

Department of Computer Science
University of Houston
Fall 2010 Seminar

WHEN: FRIDAY, SEPTEMBER 17, 2010
TIME: 10:00 AM
WHERE: PGH 232

SPEAKER: Dr Alejandro Frangi
Center for Computational Imaging and Simulation Technologies in Biomedicine
Universitat Pompeu Fabra

TITLE: @neurIST: Integrated Biomedical Information Management of Cerebral Aneurysms

Abstract

This talk will provide an overview of the @neurIST European Integrated Project as an exemplar of the Virtual Physiological Human strategy to improve healthcare of complex diseases. We will illustrate how the combination of advances in medical imaging, computational imaging, computational physiology and biomedical information management can contribute to the improvement of disease understanding, development of advanced diagnostic biomarkers, and contribute to interventional planning of minimally invasive procedures. The presentation will contribute to clarify the importance of the integration of computational imaging methods with other converging technologies as well as the interplay between the fundamental clinical questions and the possibilities opened by new IT tools and systems.

More information

www.aneurist.org
www.cilab.upf.edu

Bio sketch

Alejandro Frangi obtained his undergraduate degree in Telecommunications Engineering from the Technical University of Catalonia (Barcelona) in 1996. In 1997 he obtained a grant from the Dutch Ministry of Economic Affairs to pursue his PhD at the Image Sciences Institute (www.isi.uu.nl) of the University Medical Center Utrecht on model-based cardiovascular image analysis. During this period he was visiting researcher at the Imperial College in London, UK, and in Philips Medical Systems BV, The Netherlands.

Dr. Frangi is Associate Professor at Universitat Pompeu Fabra (UPF) and ICREA-Academia Researcher (www.icrea.cat). He currently leads the Center for Computational Imaging & Simulation Technologies in Biomedicine (www.cilab.upf.edu) at the UPF composed of 60 members. His main research interests are in medical image computing, medical imaging and image-based computational physiology. Dr. Frangi has been principal investigator or scientific coordinator of over 20 national and European projects, both funded by public and private bodies. Dr. Frangi has edited a book, published 3 editorial articles and over 65 journal papers in key international journals of his research field and more than 100 book chapters and international conference papers. He has been two times Guest Editor of special issues of IEEE Trans on Medical Imaging and one of Medical Image Analysis journal. He was chair of the 3rd International Conference on Functional Imaging and Modelling of the Heart (FIMH05) held in Barcelona in June 2005 (www.cilab.upf.edu/fimh), Publications Chair of the IEEE International Symposium in Biomedical Imaging (ISBI 2006), Programme Committee Member of various editions of the Intl. Conf. on Medical Image Computing and Computer Assisted Interventions (MICCAI) (Brisbane, AU, 2007; Beijing CH, 2010), International Liaison of ISBI 2009, and Tutorials Co-Chair of MICCAI 2010. Together with Andres Santos (UPM) he will be in charge of organizing ISBI 2012 in Barcelona. He is Senior Member of IEEE and Associate Editor of *IEEE Trans on Medical Imaging*, *Medical Image Analysis*, the *Int'l Journal for Computational Vision and Biomechanics*, *Current Medical Imaging Reviews* and *Recent Patents in Biomedical Engineering* journals. Dr. Frangi is foreign member of the Review College of the Engineering and Physical Sciences Research Council (EPSRC) in UK, is a recipient of the IEEE Engineering in Medicine and Biology Early Career Award in 2006, the Prizes for Knowledge Transfer (2008) in the Information and Communication Technologies domain and of Teaching Excellence (2008 and 2010) by the Social Council of the Universitat Pompeu Fabra. Finally, he has recently been awarded one of the 40 ICREA-Academia Prizes by the Institució Catalana de Recerca i Estudis Avançats (ICREA) in 2009.