Oscar Garcia Pañella, Ph. D.

Audiovisual (Media) Technologies Department
C/Quatre Camins 2, 08022 – Barcelona, Spain

Phone: 34.93.290.24.42
Email: oscarg@salle.url.edu
Web: http://www.salle.url.edu/~oscarg/
Born: August 4, 1973 (Spain)

General Research Keywords

Multimedia, Computer Graphics, Virtual Reality, Physical Simulation, Usability and HCI, Interactive Paradigms.

Education

La Salle School of Engineering – Ramon Llull University.
Ph. D., Computer Science, April 2004.
Ph. D. Advisor: Antoni Susin Sanchez (Universitat Politècnica de Catalunya (UPC)).
Barcelona, Spain.

La Salle School of Engineering – Ramon Llull University.
1996-1998 S.M. Electrical Engineering and Computer Sciences.
Barcelona, Spain.

La Salle School of Engineering – Ramon Llull University.
1991-1994 Bachelor of Electric Engineering and Computer Sciences.
Barcelona, Spain.

Experience & Professional Services

1993-1997: Formation Engineer at NexTReT (www.nextret.net/).
1997-1998: Professor at Ramon Llull University. Teaching Linear Algebra and Techniques of Representation.
1998-1999: Professor at Ramon Llull University. Teaching Computer Graphics.
1999-2000: Professor at Ramon Llull University. Teaching Computer Graphics.
2000-2001: Professor at Ramon Llull University. Teaching Computer Graphics & Virtual Reality.
2001-2004: Professor at Ramon Llull University. Teaching Computer Graphics & Algebra. Multimedia Studies Academic Coordinator.
2004-2006: Professor at Ramon Llull University. Teaching Computer Graphics, Algebra & Virtual Reality. Multimedia Project Manager. Multimedia Studies Academic Coordinator.
2006-2008: Professor at Ramon Llull University. Teaching Computer Graphics, Algebra & Virtual Reality. Multimedia Project Manager. Multimedia Studies Academic Coordinator (*Bachelor in Multimedia Engineering besides the Multimedia Creation & Design Master Program*).

Project manager, of several multimedia related projects. *Please feel free to ask for a detailed description document*.

Supervisor, of final projects, for undergraduate and graduate students (more than 70 projects). *Please feel free to ask for a detailed description document*.

Languages

Bilingual Spanish-Catalan.

Fluent both written and spoken English (*TOEFL certificate for the English language rated 104 out of 120*).

Stages

Integrated Media Systems Center (IMSC), University of Southern California (USC), Los Angeles, California.
01/1997-06/1998.
Pre-doctoral position on physical simulation and automated animation within VR frameworks. Advisor: Dr. Ulrich Neumann.

Vis Lab, University of California at Irvine (UCI), Irvine, California.
June 2005.
Co-PI working on automatic creation of virtualized environments. Advisor: Dr. Falko Kuester.

Grants

Epson's Rosina Ribalta first prize for the best pre-doctoral project, 1999.

Researcher in "Using VR and deformable models for the simulation and diagnosis of cardiac malfunctions". Spanish grant (TIC2000-1009). From 01/11/2000 to 01/11/2003.
PI: Alvaro Vinacua Pla.

Researcher in "Advanced interfaces intended for transparent interaction with highly complex models in VR environments". Spanish grant (TIN2004-08065-C02-01). From 01/11/2000 to 01/11/2003. From 01/11/2004 to 01/11/2007.
PI: Maria Isabel Navazo Alvaro.

Co-PI in "Automatic Creation of Virtualized Environments". Research supported by the California-Catalonia Program for Engineering Innovation. From 15/9/2004 to 15/9/2005.
PI: Falko Kuester.

PI in "Virtual Simulation of the Celestial Dome at Night". Spanish PROFIT Grant with Digital Legends Entertainment (Videogame Company). From 15/9/2004 to 30/3/2005.

PI in "A Virtual Environment for the Simulation of Metal Welding Techniques". Spanish PROFIT Grant. From 01/1/2004 to 01/03/2005.

Co-PI in "A Clever Evaluator for the Virtual Welding Simulator". Spanish PROFIT Grant. From 01/1/2005 to 01/03/2006.
PI: Ester Bernadó.

Selected Papers, Publications & Talks

O. García, A. Susín. Left Ventricle Volume Estimation from 3D SPECT Reconstruction. Proc. The 29th IEEE Annual Conference of Computers in Cardiology. Memphis, Tennessee. Volume 29, 621-624, 2002. ISSN. 0-7803-7735-4.

O. García, A. Susín. Surface and Volume Reconstruction of the Left Ventricle from SPECT data. SIACG 2002, 1st Ibero-American Symposium in Computer Graphics, Guimarães, Portugal.

O. García, A. Susín. MLC filtering applied to the 3D reconstruction of the left ventricle. Proc. CEIG2003, La Coruña. 17-30, 2003. ISSN. 84-9749-072-X.

O. García, A. Susín. Vertical Coherence Applied to Spect Imagery in the 3D Reconstruction of the Left Ventricle. Proc. The 30th IEEE Annual Conference of Computers in Cardiology, Thessaloniki, Greece. Volume 30, 753-756, 2003. ISSN. 0-7803-8170-X.

O. García. An Easy-to-code Smoothing Algorithm for 3D reconstructed surfaces. Graphics Programming Methods, Charles River Media, San Diego, CA, USA, 139-146, 2003. ISSN. 1-58450-299-1.

Antoni Cabello Miguel, Oscar Fernandez Barracel and Oscar García Pañella. iGlue.v3: An Electronics Metaphor for Multimedia Technologies Integration. ACM Multimedia 2004 (Interactive Art Program). New York, 10-16/10/2004.

Andres Fernandez, Maria Cruz Villa, Oscar García, Falko Kuester. Avatar-centric Risk Evaluation. IEEE International Symposium on Multimedia, Irvine, CA, USA, 12-14/12/2005.

P. Jeremias, O. Chavarria, O. Garcia, X. Carrillo & A. Cuñado. Solving Local Reflections: a Direct Methodology. Eurographics, Vienna, Austria, 2006.

D. Fonseca, A. Fernandez & O. Garcia. Commendable Behavior of Virtual Agents. 6ta Conferencia Iberoamericana en Sistemas, Cibernética e Informática CISCI 2007. Orlando, Florida, USA, 12-15-7-2007.

David Fonseca, Andrés Fernandez and Oscar Garcia. Photographic image categorization according to the quality and the emotions. Communicating for Social Impact, The 58th Annual Conference of the International Communication Association. Montreal, Quebec, Canada, May 22-26, 2008.

Oscar Garcia. Usability & interactive TV Lo schermo globale: presente e futuro della televisione. Lo schermo Globale: presente e futuro della televisione, Triennale di Milano, 02 Aprile - 03 Aprile 08.

PhD Advising

Juan Andres Fernandez Munuera. ”VR and Physical Simulation applied to Interactive Cuts in Telemedicine”. Ramon Llull University. Expected January 2011.

David Fonseca Escudero. ”Studying and Classifying Photographs and Images attending to their Emotional Usability”. Ramon Llull University. Expected July 2010.

Patents

Juan Pérez, Oscar García, Maria Alsina, Ester Bernadó, Guillermo González, José Cuetos & Jesús Serrano. “A device for the simulation of welding processes”. June 2006. In preparation (code P200601752).

Equipment

Stereoscopic HMD’s (VFX3D, Cybermind, I-Glasses, 5DT, etc.).

Datagloves (Cybergloves 5DT).

6DOF Magnetic Sensors (Polhemus Fastrak and Ascension MiniBird).

Magnetic Motion Capture System (Ascension Flock of Birds).

Optical Motion Capture (24 camera VICON).

October, 2008.