Studierendentagung Lübeck 2018

BioMedTec Wissenschaftscampus

Scientific Program

Wednesday March 7, 2018

8:00			Registration
9:00			Welcome
			Pitch-Session 1
9:20	37	M. Ziauddin	Development of an Appropriate Temperature Profile for Brazing a 5-pole Feedthrough of Pacemakers
9:22	46	F. Eckardt	Requirements for Tapes for Sensor Attachment to the Human Skin
9:24	67	S. Schmees	Optimization of the Inspiratory and Expiratory Controller of an Innovative Anesthesia Device
9:26	85	F. Spieß	Detection of Patient Ventilator Asynchrony based on Surface Electromyography
9:28	05	H. Kettner	Critical evaluation of gaps within the cobas m 511 hematology analyzer parameter portfolio
9:30	57	M. Keßler	Directional Hearing in clinical everyday life with the ERKI system of the company Auritec
9:32	53	N. Manjunath Swamy	A model to estimate pressure within a syringe from the corresponding force applied on the piston
9:34	86	T. Kohlfaerber	Investigation of OCT phase fluctuations correlated with neuronal activity and measurements of mechanical and optical properties in rodent brain tissue
9:36	90	R. J. Hillgruber	Analysis of blood pressure data of children receiving general anesthesia to investigate the feasibility of creating age-specific reference values
9:38	03	S. Sharif	Development of an electromagnetic compatible SpO2-simulator for the use with pulse oximeters
9:40	06	M. Stender	Development of a Simulation Module for a Synchronized Multi-Robot System Using the Simulation Software KUKA.Sim Pro for Supporting Process Validation
9:42	29	I. Ryan	Robust evaluation of timing parameters in the gait cycle
9:44	32	M. Saathoff	Investigation of corona treatment to enhance adhesion of silicone on PUR-films
9:46	59	C. Borchert	Study of Antimicrobial Effects of the Fungal Toxin Candidalysin by Atomic Force Microscopy
9:48	76	B. O. Akinola	The Hemodynamic Response Function in Functional Magnetic Resonance Imaging: Variability Between Brain Regions and Differences Between Rats and Humans
9:50	81	J. Bouchagiar	Development and evaluation of a test and training environment for endovascular aortic procedures using rapid prototyping as part of NAV-EVAR project
9:52	92	N. Tadrisi Parsa	Comparison between Piezoelectric Actuator and Brushless Motor for Insulin Delivery
9:54	10	A. P. Cameron	Investigating *Nanoparticles' Permeability* using a Tumor-Microenvironment-on-a-Chip
9:56	17	D. Kleinewalter	Gain-Scheduled PI Controller Design for PEEP-Valve Control in an Anaesthesia Device
9:58	30	M. Bodrova	Cell Adhesion on Titanium Surfaces after Modification by Plasma Electrolytic Oxidation and Sol-gel Coating
10:00	52	U. Malik	Development of Subject Specific Musculoskeletal Model of the Lower Extremity after Total Knee Replacement
10:02	63	A. Medrea	Magnetic fields generated by planar coils with potential usage towards medical applications
10:04	77	D. Weller	Transferring a Deep Cityscape Synthesis Approach to the Medical Domain
10:06	22	P. Ahrari	Light-induced Permeabilization of Liposomes
10:08	56	A. Hutfilz	Fluorescence Lifetime Imaging Ophthalmoscopy of the Retinal Pigment Epithelium during Wound Healing after Selective Retina Treatment
10:10	69	S. Burhan	*Ex-vivo* Optical Imaging and Measurements of Intrinsic Optical Signals from Porcine Retina with Full-Field Swept-Source Optical Coherence Tomography
10:12	13	P. Enzian	Cellular localization of the epithelial cell adhesion molecule (EpCAM) in synchronized cell culture
10:14	43	F. Hilge	In-vivo examination of retinal vessel pulsation during light stimulation by phase-sensitive full-field swept-source optical coherence tomography
10:16	19	G. Bulz	Development of an Acoustophoresic Flow Cell for Processing Undiluted Whole Blood at High Flow Rates
10:18	51	M. L. Münst	A compact handheld OCT-System for homecare applications
10:20			Coffee Break and Poster-Sessions 1 and 2

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			Pitch-Session 2
10:50	70	T. Mukashev	Numerical Simulation of Acoustofluidic Flow Cells with Particles
10:52	84	E. Rybczyk	Investigations of Intracellular Transport of Photoimmunconjugates
10:54	15	M. Schmidt	Measurement setup to detect the threshold fluence/abrasion of reflective surfaces
10:56	45	P. Lamminger	Frequency doubling of near infrared sub-nanosecond pulses for two photon microscopy applications
10:58	60	C. Riesenberg	Setup and calibration of a commercial optical tweezers system
11:00	18	K. Rewerts	Detection and Removal of Artifacts in Ultra-widefield MHz OCT En Face Images of the Human Retina
11:02	24	A. Britten	Spectral Characteristics of KINEVO® 900 from ZEISS
11:04	64	K. Nadji	Interferometric detection of laser induced nano- and micro bubble dynamics in water and tissue
11:06	20	C. A. Carvajal Arrieta	Investigation of Influences on Measurement Accuracy of Glucose with a Faraday Modulated Polarimeter
11:08	50	C. Stehmar	Characterization of 3D Printed Scaffolds with Microscopic Optical Coherence Tomography (mOCT)
11:10	11	M. Göb	The Dynamics of Mutant Keratin 14 in Response to Thermal Stress in Human Keratinocytes
11:12	62	F. Mütel	Characterization of the interaction between a lipid monolayer and nebulized substances by using a film balance
11:14	25	A. Kruse	Development of an Immunoassay for the Detection of Tetrahydrocannabinol and Methamphetamine
11:16	31	A.-K. Steuer	Hypotonic swelling as a procedure of encapsulating fluorescence labelled superparamagnetic iron oxide nanoparticles into human red blood cells
11:18	04	D. Laule	Occlusion Estimation in 3D Point Clouds using Visual Data from Home Care Scenarios
11:20			Group Picture
11:30			Visiconsult Spotlight Presentation
11:45			Philips Spotlight Presentation
12:00			Student Circle
12:30			Lunch
			Pitch-Session 3
13:20	38	P. Merks	Automated landmark refinement in 3D ultrasound images of the aortic root
13:22	55	M. R. Sambale	Low-Rank Mask R-CNN
13:24	79	J. Wessel	Multiple Landmark Localization in medical CT Scans using Deep Neural Networks with Heatmap Regression
13:26	26	N. Hampe	Performance enhancement of dictionary-based electrical properties tomography
13:28	42	J. Sauer	Automated defect recognition on X-ray images of aluminium castings based on change detection algorithms
13:30	61	C. T. Schareck	Development of a graphic user interface and cross manufacturer adaptation of a program for determining the pulse wave velocity in the aorta from phase-contrast magnetic resonance images
13:32	82	P. Huß	Statistical Iterative Reconstruction Including Triple Coincidences for a Two-Layer Small Animal PET Scanner
13:34	33	K. H. Zantop	Influence of Affine Image Registration on the Calculation of Diffusion Properties with a Kurtosis Model in Diffusion Weighted Imaging
13:36	54	N. Ghanad Poor	Automated detection of vesicles in electron microscope images by using deep convolutional neural networks
13:38	71	M. Maus	A Convolutional Autoencoder for Motion Field Compression
13:40	91	N. Bouteldja	Deep 3D Encoder-Decoder Networks with Applications to Organ Segmentation
13:42	09	J. Sprenger	Automated Lesion Detection with Neural Networks using Preprocessed Images in Transfer Learning

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13:44	47	L. Bannoura	A Comparison Study on MPI Reconstruction Methods for Multidimensional Lissajous-based Data-Acquisition Schemes
13:46	16	D. Wulff	Sinogram modeling for patient motion detection in dental Cone Beam CT
13:48	66	M. Fleitmann	Classification of axial CT Images using Deep Learning for determining a Standard Coordinate System
13:50	28	S. Seeger	Towards PET-CT Imaging of Fish: Development of a Dedicated Holder and a Digital Phantom
13:52	12	A. Wiggers	Detection of Acoustic Alarms in Industrial Environment
13:54	68	V.-M. Gerant	Automated analysis of ear canal geometries
13:56	35	H. Siebert	Pulse detection in video sequences acquired with a thermographic camera using MIT's Eulerian Video Magnification
13:58	73	H. S. AbdelRhaman	Sampling and Interpolation of Sound Fields
14:00	48	L. Kleinhans	Evaluation of the Simple Open EtherCAT Master for the communication in a modular medical device
14:02	34	S. Schonebeck	Problem Solving Methods in Medical Quality Management
14:04	02	T. Aldag	On the Way to Realize a Zero Defect Production with a new Quality Gate Concept at the Electro Manufacturing Service Prettl Electronics Lübeck
14:06	75	S. Keser	ChessNet – Learning to play chess by seeing grand master games –
14:08	41	E. Vothknecht	Head-to-Steering-Wheel Distance Estimation Based on a Monocular RGB Camera with Convolutional Neuronal Networks
14:10	23	O. Godwin Amasiatu	Regulatory requirement for Point-of-Care Testing (PoCT) Devices - Comparison of major regulatory systems and implications for an international regulatory strategy for market access of PoCT devices
14:12	74	L. Preuße	Integration of a label printer into the software system of a cleaning and disinfection device for hygiene documentation
14:14	89	P. Nama	Preparation of a concept for the provision of effective medical equipment maintenance in the emergency health cluster region of Syria by Dräger
14:16	14	N. Blum	Validation of software Stryker Anatomy Analysis Tool
14:18	49	K. Hüvel	Evaluation of a calotte membrane as a part in the execution of system tests of a peritoneal dialysis machine
14:20			Dräger Spotlight Presentation
14:35			Euroimmun Spotlight Presentation
14:50			Coffee Break and Poster-Sessions 3 and 4
			Pitch-Session 4
15:20	88	S. Müller	General Client-Server Software Architecture for Medical Robotics (written in C++)
15:22	21	M. L. Wiegel	Work instruction for replacement deliveries in case of commercial DEFective On Arrival
15:24	36	D. Zahnow	Improvement of the recall process at Olympus Winter & Ibe GmbH
15:26	78	N. Razavirad	Development of a verification process for software of medical devices
15:28	08	N. A. Deppenwiese	Connecting MOLGENIS to HL7 FHIR: Transformation from Questionnaires to EMX
15:30	40	C. Drenkhahn	Mapping of Laboratory Services included in an Internal Catalog to SNOMED CT using the UMLS
15:32	65	P. Prieß	A Testbed Design Approach for Teleoperative Medical Treatment
15:34	80	M. Ortac	Development of an Android Application to Monitor the Core Body Temperature
15:36	39	A.-K. Vandereike	Interaction Paradigms of a Ball-Shaped Input Device for Intensive Care Patients
15:38	58	P. Kling	Systematic Analysis of the Communication in Medical Care for the Development of Design Recommendations for Telemedical Applications
15:40	72	S. Burgsmüller	Study of Desirable Characteristics of a Communication Device for Intensive Care Patients
15:42	87	J. Oehm	An Investigation on Automated Consolidation for Medical Database Schemata
15:50			SenTec Spotlight Presentation
16:05			Student Circle
16:20			Get-Together