



Studierendentagung Lübeck 2024

Postersessions
7th of March, 2024

Postersession 3	
61	<i>Michelle Diez, Philip Gouverneur, Marco Bazzani, Marcin Grzegorzek</i> Stress Classification with a Deep Neural Network using Electrodermal Activity and Blood Volume Pulse
48	<i>Sazid Rahman Simanto, Fabian Domberg, Georg Schildbach</i> Reward Function Design for End-to-end Off-road Autonomous Simulator
87	<i>Solveig Thrun, Stine Hansen, Robert Jenssen, Michael Kampffmeyer, Maik Stille</i> Leveraging complementary labels in breast cancer segmentation on mammography data: An in-depth analysis
34	<i>Benedikt Stepanek, Lukas Boudnik</i> Efficient Processing of Multi-Channel sEMG With Neural Networks on Mobile Hardware
125	<i>Sadra Nasiri, Foti Coleca, Erhardt Barth</i> Developing a Camera-based Hands-on Detection System for the Steering Wheel Using OpenPose Library
22	<i>Lukas Groth, Saleh Mulhem, Mladen Berekovic</i> Efficient Inference Hardware Acceleration of the Yolov5s Object Detection Model at the Edge
68	<i>Peter Schumacher, Tim Jürgens, Juliane Raether, Stefan Klockgether</i> Validation of the spatial reproduction of realistic acoustic scenes with regard to the listener's head orientation.
3	<i>Luca Wiederschein, Markus Kemper, Florian Denk, Hendrik Husstedt</i> Optimizing Illuminance for Eye-Tracking in Auditory Experiments Ensuring Robustness Through Controlled Illuminance Technical Characterisation of a Spherical Loudspeaker Array
83	<i>Samira Assarzadeh, Alexander Altmann, Martin Leucker, Mohammad Khodaygani, Ramtin Rahmanzadeh</i> Realtime assessment of food spoilage using multiple sensors
8	<i>Steffen Häusler</i> Advancing Robotic Perception: Extracting Gyroscopic Data from Camera Streams
32	<i>Tim-Lucas Rabbel, Marko Križmančić</i> Development of a Modular Zigbee/LoRaWAN Wireless Sensor Network for Environmental Monitoring with Biohybrid Sensors
89	<i>Anna Osipjan, Lena Best, Christoph Kaleta, Marcin Grzegorzek</i> Impact of Dietary Choices on Human Gut Microbiome Composition
10	<i>Benjamin Förster, Benjamin Finke, Jennifer Vibert, Stefan Müller</i> Orthopedic sockets and methods for adjustments – An approach with shape-memory-alloy actuators –
33	<i>Akin Caglayan, Max Urban</i> Indoor Air Quality Monitoring and Guiding Device to Decrease the Risk of Coronavirus and Similar Airborne Diseases
58	<i>Sophia Merrath, Ludger Tappehorn, Philipp Rostalski</i> Test Standard for Controlling the Gas Temperature for Heated Breathing Hoses by Using Different Temperature Sensors



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29	<i>Robert Schumann, Frédéric Li, Marcin Grzegorzek</i> Prototyping of a StandaloneWiFi Sensing System using Single-Antenna Devices
72	<i>Maron Alexander Vagt, Max Urban</i> Airtightness Testing Procedure for Electronic Anaesthesia Vaporizers – Ensuring Leakage-Free Operation –
112	<i>Anna-Lena Urban, Zuzana Penxová, Birgit Lange, Paula Enzian, Ramtin Rahmanzadeh, Ralf Brinkmann, Karl-Ludwig Bruchhage, Anke Leichtle</i> Influence of blue light irradiation on keratinocyte viability
117	<i>Jana Hadjichrysanthou, Noah Heldt, Martin Ahrens, Svea Höhl, Tim Eixmann, Gereon Hüttmann</i> Setup for comparative studies to find optimal measurement parameters for specific tissue using dmOCT
53	<i>Lukas Pohl, Lara Buhl, Maron Dolling, Michael Wang-Evers, Felix Hilge, Dieter Manstein, Reginald Birngruber</i> Motion artifact correction for in-vivo corneal OCT in rabbits
99	<i>Celina-Christin Schubbe, Javier Plou Izquierdo, Andreas Seifert, Erhardt Barth</i> Unveiling Cell-to-Cell Evolution by Raman Micro-Spectroscopy
93	<i>Malin-Berit Kluge, Robin Brütt, Georg Männel</i> Pressure Control of a Blower-Based Valve Test Bench
127	<i>Miklos Libak, Robin Kensbock, Fabian Domberg, Georg Schildbach</i> Looking Ahead: Comparison of Stanley and Model Predictive Control for Miniature Sized Cars Using Lookahead Point
39	<i>Caterina Grundt</i> Using Contrastive Language-Image Pretraining Models for Medical Image Retrieval
40	<i>Tim-Louis Lewejohann</i> Optimizing Planetary Rover Simulation Dynamics with Real Trajectories: A Comparative Study
42	<i>Stjepan Radic, Peter Baltin, Ulf Pilz</i> Humidification system of the incubator: An investigation of possible methods and the development of potential concepts
54	<i>Sherbeen Vadakken, Igor Knor, Luca Belloi, Ulf Pilz</i> Development of a Microcontroller-Based Test Device for Air Temperature Sensor Probe of a Neonatal Incubator
45	<i>Leander Busch</i> Detection and Recognition of Racing Bib Numbers
113	<i>Elena Romiana Schütte, Christian Rönna, Christian Hübner</i> An optimised small-scale ninhydrin-based assay for the quantification of amines on aminosilanised coverslips
114	<i>Ahmad Mohammad, Lasse Hansen, Mattias P. Heinrich</i> Enhancing 3D Ultrasound Reconstruction: A Comparative Analysis Using IMU Data



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7	<i>Nina Kleineberg, Astrid Link, Paula Enzian, Ramtin Rahmanzadeh</i> Intracellular localization of light-sensitive liposomes
106	<i>Julian Lennard Völter, Maik Rahlves</i> Towards Microcontact Printing and Nanoimprint Lithography of Polymer-based Photonic Biosensors
26	<i>Tjalfe Laedtke, Sazgar Burhan, Simon Lotz, Robert Huber</i> Robotically-enabled angular compounding for speckle reduction in optical coherence tomography
86	<i>Lynn Yehia, Alexandra Eberenz, Georg Wolf, Georg Maennel, Marcus Heldmann, Freschta Malekzeda, Michael Thomaschewski, Jannis Hagenah</i> Exploring Cognitive Load in Surgical Skill Assessment using Event-Related Potentials
96	<i>Joel-Maxim Gillner, Dominik Gaus, Ludger Tappehorn, Norbert Linz</i> Development of a Cuvette Prototype for Infrared Temperature Measurement During Active Breathing Gas Conditioning
75	<i>Kishore Kumar Mariappan, Hossam S. Abbas, Dimitrios S. Karachalios</i> Balancing and Trajectory Tracking of a Ballbot based on Linear Parameter-Varying Modeling and Control
35	<i>Amira Moualhi, Saleh Mulhem, Mladen Berekovic</i> Numerical- vs NN-based Solutions for Solving Differential Equations
62	<i>Konrad von Kugelgen</i> Fine-Tuning Pre-Trained Image and Language Models on a Large German Radiological Dataset for Image-to-Text Retrieval
103	<i>Agastya Heryudhanto, Jörg Schroeter, Max Urban</i> Pattern Recognition and Machine Learning-driven Classification of Solid-State Polymer Signals in ContinuousWave NMR
51	<i>Negar Sedaghatimonavar, Kevin Vaughan, Stefan Müller</i> Optimizing the Endoscope Bending Rubber Adhesive Process
84	<i>Felicia Bader, GeorgWolf, Alexandra Eberenz, Georg Maennel, Mattias Heinrich Freschta Malekzada, Michael Thomaschewski, Jannis Hagenah</i> Detection of Repetitive Phases in Surgical Training Videos
95	<i>Thore Viemann, Janosch Kappel, Christian Hübner</i> Construction of a short dead-time small volume stopped-flow system for kinetics reactions
63	<i>Marie C. Wetzel, Janina Nandy, Christian Nehls</i> Microfluidic production of water-in-oil droplets
77	<i>Jasmin Handel, Shouguang Huang, Rainer Hedrich, Young-Hwa Song</i> Wounding induces sequential pinna movement in Mimosa Pudica



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43	<i>Rebecca Köhler, Leonard Wägele</i> Automatic prostate MRI sequence identifier based on image features
30	<i>Jan Meyer, Christian Janorschke</i> Self-Supervised DEnoising UltraSound Network (DEUS-Net)
78	<i>Lara Presser, Jasper Diesel, Mattias Heinrich</i> A Template-Based Region Proposal Approach for Two-Stage Object Detection in Point Clouds
118	<i>Suneesh Omanakuttan Sumesh Nivas</i> Obstacle Avoidance of MONSUN AUV Using SONAR
94	<i>Eike Schultz</i> Using Computer Vision for Inventory Management
28	<i>Leon Dietrich, Ahmed Mahmoudi, Mladen Berekovic</i> Exploring neural network acceleration using Gemmini
13	<i>Lisa Marie Schneider, Daniela Hollfelder</i> Transmission behaviour of the Samba 2 Hi audio processor for different programs
2	<i>Jennifer Schmidt, Daniela Hollfelder</i> Reproducibility of responses in the Nijmegen Cochlear Implant Questionnaire (NCIQ): Independent vs. supervised performance and its relation to patient satisfaction and speech intelligibility
65	<i>Cleo Noak, Markus Kallinger, Jürgen Tchorz, Fabian Hettler, Florian Denk, Hendrik Husstedt, Tim Jürgens</i>
79	<i>Sonja Taupadel, Nina Aldag, Philip Gouverneur, Marcin Grzegorzec, Waldo Nogueira</i> Measurement and Evaluation of Auditory Evoked Potentials using Deconvolution and Conventional Methods in Normal Hearing Subjects
9	<i>Isabel Haasler, Christian Seitzer, Sebastian Fudickar</i> Use of RGB and Depth Information for AI-assisted Estimation of an optimal Patient Position
5	<i>Abdulkader Chukr, Stefan Müller, Sebastian Jungbauer</i> Analyzing the Impact of Thermal Cycles on the Performance of Solid-State SMD Batteries (TDK)
55	<i>Abdelhalim Elashram, Martin A. Koch, Luca Belloi</i> Improvement of SNR and Sensitivity in MRI receiving array coils for neonatal patients by preamplifier decoupling
119	<i>Ahmad Alsalhani</i> Testing for Service-Oriented Device Connectivity Application
41	<i>Jennifer Vibert, Niklas Hainz, Pascal Krauß, Michael Nolte, Stefan Müller</i> Developing a portable data logger for medical devices using the Arduino Portenta H7