

Europass Curriculum Vitae

Personal information

First name / Surname **Luigi Calori**
Address c/o Cineca, Via Magnanelli 6/3, Casalecchio di Reno (BO), Italy
Nationality Italian
Date of birth 05 Jan. 1963

Occupational field **Software Development, Scientific Visualisation**

Work experience

Dates 1986 - 1987
Occupation or position held Software Development
Main activities and responsibilities GIS development
Name and address of employer SEART, Bologna, IT
Type of business or sector Cartography

Dates 1989-2021
Occupation or position held Technologist
Main activities and responsibilities Scientific Visualisation dedicated to environmental simulation of pollution distribution of an industry
Development of web interface for on line visualisation of weather forecast for Regional Weather Forecast Service, ARPA
Contribution to GRADS development, software for weather forecast visualisation
Particle Visualisation of N-body astrophysical simulation models, in EU funded projects such as COSMOLAB (developed open source software: ASTROMD) .
Development of Remote Connection Manager: client-server tool for support VNC session handling, developed within PRACE EU project and currently in production on CINECA clusters
Name and address of employer CINECA Supercomputing Center, Casalecchio di Reno, Bologna, IT
Type of business or sector Scientific and Remote Visualization: Environmental, Astrophysical, Weather forecast

Dates 1998-2003
Occupation or position held Technologist
Main activities and responsibilities Development of software based on VTK open source library for anatomic library visualisation (Visible Human Project Data) and surgery simulation
Development of a software for Melanoma Automatic diagnosis (EU funded ADAM project)
Name and address of employer CINECA Supercomputing Center
Type of business or sector Biomedical applications

Dates 1997-2003
Occupation or position held Technical Coordinator

Main activities and responsibilities	Development of video surveillance system for EU funded project (EU funded CEMUVIS project Development of haptic interface for colour correction of damaged film and video material in EU funded project RACINE:
Name and address of employer	CINECA Supercomputing Center
Type of business or sector	Image processing: Film and video industry, Video Surveillance

Dates	1994-1997, 2008
Occupation or position held	Technologist
Main activities and responsibilities	1994-1997: Development of Forensic Application for image visualisation and video synchronisation in F1 Ayrton Senna Accident trial
	2008: Image Analysis in "Una Bomber trial"
Name and address of employer	CINECA Supercomputing Center
Type of business or sector	Forensic Applications

Dates	1992 - 20015
Occupation or position held	Technologist
Main activities and responsibilities	Software Development and user support in cultural heritage: terrain rendering applied to National and European projects (Marzabotto, Jaen)
	Development of VRML based VR application (NUME project)
	Development of OpenSceneGraph library based VR application for terrain 3d visualisation and interaction over the web (Certosa project, Virtual Rome project:
	platform integration of VMUST EU project (http://www.v-must.net/)
Name and address of employer	CINECA Supercomputing Center
Type of business or sector	Cultural Heritage Applications
Education and training	
Dates	1986
Title of qualification awarded	Degree in Mathematics
Principal subjects covered	Data structures in cartography
Name and type of organisation providing education and training	University of Bologna
Level in national classification	110/110 +

Dates	1987
Title of qualification	First year of PhD in Computing and Mathematics
Principal subjects	/
Name and type of organisation providing education and training	University of Padova
Level in national classification	/

Personal skills and competences	
Mother tongue	Italian
Other language	English

Self-assessment <i>European level (*)</i> Language	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
	EN	Good	EN	Good	EN	Good	EN	Good	EN	Good

(*) *Common European Framework of Reference for Languages*

Organisational skills and competences EU project management

Technical skills and competences Scientific Visualization, real time 3d Computer Graphics,(CINECA)
GIS, (Thesis work, CINECA)
Web application development and deployment, image processing (CINECA)

Computer skills and competences Pascal-Fortran (University)
C,C++ coding experience (CINECA)
OpenGL (CINECA)
Kitware Visualization ToolKit VTK (CINECA)
OpenSceneGraph real time library (CINECA)
Tcl,PHP coding experience (CINECA)
Cmake cross platform build system (CINECA)
(Unix,Windows OS "power user" working experience.
Currently mainly Python coding for RCM project and Spack package manager for cluster sw deployment

Driving licence B

Additional information

Publications L.M. GUTIÉRREZ SOLER, M.A. ROYO ENCARNACION, L. CALORI, A. GUIDAZZOLI Elaboracion de un modelo de navegacion tridimensional sobre el paisaje arqueologico de Jaen in "Arqueologia y Terntorio medieval", Universidad de Jaen, 1995

A.R.FORMICONI, A.PASSERI, R.GUELF, M.MASONI, A.PUPI, U.MELDOLESI,A.GUIDAZZOLI, L.CALORI, World Wide Web interface for advanced SPECT reconstruction algorithms on a remote massively parallel computer. Proceedings of MEDNET96

L.M. GUTIÉRREZ SOLER, M.A. ROYO ENCARNACION, L.CALORI, A.GUIDAZZOLI, Remote Sensing and 3D Navigation through the Iberic Archeological Landscape of the Guadalquivir Region (Spain), EAA96 proceedings

(M.Forte, A.Guidazzoli, L.Calori), *3D Virtual scientific visualization of archaeological sites: new navigation metaphores*, in "Scienza e Supercalcolo", luglio 1996, Bologna, pp.9-12.

(M.Forte, A.Guidazzoli, L.Calori, F.Fraticelli, S.Simani), *Shape from motion project: 3d modelling by analogic video input data for the reconstruction of archaeological sites*, in "Scienza e Supercalcolo", luglio 1996, Bologna, pp.13-19

L. CALORI, A. GUIDAZZOLI, F. PERSIANI, L. PIANCASTELLI,. Some considerations on systems of visualization for a virtual flight simulator. *Pixel: Computer Graphics, CAD/CAM, Image Processing*, 17(10), 1997, 5-12

M.E. Bonfigli, L. Calori, A. Guidazzoli, M.A. Mauri & M. Melotti; "Tailored virtual tours in Cultural Heritage worlds", ACM SIGGRAPH2000, New Orleans, July 2000.

M.E. Bonfigli, L.Calori & A. Guidazzoli, "Nu.M.E.: a WWW Virtual Historic Museum of the City of Bologna", *Proceedings of SAC 2000 - ACM Symposium on Applied Computing* (J. Carroll, E. Damiani, H.Haddad,D.Oppenheim Eds.) Villa Olmo, Como, Italy, March 2000, Vol. 2, pp. 956-961.

Arturo Ruiz Rodriguez, Manolo Molino Molino , L.M.GUTIÉRREZ SOLER, M.A. ROYO,ENCARNACION, L. CALORI, A. Guidazzoli, "Travel to the time of the Iberians", in *Virtual Reality in Archaeology*, J.A. Barcelo, M.Forte, D. Sanders (eds.), ArchoPress,May 2000.

Hermon, S., Calori, L. Adding the third dimension in the visualization of spatial distribution of archaeological data – some scientific implications *Proceedings of the CAA conference in Dublin*. British Archaeological Reports, Oxford.

Hermon, S. Petrone, M. Calori, L. Attribute analysis of flint artifacts using image-processing tools, experimental implications *Proceedings of the CAA conference in Lublyana* British Archaeological Reports, Oxford.

C.Gheller, F.Buonomo, L.Calori, U.Becciani, AstroMD and Cosmo.Lab: Visualizing Astrophysical Data, in *4th Joint Eurographics-IEEE TCVG Symposium on Visualization*, 2002

Benini L., Bonfigli M. E., Calori L., Farella E., and Ricco B., 2002. Palmtop Computers for Managing Interaction with Immersive Virtual Heritage, *Proceedings of the EUROMEDIA2002*, pp. 183--189

C.Gheller, U.Becciani, D.Ferro, M.Melotti, L.Calori, The Cosmo.Lab project: developing AstroMD, an object oriented, open source visualization and pre-analysis tool for astrophysical data, in *Astronomical Data Analysis Software and Systems (ADASS) 13-16 October 2002 Baltimore*

A Multi Dimensional Visualization and Analysis Toolkit for Astrophysics
D.Ferro, U.Becciani, V.Antonuccio-Delogu, A.Germanà, C.Gheller, L.Calori, M.Melotti, in *Astronomical Data Analysis Software and Systems (ADASS) 13-16 October 2002 Baltimore*

Pescarin S., Forte M., Pietroni E., Rufa C., Calori L., Desktop Virtual Reality Systems between site and landscape, in *Proceedings of 'Heritage Management Historic Cities'*, Mexico City, 6-9 Nov.2002

CALORI PESCARIN MORGOTTI, 2004: Calori L., Pescarin S., Morgotti M., 3d Terrain Models On The Web. The case of Delta del Po project, in Calori Hermon Niccolucci Pescarin: "Open-Source and Freeware Applications to the Archaeological Research"

CALORI L, DIAMANTI T., FELICORI M., GUIDAZZOLI A., LIGUORI M.C., PESCARIN S., VALENTINI L., Databases and Virtual Environments: a Good Match for Communicating Complex Cultural Sites, in *Proceedings of 2004 SIGGRAPH Educators' Program*

Stanganelli, I., Brucale, A., Calori, L., Gori, R., Lovato, A., Magi, S., Kopf, B., Bacchilega, R., Rapisarda, V., Testori, A., Ascierio, P.A., Simeone, E., and Ferri, M., "Computer-Aided diagnosis of melanocytic lesions", *Anticancer Research*, 25(6C), pp. 4577–4582, 2005.

Calori, Forte, Pescarin, Real-time interactive reconstruction of archaeological landscapes: an OpenSource approach: from GIS to Virtual Reality, in the series of Volumes of The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences from ISPRS Congress "3D Digital Imaging and Modeling: Applications of Heritage, Industry, Medicine and Land" (Padova 17-18 May 2005),

Calori L., Camporesi C., Forte M., Guidazzoli A., Pescarin S., OpenHeritage: Integrated approach to web 3d publication of virtual landscapes, in Proceedings of ISPRS Workshop 3D-ARCH'2005: "3D Virtual Reconstruction and Visualization of Complex Architectures", Aug.05, Mestre-Venice (IT)

L. Calori, C. Camporesi, A. Negri, S. Pescarin, Virtual Rome, Poster at Siggraph 2008, 11-15 Aug. 2008, Los Angeles

Pescarin S., Calori L., Forte M., Virtual Rome project: a web-based VR application on the archaeological landscape of Rome, in Proceedings of the 1st International Workshop on "Advances in Remote Sensing for Archaeology and Cultural Heritage Management", Rome 30 September - 4 October, 2008

S.Pescarin, L. Calori, C. Camporesi, M. Di Iorio, M. Forte, F. Galeazzi, S. Imboden A. Moro, A.Palombini, V.Vassallo, L.Vico, Back to II AD. A VR on-line experience with Virtual Rome Project, in The 9th International Symposium on Virtual Reality, Archaeology and Cultural Heritage VAST (2008), M. Ashley, S. Hermon, A. Proenca, and K. Rodriguez-Echavarría (Editors)

L.Calori, C.Camporesi, S.Pescarin, Virtual Rome: a FOSS approach to WEB3D, Proceedings of the 14th International Conference on 3D Web Technology Darmstadt, Germany June 16 - 17, 2009
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