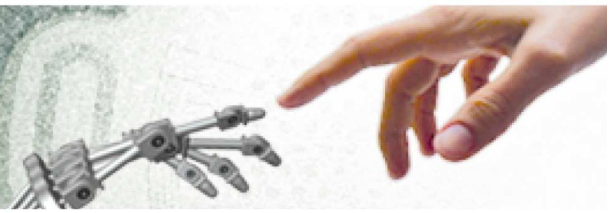


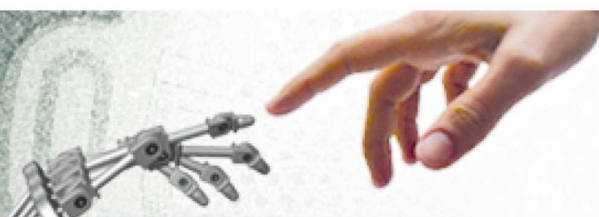
TAR CONFERENCE



TAR 2017 - Technically Assisted Rehabilitation - Programme March 09, 2017

09:00	09:30	Registration (foyer)			
09:30	10:00	Opening TAR 2015: Krüger (Fraunhofer IPK) and Kraft (TU Berlin), Organising Committee (lecture hall)			
10:00	10:55	Session 1: MMA I (Movement/Gait: Monitoring & Assessment 1) (lecture hall)			
Chair: Kraft	Pusch	Standing in Balance on 3D L.A.S.A.R. Posture	Otto Bock Healthcare Duderstadt	Germany	
	Valtin	Modular Finger and Hand Motion Capturing System based on Inertial and Magnetic Sensors	Technische Universität Berlin	Germany	
	Wang	Novel Measure for Gait Quality Monitoring	Universität Bremen	Germany	
10:55	11:30	Coffee Break (foyer)			
11:30	12:40	Session 2: Functional Electrical Stimulation (FES) (lecture hall)			
Chair: Hoffmann	Klauer	FES-based arm weight relief: First investigations in stroke patients	Technische Universität Berlin	Germany	
	Kutlu	Functional electrical stimulation for home-based upper-limb stroke rehabilitation	University of Southampton	United Kingdom	
	Ruppel	Towards a High Motor-Precision Neuroprosthesis by Recruitment-Controlled Antagonistic Muscle Co-activation Strategies	Technische Universität Berlin	Germany	
	Passon	Compensating the effects of FES-Induced Muscle Fatigue by Rehabilitation Robotics During Arm Weight Support	Technische Universität Berlin	Germany	
12:40	13:10	Key Note: Catherine Disselhorst-Klug - "Insights into the Generation and Control of Movement" (lecture hall)			
13:10	14:10	Lunch Break (testing field)			
14:10	15:20	Session 3: Orthotics (lecture hall)			
Chair: Blumentritt	Millard	Predicting human lifting motions using optimal control	Heidelberg University	Germany	
	Schmalz	Conventional and Microprocessor-Controlled KAFOs: Comparative Evaluation of Functionality Based on Biomechanical, Metabolic and Safety Parameters	Otto Bock Healthcare Göttingen	Germany	
	Hochmann	Method for Instrumentation of Orthotic Joints for Measurement of Internal Joint Loads	University of Applied Science Münster	Germany	
	Stumper	Adaptive ankle control – Properties of an innovative system for foot stabilisation	Betterguards Technology GmbH Berlin	Germany	
15:20	16:20	Coffee Break (foyer)			
16:20	17:45	Session 4: Virtual and Tele-Rehabilitation (lecture hall)			
Chair: Disselhorst-Klug	Hassan	Evaluation of consumer grade Time of Flight cameras for marker-less motion capture	University of Applied Science Weingarten	Germany	
	Brunner	Upper limb virtual reality training provides increased activity compared with conventional training for severely affected patients in the subacute phase after stroke	University of Bergen	Norway	
	Lutz	Application of head-mounted devices with eye-tracking in virtual reality therapy	Technische Universität Berlin	Germany	
	Puchinger	A Test Rig for Investigating Manual Wheelchair Propulsion Devices	Technische Universität Wien	Austria	
	Ivanova	User-Centered Design of a Patient's Work Station for Haptic Robot-based Telerehabilitation after Stroke	Technische Universität Berlin	Germany	
18:00	19:00	DGBMT Fachausschuss-Sitzungen: "Rehabilitationstechnik" und "Implantierbare Assistenzsysteme" (Room 457)			
19:30	22:30	Conference Dinner - Arminiusmarkthalle			

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09:00	10:10	Session 5: MMA II (Movement/Gait: Monitoring & Assessment 2) (lecture hall)			
Chair: Dohle	Fonseca	Assessment of the upper extremity movement of patients with Obstetric Brachial Plexus Palsy	RWTH Aachen University	Germany	
	Noll	A Physically-Motivated Model Describing the Dynamic Interactions between Residual Limb and Socket in Lower Limb Prostheses	Technische Universität Darmstadt	Germany	
	Kuschan	Analysis of ergonomic and unergonomic human lifting behaviors by using Inertial Measurement Units	Fraunhofer IPK	Germany	
	Matjacic	Comparison of dynamic balancing responses following outward lateral perturbations during walking of healthy and post-stroke subjects	University Rehabilitation Institute Ljubljana	Slovenia	
10:10	10:40	Coffee Break (foyer)			
10:40	11:15	Key Note: Oliver Brock - "Principles of Human Grasping and Their Application to Robots (and Prostheses)" (lecture hall)			
11:15	11:30	Poster- and Workshop-Advertisements (lecture hall) - see below for titles			
11:30	12:00	Poster Presentation // Coffee Break (foyer)			
12:00	13:10	Session 6: Parallel Workshops			
Workshop: Inertial Sensors as a Tool for Rehabilitation (Seel, Laidig // Room 507)					
Workshop: User-centered Design in Medical Technology Development (Jankowski, Lorenz, Minge, Klausner // Room 407)					
13:10	14:10	Lunch Break (testing field)			
14:10	15:20	Session 7: Prosthetics (lecture hall)			
Chair: Hochmann	Wiesmann	Bending and torsional moments acting on prosthetic feet – a pilot study	University of Applied Science Münster	Germany	
	Flynn	CYBERLEGs Beta-Prosthesis: Testing and Cyathlon	Vrije Universiteit Brussel	Belgium	
	Westebbe	Development of a haptic system for the digitization of body parts	Technische Universität Berlin	Germany	
	Bellmann	The Biomechanical Need of the Proximal Rim in Transfemoral Prosthetic Sockets	Otto Bock Healthcare Duderstadt	Germany	
15:20	15:50	Coffee Break (foyer)			
15:50	17:00	Session 8: Rehabilitation Robotics and Training Systems (lecture hall)			
Chair: Sigmund	Focke Martinez	Adjustment of instantaneous reference walking speed during synchronized robot-based gait rehabilitation	University of Bremen	Germany	
	Klöckner	Automated use of individual rhythmic movement initiation in neurological rehabilitation	Ruhr-Universität Bochum	Germany	
	Morkisch	Modelling of therapeutic action during mirror therapy- A basis for technical solution	Median Klinik Berlin	Germany	
	Pust	Design of a pressure sensitive matrix for analyzing direct haptic patient-therapist interaction in motor rehabilitation after stroke	Technische Universität Berlin	Germany	
Closing of the conference					
11:15	12:00	Postersession			
Chair: Schauer	Töllner	Gait Simulator for Lower Limb Prosthesis: Shock Absorber for Modelling Soft Tissue Damping	Rehabtech Research Lab GmbH Berlin	Germany	
	Breusing	PDMS electrodes for recording and stimulation	Fraunhofer Institute for Biomedical Engineering Sulzbach	Germany	
	Schönijahn	User participation as an important potential in technology development Improving stroke rehabilitation systems with user acceptance and satisfaction surveys	Humboldt Universität zu Berlin	Germany	
	Schöllig	Quality assessment of prosthesis alignments – mobile gait analysis with additional EEG measurements to evaluate required attention for walking	Technische Universität Berlin	Germany	