. Levoy; Univ. of Southern California – P. Debevec; MPII – H.P. Seidel; Univ. of Brighton – D. Arnold, K. Rodriguez; INRIA – G. Drettakis, X. Granier; UPC – P. Brunet, I. Navazo; Fraunhofer – D. Fellner. The major ones at the national level include: Universities of Genova, Pisa, Rome, Cagliari; CRS4; CNR institutes ITABC, IBAM, IMATI, ICVBC, INOA. The activity on CH is performed in strict cooperation with primary institutions: Florence museums, Pisa museums, restoration labs (OPD, SAT, ISCR), Max Plank Kunsthistorische Institute in Florence, C2MRF Paris, Victoria and Albert Museum London, MNAC Museum Barcelona, etc.

He published more than two hundred fifty papers in international refereed journals/conferences/books, including papers in top conferences proceedings (ACM Siggraph, Eurographics, IEEE Viz) and first-rank journals. Overall quality and visibility of those research results can be measured with *Google Scholar* figures: >12,000 citations, *h-index* 52 (2019).

He has given invited talks or tutorials in many international conferences.

He is member of Eurographics Association (EG), served as an elected member of the Executive Board of EG (2001-2012), was nominated Deputy Chair (2004-2008) and then General Chair (2009-2010).

In the framework of the organization in thematic Departments of CNR, Roberto was appointed coordinator of the national research action on Cultural Heritage & ICT (entitled in Italian "Fruizione e Valorizzazione del Patrimonio Culturale", 2006-2012). Since 2014 he is now covering the same role for the Department on Engineering and Computer Science of CNR (DIITET).

Nominated member of the Italian National Consultation Panel of the EC Joint Project Initiative (JPI) on "Cultural Heritage" (2012-2017).

Scopigno contributed to the design of several software systems developed by the Visual Computing Lab, many of them distributed in open source to the community (<http://vcg.isti.cnr.it/software.php>). Worth of notice here are: the **MeshLab** tool for processing sampled 3D data (<http://www.meshlab.net/>), which totals around 300,000 downloads per year; the **3DHOP** platform for web-based visualization of 3D models (<http://vcg.isti.cnr.it/3dhop/>).

Editorial activity

- Chaired several international conferences (Eurographics 1999, ACM/EG SGP 2004, WSCG 2004, EG VAST 2005, Eurographics 2008, ACM Afrigraph 2010, Sibgrapi 2012, EG GCH 2014, CAA 2015, Digital Heritage 2015, Visual Heritage 2018).
- Has been member of the IPC of major CG conferences (ACM SIGGRAPH 2004 and 2005, Eurographics annual conference since 1999, among others). Concerning the interdisciplinary *ICT & CH* domain he served in the following IPCs: EG VAST Int. Symp. on Virtual Reality, Archaeology and CH (from 2004 to 2011); Virtual Systems and Multimedia VSMM (2008, 2012); 3D-Arch'2009; EuroMed 2010, 2014; CAA 2011; ArcheoFoss 2013; Digital Heritage 2013.
- Editor in Chief of the **ACM Journal of Computing and Cultural Heritage** (2012-2018)
- Editor in Chief of the international journal **Computer Graphics Forum**, Wiley (2002-2010)
- Member of Editorial Board of:
 - ACM J. on Computers and Cultural Heritage (2007-2012)
 - The Visual Computer (2001-2007),
 - Elsevier Journal of Cultural Heritage (since 2010)
 - Member of the Advisory Board of the Book Series "Geometry and Computing", Springer-Verlag.
- Served as reviewer for most of the main conferences and journals in Computer Graphics.

Service as expert evaluator:

- Member of the **EC ERC PE6 panel** (Computer science and informatics) on 2011, 2012, 2013, 2015, 2016, 2018.
- Advisory Board member of the "Max Planck Center for Visual Computing and Communication", a joint action of MPII and Stanford University (MPC-VCC, <http://www.mpi-sb.mpg.de/mpc/>), 2003-2008.
- Evaluator for: EC FP7 and H2020, EC ERC program, Enterprise Ireland, National Research Agency – ANR - France, FIT-IT Austria, National Science Foundation (NSF) USA, Swiss National Science Foundation, Research Foundation Flanders, Cyprus Research Promotion Foundation, Czech Science Foundation, Netherland NWO, UK Royal Society.

Funding ID - Recent Projects:

- EU IST "The Virtual Planet", IST-2000-28095, 2001-2004. (ISTI budget 375KE)
- EU IST "ViHAP3D - Virtual Heritage: 3D High Quality Acquisition and Presentation", IST-2001-32641, 2002-2005. (ISTI budget 300KE)
- Michelangelo's David Restoration, National Initiative, 2002-2004. (ISTI budget 20KE)

- National Project MIUR “EndoCAS: Center of Excellence on Computed-Aided Surgery”, 2003-2007 (ISTI budget 120KE)
- EU IST N.o.E. “EPOCH - a European Research Network on Excellence in Processing Open Cultural Heritage”, IST-2002-507382, 2004-2008. (ISTI budget 160KE)
- EU PASR-2004 “CRIMSON: The Crisis Simulation System”, 2004-011500, 2004-2007. (ISTI budget 153KE)
- EU IST “CROSSMOD: Cross-Modal Perceptual Interaction and Rendering - A New Generation of Audiovisual Virtual Environments”, 2005-2008. (ISTI budget 170KE)
- Regione Toscana project “START – Developing technologies for cultural heritage applications”, 2008-2010. (ISTI budget 320KE)
- EU IST “3D-COFORM: Tools and Expertise for 3D Collection Formation”, 2008-2012. (ISTI budget 624KE)
- EU IST “V-CITY: The Virtual City”, 2008-2011, (ISTI budget 254KE)
- EU FP7 Security “INDIGO – Innovative Training and Decision Support for Emergency Operations”, grant no. 242341, 2010-2013 (ISTI Budget 296 KE)
- POR Reg Toscana “Visito Tuscany”, 2009-2011, (ISTI budget 410KE)
- EC COST “ HDRI: the digital capture, storage, transmission and display of real-world lighting ”, 2011-2015
- EC 7thFW NoE “V-Must.Net: Virtual Museum Transnational Network”, no. 270404, 2011-2015, (contribution CNR-ISTI 190 KE), <http://www.v-must.net/>
- EC PSP “3DICONS: 3D Digitisation of Icons of European Architectural and Archaeological Heritage”, 2012-2015 (contribution CNR-ISTI 274 KE)
- EC INFRA “ARIADNE: Advanced Research Infrastructure for Archaeological Dataset Networking in Europe”, 2013-2017 (contribution CNR-ISTI 382KE) <http://www.ariadne-infrastructure.eu/>
- EC FET “Harvest4D: Harvesting Dynamic 3D Worlds from Commodity Sensor Clouds”, (contribution CNR-ISTI 461KE), 2013-2016 <https://harvest4d.org/>
- EC FP7-SEC-2013-1 CP-FP “VASCO: a Virtual Studio for Security Concepts and Operations”, (contribution CNR-ISTI 286KE), 2014-2017 <http://vasco.diginext.fr/>
- H2020-INFRADEV-1 “PARTHENOS: Pooling Activities, Resources and Tools for Heritage E-research Networking, Optimization and Synergies” (2015-2019, contribution CNR-ISTI 800 KE)
- EC H2020 “ArchAIDE- Archaeological Automatic Interpretation and Documentation of cEramics”, 2016-2019 (contribution CNR-ISTI 395KE).
- Regione Toscana “SCIADRO - SCIAme di DROni”, 2016-2018 (contribution CNR-ISTI VCLab 300KE).
- EC H2020 “EMOTIVE: Emotive virtual cultural experiences through personalized storytelling”, 2016-2019 (contribution CNR-ISTI VCLab 250KE).
- EC H2020 “ENCORE: ENergy aware BIM Cloud Platform in a COst-effective Building RENovation Context”, 2018-2021.
- EC H2020 ITN “EVOCATION: Advanced Visual and Geometric Computing for 3D Capture, Display, and Fabrication”, 2018-2022.
- EC H2020 “ARIADNE Plus: Advanced Research Infrastructure for Archaeological Dataset Networking in Europe”, 2019-2023.

International Prizes/Awards

- R. Scopigno was presented the “**Distinguished Career Award**” of the EUROGRAPHICS Association, announced at the Eurographics 2014 Conference, Strasbourg (France), April 7th, 2014 (<https://www.eg.org/index.php/awards/eg-awards>).
- IEEE/EG Int. Conf. “Digital Heritage 2013 – **Special Team Award**” given to Visual Computing Lab – CNR-ISTI, 2013.

- R. Scopigno was presented the “**Outstanding Technical Contributions Award**” of the EUROGRAPHICS Association, announced at the Eurographics 2008 Conference, Crete (Greece), April 14th, 2008 (<https://www.eg.org/index.php/awards/eg-awards>).
- R. Scopigno was presented the “**Tartessos Award**” by the Spanish Society on Virtual Archeology (SEAV) at the annual conference Archaeologica 2.0, Seville (Spain), June 2011.
- R. Scopigno was presented the award for “Technology and Innovation”, Premio Zeus – International Archeology Award, Città di Ugento, Lecce (Italy), 15 settembre 2007.
- *Fellow* of the Eurographics Association, 2006 (<http://www.eg.org/index.php/about-eg/fellows/>)
- **Best Paper Award 2005** of the International Journal "Computers & Graphics", Vol. 30(6), for the paper published on Vol. 29, no.1, pp 125-133.
- **Second Best Paper Award**, Eurographics 2003 Conference, for the paper: “BDAM – Batched Dynamic Adaptive Meshes for High Performance Terrain Visualization”.
- **Best Paper Award 2000**, Computer & Graphics Journal, Elsevier - Pergamon Press, Vol. 25(6), pp.III-V, for the paper published on Vol.24, no. 3, May 2000, pp.399-418.
- **Second Best Paper Award** (and Best Student Paper awarded to co-author M. Tarini), Eurographics 2000, for the paper: “Real Time, Accurate, Multi-Featured Rendering of Bump Mapped Surfaces”.
- **Second Best Paper Award 1998**, Journal Computer & Graphics (Elsevier - Pergamon Press), Dec. 1999, Vol. 24(1), pp.3-4, for the paper published on Vol. 22(1), 1998, pp. 37-54 and the tools developed.

More details on the research activity, active projects and published papers are presented on the Visual Computing Lab web: <http://vcg.isti.cnr.it/>

Publications

The complete list of papers is available on <http://vcg.isti.cnr.it/Publications/>