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General Information

Birth September 26th 1980, Lyon, France (27 years old)

Nationality French

Languages French (native), English. Notions of Spanish and Japanese.

Research Interests

My research interests include the wide area of computer vision in general. I am more specifically attracted by visual tracking issues and its use in new types of Computer-Human interaction such as Augmented Reality.

Keywords: visual object tracking, augmented reality, model-based 3D tracking

Education

October 2003 - December 2007 IRIT (Computer Science Research Institute of Toulouse) INPT (National Polytechnic Institute of Toulouse)	Ph.D. candidate in Computer Vision Thesis: Real-time 3D object tracking based point-based models. Supervisor: Pr. Alain Ayache
September 2003 - June 2003 University of Toulouse III, France	DEA (Master's Degree) in Image Analysis, Image Synthesis and Hypermedia. Master Thesis subject: 3D object pose tracking using a Kalman filtering method.
September 2000 – June 2003 ENSEEIHT (Grande École) Toulouse, FRANCE.	French Engineering degree in Computer Science and Mathematics.

Academic positions

September 2003 – August 2007	Research Associate and Ph.D. student at engineering school ENSSEIHT
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Teaching, Advising and Development

Teaching at ENSSEIHT

2007	Practice Labs session in Algorithmics and C Programmation
2004 - 2007	Lectures and Practice Labs sessions in Computer Graphics / OpenGL
2007	Lectures in Data Analysis
2003	Lectures in Computer Vision

Other experience

2004 - 2006	Proposed and advised 4 one month projects (groups of 4 to 5 students) with realisations in the following themes: 2D body tracking, 3D model-based tracking and point-based rendering.
2004 - 2005	Collaboration with choreographer Jean-Marc Matos for the evaluation of body motion tracking in choreographic work.
Spring to Fall 2005	With Dr. Ariel Choukhroun, design and implementation of the prototype of a real-time face tracking application which lead to the creation of the FittingBox startup (http://www.fittingbox.com/).
Fall 2003	At startup AlterEgo Infoservice (Toulouse, France), design and implementation of a fast segmentation algorithm for the visualization of complex cartographic data.

Technical skills

I have a good mathematical background in **numerical methods for optimization problems** and **data analysis and synthesis**.

I am proficient in **C**, **Java** and **Python** programming languages. I can program with **OpenGL** (fixed pipeline and shaders) for graphical or GPGPU applications. I have a good knowledge of the **Gtk+ toolkit** for GUI programming.

I have abilities with web technologies both on the client-side (HTML, CSS, Javascript) and the server-side (PHP, JSP and servlets). I support and contribute to Open Source Software.

List of Publications

International Conferences

EUROMEDIA 07	Dehais, C.; Charvillat, V. & Conter J. <i>Interactive Augmentation of Photographs Depicting Prehistoric Engravings.</i> Euromedia 07, Delft, Netherlands, April 2007.
VMV06	Dehais, C.; Charvillat, V. & Morin, G. <i>3D Visual Tracking Using a Point-based Model.</i> Vision, Modeling and Visualization, Aachen, Germany, November 2006.
IACPR 06	Vandeportaele, B.; Dehais, C.; Cattoën, M. & Marthon, P <i>Orient-Cam, a camera that knows its orientation and some applications.</i> Ibero-American Congress on Pattern Recognition, Cancun, Mexico, November 2006
ICPR 04	Dehais, C.; Douze, M.; Charvillat, V. & Morin, G. <i>Augmented Reality through real-time tracking of video sequences using a panoramic view.</i> Int. Conf. on Pattern Recognition, Cambridge, UK, August 2004.

Other communications (in French)

VisioMiP 2007	Dehais, C. Suivi 3D à partir d'un modèle basé points. Regional workshop for developping business / academics relationships.
CORESA 2006	Dehais, C.; Charvillat, V. & Morin, G. Suivi 3D à partir d'un modèle basé points. COmpression et REprésentation des Signaux Audiovisuels, Caen, France, November 2006.

References available upon request.