

WORKSHOP

“ASSISTIVE TECHNOLOGIES AND NEURO-REHABILITATION”

SALÓN DE GRADOS DEL INSTITUTO DE BIOINGENIERÍA
FEBRUARY 18, 2015



FREE ATTENDANCE
LIMITED SEATED



Program

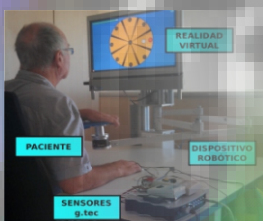
- 11:00–11:15 Nicolas Garcia Aracil (AIDE project)
- 11:15–11:20 Q&A
- 11:20–11:35 Suzanne Martin (Cedar Foundation)
- 11:35–11:40 Q&A
- 11:40–11:55 Florian Dennerlein (Fraunhofer Institute)
- 11:55–12:00 Q&A
- 12:00–12:40 Coffe Break
- 12:40–12:55 Mariano Alcañiz (Labhuman- UPV)
- 12:55–13:00 Q&A
- 13:00–13:15 Surjo R. Soekadar (U. Tübingen)
- 13:15–13:20 Q&A
- 13:20–13:35 Teofilo Redondo (ZED)
- 13:35–13:40 Q&A
- 13:40–14:00 María Peña (B&J Adaptaciones)
- 14:00–14:05 Q&A

Organizers:

Chair: Nicolas Garcia Aracil
Co-Chair: José María Sabater
Co-Chair: Eduardo Fernández Jover

Local committee:

Francisco J. Badesa Clemente
Ricardo Morales Vidal
Luis Daniel Lledó Pérez
Jorge A. Díez Pomares
Arturo Bertomeu Motos
Álvaro García Martínez
Carlos G. Juan Poveda
Santiago Ezquerro García



Lecturers



Dr. Nicolas M. Garcia-Aracil (M) is Associate Professor of Control and Systems

Engineering at Miguel Hernandez University (Spain) and head of the Virtual Reality and Robotics Lab. He holds a M.Sc. in Control Engineering by the University of Murcia (1996, Spain), Master in Design, Robotics and Industrial Automation from University of Murcia (Spain) 1996-1997 and a PhD in Control Engineering by the

Miguel Hernandez University of Elche (Spain). He has been appointed as Visiting Scientist at INRIA (Institut National de Recherche en Informatique et en Automatique), Sophia Antipolis, FRANCE), in 2003 and at Institute of Robotics and Mechatronics, DLR, Oberpfaffenhofen-Wessling, Germany, in 2006. His current research interests are medical and surgical robotics, rehabilitation robotics, medical image, computer vision, human-robot Interaction and design and control of new

robotic devices. Dr. Nicolas Garcia was a 2004 recipient of the Best Thesis in Robotics , National Research Prize, from the Spanish Federation of Automatic control. He is author or co-author of a broad range of research publications. He was the Program Chair of the 2012 IEEE RAS\EMBS International Conference on Biomedical Robotics and Biomechanics (BIOROB, Roma, Italy) and the General Chair of EURON Winter School on Rehabilitation Robotics (Elche, Spain).



Dr. Suzanne Martin (F) is an Occupational Therapist with a PhD in computing and Mathematics. Suzanne has an academic contract with the University of Ulster and within this an honorary contract with CF for last 10 years. Suzanne works

with CF on a range of research projects exploring the development and integration of emerging technologies within community based services for people with physical disability. Her research expertise is on user centric participation/design in research, qualitative research methods

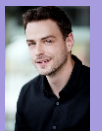
supporting e-inclusion and participation in society. Suzanne is a member of the Office Research Ethics Northern Ireland (ORECNI) and Chair of the Research and Development Board for the College of Occupational Therapists United Kingdom.



Prof. Mariano Alcañiz Raya (M) is Full Professor with the Graphic Engineering Department at UPV and LabHuman Institute director. Dr. Alcañiz has over 100 publications in the area of computer mediated human activity and

patents on augmented reality and biomedical devices. He has been coordinator of various European projects and national research projects related to the area. He is also coordinator of several national R&D programs of excellence. He is the National Program Coordinator of the

Information Society Technology (IST) of the Ministry of Science and Innovation of Spain and he is the Spanish representative for ICT area at the Horizon 2020 European Research program Committee. He has been founder of several spin-off companies related with his research field.



Dipl.-Inform. Florian Dennerlein (M), Fraunhofer IPA, Department Biomechatronic Systems of several spin-off companies related with his research field. He is the author of the following publications: Rosenberg, Harald von; Dennerlein, Florian. EMG based input and control system for lower limb prostheses.

Hipp, Jasmin; Starker, Felix; Dennerlein, Florian; Schneider, Urs. Natural prosthetic gait with a 6-DOF articulated robot. Starker, Felix; Blab, Florian; Dennerlein, Florian; Schneider, Urs. A novel method for sports shoe testing based on a modified prosthetic foot test machine. Dennerlein, Florian; Rosenberg, Harald von. Input and control system for lower limb prostheses

based on EMG and movement sensors. Starker, Felix; Blab, Florian; Dennerlein, Florian; Schneider, Urs. A method for sports shoe machinery endurance testing. Modification of ISO 22675 prosthetic foot test machine for heel-to-toe running movement.

Lecturers



Dr. med. Surjo R. Soekadar (M) is a senior research scientist at the Institute of Medical Psychology and Behavioral Neurobiology, and resident physician at the University Hospital of Tübingen. From 2008–2011, he worked as a research fellow at the Human Cortical

Physiology and Stroke Neurorehabilitation Section (HCPS) at the NIH, USA. His research interests include cortical plasticity in the context of brain-machine interface (BMI) applications, non-invasive brain stimulation and neural mechanisms of learning and memory. Surjo Soekadar is member of board of

several NGOs dealing with improving health care in developing countries. He received various prizes such as the NIH-DFG Research Career Transition Award (2008) and the NIH Fellows' Award for Research Excellence (2011), and the international BCI Research Award 2012.



Teófilo Redondo (M) is Portfolio Coordinator of Zed. He holds BArts -1985, MArts - 1986; Universidad Complutense de Madrid – UCM. Teófilo Redondo was before Technology Architect & Director of Innovation Projects at Universidad Internacional de La Rioja (UNIR).

Previously he developed a career at IBM covering several areas like Cloud Computing and Big Data Architectures, Enterprise Solutions Architect (SAP, Oracle Solutions, Dassault Systemes), and as SOA Architect. He started in the Research Division of IBM with several projects on Machine Translation, during which he produced a number of articles on this

subject. He was Visiting Scholar at Stanford University (1987). He currently holds an Associate Professorship at UNIR teaching about eLearning in Social Networks as well as Natural Language Processing techniques. He is affiliated with SEPLN (Sociedad Española para el Procesamiento del Lenguaje Natural) since almost the beginning.



María P. Rodriguez (F), Innovation manager of BJ Adaptaciones, PhD in

electronics engineering, BSc in Physics. Coordinates innovation projects at BJ since 2009.

