

Matei MANCAS

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Research Engineer, PhD Student

Education :

- Matei MANCAS holds an Audiovisual Systems and Networks Engineering degree (Ir.) from ESIGETEL (France) and an Information Processing MS degree (DEA SETI) from the Université d'Orsay Paris Sud (France) since 2002.
- He is now a PhD student at the TCTS Lab of the Faculté Polytechnique de Mons (Belgium) since March 2003.

Research :

- Matei's research interests concern signal and, in particular, image processing. After a study on nonstationary shock signals in industrial tests at MBDA (EADS group), he focuses now on combining high level processing methods based on the Human Visual System (HVS) with low-level processing techniques.
- He has a high interest in image perception and medical image processing. For instance, his research is focused on tumor detection and segmentation on CT-Scan images.
- Matei is a member of the Image Processing Group and Biomedical Group of the TCTS Lab.

Publications :

- March 2005: Matei MANCAS, Bernard GOSSELIN, Benoît MACQ, 2005, "Fast and Automatic Tumoral Area Localisation Using Symmetry", Proc. of the IEEE ICASSP Conference, Philadelphia (Pennsylvania, USA).
- January 2005: Matei MANCAS, Bernard GOSSELIN, Benoît MACQ, 2005, "Segmentation Using a Region Growing Thresholding", Proc. of SPIE/IS&T, San Jose (California, USA).
- October 2004: Matei MANCAS, Bernard GOSSELIN and Benoît MACQ, "Automatic Fast Detection of Tumor suspect areas on CT Scan" , Proc. of the IEEE VIS 2004, Austin (Texas, USA).
- September 2004: Matei MANCAS, Benard GOSSELIN and Benoît MACQ, "Risk Areas Segmentation for Radiotherapy Planning using Distance Maps", Posters at SPIE Optical Imaging held at the National Institute of Health, Washington DC (Maryland, USA).
- February 2004: Matei MANCAS and Bernard GOSSELIN, "Towards an automatic tumor segmentation using iterative watersheds", Proceedings of the Medical Imaging Conference of the International Society for Optical Imaging (SPIE Medical Imaging 2004), San Diego (California, USA).
- October 2003: Matei MANCAS and Bernard GOSSELIN, "Iterative watersheds and fuzzy tumor visualization" in the Proceedings of the IEEE Visualization Conference (IEEE VIS 2003), Seattle (Washington, USA).
- June 2003: Matei MANCAS and Gilbert LE FLOC'H, "Missiles : influence des dérives dans les mesures de chocs mécaniques" in "Essais Industriels" magazine Nr. 25. Essais Industriels mainly deals with tests in technical environment and it is published by A.S.T.E. association.

Preferred project :

1. A Multimodal (Gesture+Speech) Interface for 3D Model Search and Retrieval Integrated in a Virtual Assembly Application (no 7)
2. Combined Gesture-Speech Analysis and Synthesis (no 1)
3. Multimodal Caricatural Mirror (no 2)

Skills :

Mostly image processing. I am interested in gesture recognition and descriptor extraction. Moreover, I have some experience in VTK libraries (3D objects visualization) and FLTK (Cross-platform Interface) as I made a medical images test viewer.

I have a laptop.