

**Scientific Program**  
**2<sup>nd</sup> of March, 2023, AM 4**

<b>Session 1 - Track B</b>		
<b>Biomedical Engineering 4</b>		
<b>Time</b>	<b>Chair:</b>	
9:00	115	<i>N. Ghaleb</i>
		Bioprinting anisotropic 3D structures
9:12	108	<i>T. Strunk, Q. Nawaz, C. Damiani, A. Boccaccini</i>
		3D-printability of composite scaffolds based on PCL and bioactive glass nanoparticles for bone tissue engineering applications
9:24	55	<i>A. A. Ashong, P. Radon, F. Wiekhorst</i>
		Device for Assessment of Quantitative Magnetic Drug Targeting using Magnetic Nanoparticles
9:36	86	<i>M. Studt</i>
		<i>3D Tracking and Control of a Magnetic Particle for Automated Lens Emulsification in Cataract Surgery</i>
9:48	125	<i>L. Hansen, N. Koch, A. Mertins</i>
		Technical realization of a medical assessment of geriatrics
10:00	76	<i>N. Johnny, O. Krahnfeld, T. Agdirlioglu, J. Weil</i>
		Extended Percutaneous MAZE in Combination with Vein of Marshall Ethanol Ablation in Persistent Atrial Fibrillation – EP-AMAZE-IT –
10:15	Coffee Break	
10:30	Postersession Jury	
<b>Session 2 - Track B</b>		
<b>Machine Learning / AI 1</b>		
<b>Time</b>	<b>Chair: Ph.D. Ngoc Thinh Nguyen</b>	
11:00	2	<i>F. Stark, L. Gerdes, G. Schildbach</i>
		Autonomous locomotion of a quasi-omnidirectional rover
11:12	59	<i>M. Maan, A. A. Kumar</i>
		Development of Machine Learning Model for Image Segmentation in Solder Joints
11:24	129	<i>M. Bleskina, S. Szymczak</i>
		The Optimal Crowd Machine for multi-omics data integration
11:36	103	<i>N. Kompe, N. T. Nguyen</i>
		Autonomous Mapping of Rumex in Grassland with a Mobile Robot
11:48	12	<i>R. J. Luckey, K. Ehlers, H. Hamann</i>
		A Decentralized Multi-Robot Warehouse Picking Mechanism with High Scalability, Robustness and Low Wear
12:00	124	<i>C. Bomane</i>
		Flood Detection using Optical and SAR Satellite Data
12:15	Lunch Break	

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<b>Session 3 - Track B</b>		
<b>Machine Learning / AI 2</b>		
<b>Time</b>	Chair: Dr. Hossam Abbaas	
13:15	6	<i>A. Kandathil Abraham, T. Dentler, E. Sapozhnikova</i>
		Reinforcement Learning Algorithms for Lateral Vehicle Control in ROS
13:27	31	<i>M. F. Gerwin, S. Zeinali, G. Schildbach</i>
		NN-MPC - Replacing a First Principles Model with a Neural Network
13:39	16	<i>T. Plattenteich</i>
		Using Systolic Arrays and SystemC for Hardware Optimization of Deep Neural Networks
13:51	45	<i>F. Lentzsch, F. Li, F. Pagel, M. Lau, K. Otte, H. M. Röhling, A. Stein, A. Nisar, L. Zieser, S. Glende, N. Kaartinen, S. Mansow-Model, U. Thyen, M. Grzegorzek</i>
		Deep feature learning for fidgety movement detection using inertial measurement unit data
14:03	53	<i>T. Kruse, O. Sellhorn, H. Hellbrück</i>
		Evaluation of Estimated Substance Compositions by AI-based Classification of Optical Absorption Spectra
14:15	35	<i>W. Philipp, R. Benitez</i>
		Rule-based explanations of CNN classifiers using regional features
14:30	Coffee Break	
<b>Session 4 - Track B</b>		
<b>Machine Learning / AI 3</b>		
<b>Time</b>	Chair:	
14:45	9	<i>M. Streppel, M. Henke, L. Omland</i>
		A Global Regulatory Landscape for AI-based Medical Devices – How to Convey and Address the Emerging Regulatory Landscape for AI Technology in Healthcare
14:57	113	<i>J. Richter</i>
		Comparative Study Of Different Explainable Artificial Intelligence Algorithms For A Customer Specific Natural Language Processing Model
15:09	84	<i>R. Berehi Zadeh, X. Huang, M. Grzegorzek, A. Witolla</i>
		Machine learning approaches on health insurance data to classify cases related to care grades: first pilot studies
15:21	28	<i>F. Dlugi</i>
		Benchmarking AI-Accelerators
15:33	29	<i>L. P. Scherf, O. Witt, J. Zauleck, L. Jablonski, M. Grzegorzek</i>
		Analysis of Blood Glucose Daily Patterns