2018 IEEE International Conference on Cyborg and Bionic Systems (CBS 2018)

Shenzhen, China
25 – 27 October 2018

IEEE Catalog Number: CFP18K26-POD
ISBN: 978-1-5386-7356-0

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IEEE Catalog Number: CFP18K26-POD
ISBN (Print-On-Demand): 978-1-5386-7356-0
ISBN (Online): 978-1-5386-7355-3

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Table of Contents

Friday October 26, 2018

FrAT2	Room A503
Learning and Control (Regular Session)	
Chair: Arai, Tatsuo	University of Electro-Communications
Co-Chair: Li, Ke	School of Control Science and Engineering, Shandong University
10:30-10:45	FrAT2.1
Incorporating Hand-Crafted Features to Deep Neural Networks for Seizure Prediction, pp. 25-30.	
Lian, Qi	ZheJiang University
Qi, Yu	ZheJiang University
Lin, Kang	ZheJiang University
Wang, Yueming	ZheJiang University
Zhang, Shaomin	ZheJiang University
Pan, Gang	ZheJiang University
10:45-11:00	FrAT2.2
Activity Recognition Based on Deep Learning and Android Software, pp. 31-35.	
Wang, Chao	Northeastern University
Lin, Chuang	Shenzhen Institutes of Advanced Technology, CAS
Yang, Mo	Northeastern University
11:00-11:15	FrAT2.3
Model of Prosthetic Arm Finger Using Neural Network, pp. 36-41.	
Varghese, Midhun	Rajagiri School of Engineering & Technology
Rita Samuel, Elizabeth	Rajagiri School of Engineering & Technology
Koshy, Rinu Alice	Rajagiri School of Engineering & Technology
11:15-11:30	FrAT2.4
A Learning-From-Demonstration Based Framework for Robotic Manipulators Sorting Task, pp. 42-47.	
Zhang, Yahui	Univ. of Chinese Academy of Sciences
Ou, Yongsheng	CAS
Liu, Guodong	Univ. of Chinese Academy of Sciences
Xu, Tiantian	CAS
11:30-11:45	FrAT2.5
NMES Evoked Semg Enhancing Close-Loop Control of Stable Force Output in Myoelectric Hand Prosthesis, pp. 48-52.	
Zhao, Yun	Chongqing University
Qu, Wen	Chongqing University
Yufeng, Guo	Chongqing University
Wu, Xiaoying	Chongqing University
Chen, Lin	Chongqing University
Hou, Wensheng	Chongqing University

FrAT3	Room A601
Novel Technology for Cyborg and Bionic Systems (Regular Session)	
Chair: Shimizu, Masahiro	Osaka University
Co-Chair: Landgraf, Maximilian	Friedrich-Alexander-Universität Erlangen-Nürnberg
10:30-10:45	FrAT3.1
Continuous Reinforcement Learning with Knowledge-Inspired Reward Shaping for Autonomous Cavity Filter Tuning, pp. 53-58.	
Wang, Zhiyang	Shenzhen Institutes of Advanced Technology, CAS
Ou, Yongsheng	CAS
Wu, Xinyu	CAS
Feng, Wei	Shenzhen Institutes of Advanced Technology, CAS
10:45-11:00	FrAT3.2
Control of Canine's Moving Direction by Using On-Suit Laser Beams, pp. 59-64. *Video Clip*	
Ohno, Kazunori	Tohoku University
Yamaguchi, Shumpei	Tohoku University
Nishinoma, Hiroyuki	Tohoku University
Hoshi, Tatsuya	Tohoku University
Hamada, Ryunosuke	Tohoku University
Matsubara, Satoko	Azabu University
Nagasawa, Miho	Azabu University
Kikusui, Takefumi	Azabu University

Tadokoro, Satoshi	Tohoku University

11:00-11:15 FrAT3.3

Lightweight Control Method for Dielectric Elastomer Actuators As Self-Sensing Artificial Muscles, pp. 65-70.

Landgraf, Maximilian	Friedrich-Alexander-Universität Erlangen-Nürnberg
Ollech, Johannes	Friedrich-Alexander-Universität Erlangen-Nürnberg
Klemm, Tobias	Friedrich-Alexander-Universität Erlangen-Nürnberg
Schaude, Janik	Friedrich-Alexander-Universität Erlangen-Nürnberg
Reitelshöfer, Sebastian	Friedrich-Alexander-University of Erlangen-Nuremberg
Franke, Jörg	University of Erlangen-Nuremberg

11:15-11:30 FrAT3.4

A Pilot Study of Neural Stimulation and Motion Intervention Via Self-Powered Wearable Electronics, pp. 71-74.

Wang, Lin	Shenzhen Institutes of Advanced Technology
Zhan, Yang	Shenzhen Institutes of Advanced Technology, CAS

11:30-11:45 FrAT3.5

A Flexible Compound Sensing System for Tactile Detection in Prosthetic Hands, pp. 75-79.

Yu, Lei	Northeastern University
Tian, Lan	Shenzhen Institutes of Advanced Technology, CAS
Qian, Wei	Northeastern University
Zhang, Xiaoqing	Tongji University
Wang, Feipeng	Chongqing University
Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS
Yu, Bin	Eindhoven University of Technology

11:45-12:00 FrAT3.6

A Wearable Ultra-Low-Cost Gait Analysis System Based on Foot Pressure Detection, pp. 80-83.

Xu, Dazhong	Shenzhen Institutes of Advanced Technology, CAS
Hou, Zengtao	Siat
Yang, Zhaolan	Shenzhen Institutes of Advanced Technology, CAS
Zhang, Qinli	Shenzhen Institutes of Advanced Technology
Xu, Rong	Shenzhen Institute of Technology
Shang, Peng	Siat

FrBT1 Room A504

Advanced Biotechnology (Regular Session)

Chair: Liang, Wenyuan	National Research Center for Rehabilitation Technical Aids
Co-Chair: Sakuma, Shinya	Nagoya University

13:30-13:45 FrBT1.1

Inverse Streamline Mapping for Finding an Optimum Medicine Injection Point in Micro Chamber, pp. 84-87.

Takayama, Toshio	Tokyo Institute of Technology
Akai, Takayuki	Osaka University
Tsai, Chia-Hung Dylan	National Chiao Tung University
Kaneko, Makoto	Osaka University

13:45-14:00 FrBT1.2

Microfluidic Device for Analyzing Self-Adaption of Cancer Cell During Squeezing in Channel, pp. 88-92.

Li, Pengyun	Beijing Institute of Technology
LIU, Xiaoming	Beijing Institute of Technology
Tang, Xiaoqing	Beijing Institute of Technology
Lin, Yuqing	Beijing Institute of Technology
Kojima, Masaru	Osaka University
Huang, Qiang	Intelligent Robotics Institute, Beijing Institute of Technology
Arai, Tatsuo	University of Electro-Communications

14:00-14:15 FrBT1.3

Evaluation of Local Environment Chemical Stimulation System for Cellular Analysis, pp. 93-96.

Kojima, Masaru	Osaka University
Sera, Keita	Osaka University
Mae, Yasushi	Osaka University
Arai, Tatsuo	University of Electro-Communications

14:15-14:30	FrBT1.4
Micro-Robot Driven by Cardiac Cells That Cooperatively Beating, pp. 97-100.	
Shimizu, Masahiro	Osaka University
Maekawa, Koki	Osaka University
Kitaiwa, Kanta	Osaka University
Hosoda, Koh	Osaka University
14:30-14:45	FrBT1.5
Application of Biocompatible Organic/Inorganic Composite Film in Implantable Retinal Prosthesis, pp. 101-105.	
ZHAO, SAISAI	Shenzhen Institutes of Advanced Technology, CAS
Wu, Tianzhun	Shenzhen Institutes of Advanced Technology, CAS

FrBT2	Room A503
Advanced Image Processing (Regular Session)	
Chair: Liu, Yunhui	Chinese University of Hong Kong
Co-Chair: Wang, Lin	Shenzhen Institutes of Advanced Technology
13:30-13:45	FrBT2.1
Pose Estimation for Unknown Motion Target Based on Improved ICP Algorithm and Adaptive EKF, pp. 106-111.	
Ma, Zhenhua	Harbin Institute of Technology, Shenzhen
Huang, Hailin	Harbin Institute of Technology
Yang, Xiaojun	Shenzhen Graduate School, Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
13:45-14:00	FrBT2.2
A Vision Inspection Method for the Parameter Extraction of Orthodontic Archwire, pp. 112-115.	
He, Bo	Shenzhen Institutes of Advanced Technology, CAS
Gan, Yangzhou	Shenzhen Institutes of Advanced Technology, CAS
Xiong, Jing	CAS
Xia, Zeyang	CAS
14:00-14:15	FrBT2.3
Nonuniform Illumination Image Segmentation Based on Improved Homomorphic Filtering and Class Uncertainty Theory, pp. 116-120.	
Wu, Zhen	Shenzhen Institutes of Advanced Technology, CAS
Liang, guoyuan	Shenzhen Institutes of Advanced Technology, CAS
ren, jiao	Shenzhen Institutes of Advanced Technology, CAS
Chen, Fan	Shenzhen Institutes of Advanced Technology, CAS
Zhou, Likai	Shenzhen Institutes of Advanced Technology, CAS
Wu, Xinyu	CAS
14:15-14:30	FrBT2.4
SLAM of Robot Based on the Fusion of Vision and LIDAR, pp. 121-126.	
Xu, Yinglei	Univ. of Chinese Academy of Sciences
Ou, Yongsheng	CAS
Xu, Tiantian	CAS
14:30-14:45	FrBT2.5
RDS-Denoiser: A Detail-Preserving Convolutional Neural Network for Image Denoising, pp. 127-132.	
Wu, Shixiang	Shenzhen Institutes of Advanced Technology, CAS
Fan, Tianqi	Shenzhen Institute of Advanced Technology
Dong, Chao	Shenzhen Institutes of Advanced Technology, CAS
Qiao, Yu	Shenzhen Institutes of Advanced Technology, CAS
14:45-15:00	FrBT2.6
FPGA-Based Implementation of Hand Gesture Recognition Using Convolutional Neural Network, pp. 133-138.	
Zhang, Tongtong	Shenzhen, Harbin Institute of Technology
Zhou, Weiguo	Harbin Institute of Technology Shenzhen Graduate School
Jiang, Xin	Harbin Institute of Technology Shenzhen Graduate School
Liu, Yunhui	Chinese University of Hong Kong

FrBT3	Room A601
Exoskeleton (Regular Session)	
Chair: Hirata, Yasuhisa	Tohoku University
Co-Chair: Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS
13:30-13:45	FrBT3.1
Concept and Prototype Design of an Underwater Soft Exoskeleton, pp. 139-143.	
Zhang, Zhendong	Peking University
Zhou, Zhihao	Peking University
Zheng, Enhao	Peking University
Zhou, Yalei	Peking University
Zhang, Shichang	Peking University
Mai, Jingeng	Peking University
Wang, Qining	Peking University
13:45-14:00	FrBT3.2
Scene Understanding with Support Relation Inference for Exoskeleton Robot, pp. 144-150.	
ren, jiao	Shenzhen Institutes of Advanced Technology, CAS
Huiwen, Guo	Shenzhen Institutes of Advanced Technology, CAS
Wu, Zhen	Shenzhen Institutes of Advanced Technology, CAS
Long, Xingguo	Shenzhen Institutes of Advanced Technology, CAS
Wu, Xinyu	CAS
14:00-14:15	FrBT3.3
An Analysis of Biomechanical Characteristics of Gait Based on the Musculoskeletal Model, pp. 151-154.	
Wang, Yingying	Shenzhen Institutes of Advanced Technology, CAS
Li, Xiangxin	Shenzhen Institutes of Advanced Technology, CAS
huang, pingao	Shenzhen Institutes of Advanced Technology, CAS
Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS
Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS
14:15-14:30	FrBT3.4
Bionic Mechanical Design and Stair Ascending/Descending Gait Planning of a Lower-Limb Exoskeleton Robot, pp. 155-160.	
Yan, Zefeng	Shenzhen Institutes of Advanced Technology, CAS
Li, Nan	Shenzhen Institutes of Advanced Technology, CAS
Long, Xingguo	Shenzhen Institutes of Advanced Technology, CAS
Ren, Hao	Shenzhen Institutes of Advanced Technology, CAS
Wu, Xinyu	CAS
14:30-14:45	FrBT3.5
Lumbar Assistive Orthosis with Torsion Spring-Based Joint for Lumbar Degenerative Kyphosis Patient, pp. 161-166.	
Piriyakulkit, Songyot	Tohoku University
Hirata, Yasuhisa	Tohoku University
Ozawa, Hiroshi	Tohoku Medical and Pharmaceutical University
14:45-15:00	FrBT3.6
Upper-Body Motion Mode Recognition Based on IMUs for a Dynamic Spine Brace, pp. 167-170.	
Sun, Pihsaia	Peking University
Zhou, Zhihao	Peking University
Mai, Jingeng	Peking University
Agrawal, Sunil	Columbia University
Wang, Qining	Peking University

FrCT1	Room A504
Robotic and Bionic Technology for Corneal Replacement and Arm Applications 1 (Organized Session)	
Chair: Kim, Dong Sung	POSTECH
Co-Chair: Jang, Jinah	Pohang University of Science and Technology
Organizer: Kim, Dong Sung	POSTECH
Organizer: Kim, Keehoon	Korea Institute of Science and Technology
Organizer: Kim, Jinhyun	Seoul National University of Science and Technology

15:15-15:30 FrCT1.1

Underactuated Tendon-Driven Finger Design with Bio-Inspired Ligamentous Joint Mechanism (I), pp. 171-176.

Son, Hyeryon — Hanyang University
Lee, Geon — Hanyang University
Lee, Changhun — Eulji University, College of Medicine
Choi, Youngjin — Hanyang University

15:30-15:45 FrCT1.2

Electrospun Random/aligned Hybrid Nanofiber Mat for Development of Multi-Layered Cardiac Muscle Patch (I), pp. 177-180.

Eom, Seongsu — POSTECH
Park, Sang Min — POSTECH
Lim, Jiwon — POSTECH
Kim, Dong Sung — POSTECH

15:45-16:00 FrCT1.3

Towards the Development of Bidirectional Peripheral Nerve Interface for Long-Term Implantation (I), pp. 181-184.

Park, HyungDal — Korea Institute of Science and Technology (KIST)
Choi, Wonsuk — Korea Institute of Science and Technology (KIST)
Jung, Woohyun — Korea Institute of Science and Technology
Kim, Ockchul — Korea Institute of Science and Technology
Chu, Jun-Uk — Korea Institute of Machinery & Materials
Son, Donghee — Korea Institute of Science and Technology
Park, Jong Woong — Korea University
Kim, Jinseok — KIST (Korea Institute of Science and Technology)

16:00-16:15 FrCT1.4

Towards a High Precision Robotic Platform for Neural Interface Implantation (I), pp. 185-190.

Jeong, Jinwoo — Sungkyunkwan University
Yim, Sehyuk — KIST
Hwang, Donghyun — Korea Institute of Science and Technology
Oh, Sang-Rok — KIST
Kim, Keehoon — Korea Institute of Science and Technology
Ihn, Yong Seok — Korea Institute of Science and Technology

16:15-16:30 FrCT1.5

3D Cell Printed Corneal Stromal Analogues for Corneal Tissue Engineering (I), pp. 191-194.

Kim, Hyeonji — Pohang University of Science and Technology
Jang, Jinah — Pohang University of Science and Technology
Kim, Hong-Kyun — Kyungpook National University School of Medicine
Kim, Ki Hean — Pohang University of Science and Technology
Cho, Dong-Woo — Pohang University of Science and Technology

16:30-16:45 FrCT1.6

Development of Dense Collagenous Construct Mimicking Native Corneal Stroma Based on Collagen Compression Process (I), pp. 195-198.

Hong, Hyeonjun — Pohang University of Science and Technology (POSTECH)
Kim, Hyeonji — Pohang University of Science and Technology
Han, Seonjin — Pohang University of Science and Technology (POSTECH)
Kim, Hong-Kyun — Kyungpook National University School of Medicine
Cho, Dong-Woo — Pohang University of Science and Technology
Kim, Dong Sung — POSTECH

FrCT2 — Room A503

Human Assist Robots 1 (Organized Session)

Chair: Kiguchi, Kazuo — Kyushu University
Co-Chair: Qi, Lin — Northeastern University
Organizer: Kiguchi, Kazuo — Kyushu University

15:15-15:30 FrCT2.1

An Upper Limb Motion Assist Device for Hemiplegic Patients, pp. 199-203.

Hu, Lintao — Chongqing University
Sun, Chonglong — Chongqing University
Zhao, Desheng — Chongqing University

Ye, Donghai	Chongqing University
Shu, Bin	Chongqing University
Zheng, Xiaolin	Chongqing University
Wu, Xiaoying	Chongqing University
Hou, Wensheng	Chongqing University

15:30-15:45 FrCT2.2

Virtual Tunnel Generation Algorithm for Perception-Assist with an Upper-Limb Exoskeleton Robot (I), pp. 204-209.

Hou, Yue	Kyushu University
Kiguchi, Kazuo	Kyushu University

15:45-16:00 FrCT2.3

Effect of Vibration Stimulation on a Biarticular Muscle for Elbow Joint Motion Change During Elbow/Shoulder Joint Extension Motion: A Study for the Upper-Limb Perception-Assist (I), pp. 210-215.

Honda, Koki	Kyushu University
Kiguchi, Kazuo	Kyushu University

16:00-16:15 FrCT2.4

A Robotic Rehabilitation System for Cooperative Motor Training: A Preliminary Study in a Balance Seesaw Task, pp. 216-221.

Tanaka, Yoshiyuki	Nagasaki University
Goto, Ryuma	Nagasaki University

16:15-16:30 FrCT2.5

Development of Kinect-Based Upper-Limb Assistance Device for the Motions of Activities of Daily Living (I), pp. 222-227.

LIAO, Yun-Ting	Waseda University
Zong, Chi-Hang	Waseda University
Lee, Hee-hyol	Waseda University
Tanaka, Eiichiro	Waseda University

16:30-16:45 FrCT2.6

Motion Estimation for the Control of Upper Limb Wearable Exoskeleton Robot with Electroencephalography Signals (I), pp. 228-233.

Liang, Hongbo	Maebashi Institute of Technology
Zhu, Chi	Maebashi Institute of Technology
Iwata, Yu	Maebashi Institute of Technology
Maedono, Shota	Maebashi Institute of Technology
Mochida, Mika	Maebashi Institute of Technology
Yu, Haoyong	National University of Singapore
Yan, Yuling	Department of Bioengineering, Santa Clara University/ Dept. Otolaryng
DUAN, Feng	Nankai University

FrCT3 Room A601

Advanced Medical Technology 1 (Regular Session)

Chair: Wanqing, Wu	Shenzhen Institutes of Advanced Technology (SIAT), Shenzhen, 518055, China
Co-Chair: Zhang, Li	The Chinese University of Hong Kong

15:15-15:30 FrCT3.1

A New Solution for the Inverse Kinematics of Concentric-Tube Robots, pp. 234-239.

Wang, Jie	Harbin Institute of Technology, Shenzhen
Zhang, Di	Harbin Institute of Technology, Shenzhen
Ma, Tao	Harbin Institute of Technology(Shenzhen)
Song, Shuang	Harbin Institute of Technology Shenzhen Graduate School
Meng, Max Q.-H.	The Chinese University of Hong Kong

15:30-15:45 FrCT3.2

Toward Autonomous Robotic Colonoscopy: Motion Strategies for Magnetic Capsule Navigation, pp. 240-244.

Martin, James William	University of Leeds
Scaglioni, Bruno	University of Leeds
Norton, Joseph	University of Leeds
Obstein, Keith	Vanderbilt University
Valdastri, Pietro	University of Leeds

15:45-16:00	FrCT3.3
Analytical Magnetic Model towards Compact Design of Magnetically-Driven Capsule Robot, pp. 245-249.	
Hao, Yang	Beijing Insititute of Technology
Zhang, Peisen	Beijing Insititute of Technology
Bianchi, Federico	The BioRobotics Institute, Scuola Superiore Sant'Anna
Wu, Lei	Beijing Institute of Technology
Li, Jing	Beijing Insititute of Technology
Ciuti, Gastone	Scuola Superiore Sant'Anna
Huang, Qiang	Beijing Institute of Technology
Dario, Paolo	Scuola Superiore Sant'Anna
16:00-16:15	FrCT3.4
A Magnetically-Triggered Soft Capsule for On-Demand Mucus Collection, pp. 250-254.	
Du, Xingzhou	The Chinese University of Hong Kong
Chan, Kai Fung	The Chinese University of Hong Kong
Xia, Xianfeng	Chow Yuk Ho Technology Centre for Innovative Medicine, the Chine
Chiu, WAI, YAN Philip	Chinese University of Hong Kong
Zhang, Li	The Chinese University of Hong Kong
16:15-16:30	FrCT3.5
Development of an External Electromagnetic Actuation System to Enable Unrestrained Maneuverability for an Endoscopic Capsule, pp. 255-260.	
Hoang, Manh Cuong	Chonnam National University
Le, Viet Ha	Chonnam National University
Kim, Jayoung	Chonnam National University
Choi, Eunpyo	Chonnam National University
Kang, Byungjeon	Chonnam National University
Kim, Chang-Sei	Chonnam National University
Park, Jongoh	Chonnam National University
16:30-16:45	FrCT3.6
A Novel Soft Device for Assisting Magnetically-Driven Soft-Tethered Capsule Navigation, pp. 261-265.	
Gabrieli, Noemi	Scuola Superiore Sant'Anna
Ortega Alcaide, Joan	University of Colorado
Cianchetti, Matteo	Scuola Superiore Sant'Anna
Menciassi, Arianna	Scuola Superiore Sant'Anna - SSSA
Ciuti, Gastone	Scuola Superiore Sant'Anna

FrDT1	Room A504
Robotic and Bionic Technology for Corneal Replacement and Arm Applications 2 (Organized Session)	
Chair: Kim, Dong Sung	POSTECH
Co-Chair: Jang, Jinah	Pohang University of Science and Technology
Organizer: Kim, Dong Sung	POSTECH
Organizer: Kim, Keehoon	Korea Institute of Science and Technology
Organizer: Kim, Jinhyun	Seoul National University of Science and Technology
16:45-17:00	FrDT1.1
Insertion-Depth Sensor Embedded Automatic Grasping Forceps for Precise Cornea Grasping in Keratoplasty (I), pp. 266-269.	
Shin, Hyung Gon	POSTECH
Park, Ikjong	POSTECH
Chung, Wan Kyun	POSTECH
17:00-17:15	FrDT1.2
Design of Hand-Held Suturing Device Integrated with Optical Coherence Tomography Probe for Corneal Suturing (I), pp. 270-273.	
Park, Ikjong	POSTECH
Kim, Se Jin	POSTECH
Lee, Donghyun	Pohang University of Science and Technology (POSTECH)
Kim, Chulhong	Pohang University of Science and Technology (POSTECH)
Kim, Myoung Joon	University of Ulsan College of Medicine, Asan Medical Center
Chung, Wan Kyun	POSTECH

17:15-17:30	FrDT1.3
Eye Surgery Simulator for the Training of Minamally Invassive Glaucoma Surgery Skills, pp. 274-277.	
Omata, Seiji	NAGOYA UNIVERSITY
Gallab, Mahmoud	NAGOYA UNIVERSITY
Harada, Kanako	The University of Tokyo
Mitsuishi, Mamoru	The University of Tokyo
Sugimoto, Koichiro	The University of Tokyo
Ueta, Takashi	The University of Tokyo
Totsuka, Kiyohito	The University of Tokyo
Araki, Fumiyuki	The University of Tokyo
Takao, Muneyuki	The University of Tokyo
Aihara, Makoto	The University of Tokyo
Arai, Fumihito	Nagoya University
17:30-17:45	FrDT1.4
Optical Measurement of Deformation Distribution on Retinal Model for Vitreoretinal Surgery Training, pp. 278-281.	
Maruyama, Hisataka	Nagoya University
Tsubaki, Toshimitsu	NTT
Okuda, Kazuma	Nagoya University
Omata, Seiji	NAGOYA UNIVERSITY
Masuda, Taisuke	Nagoya University
Arai, Fumihito	Nagoya University

FrDT2	Room A503
Human Assist Robots 2 (Organized Session)	
Chair: Kiguchi, Kazuo	Kyushu University
Co-Chair: Qi, Lin	Northeastern University
Organizer: Kiguchi, Kazuo	Kyushu University
16:45-17:00	FrDT2.1
Evaluating Shifted Body Representation and Modified Body Schema Using Extra Robotic Thumb (I), pp. 282-285.	
Zhu, Yaonan	Nagoya University
Shikida, Hiroshi	Nagoya University
Aoyama, Tadayoshi	Nagoya University
Hasegawa, Yasuhisa	Nagoya University
17:00-17:15	FrDT2.2
Stable Posture Compensation Based on Zero-Moment Point Control Method for a Walking Assistance Apparatus (I), pp. 286-291.	
Yang, Bo-Rong	Waseda University
Lee, Hee-hyol	Waseda University
Tanaka, Eiichiro	Waseda University
17:15-17:30	FrDT2.3
Study of Hemiplegic Dorsiflexion Functional Recovery Training Device with Facilitating Stimuli (I), pp. 292-297.	
Yu, Yong	Kagoshima University
Qi, Hao	Ulvac Kyushu Corporation
Taniguchi, Koutaro	Kagoshima University
Takahashi, Junji	Kagoshima University
Shimodozono, Megumi	Kagoshima University
KAWAHIRA, Kazumi	Kagoshima University
17:30-17:45	FrDT2.4
Track Your Emotional Perception of 3-D Virtual Talking Head in Human-Computer Interaction, pp. 298-303.	
Ni, Hu	Shenzhen Institutes of Advanced Technology, CAS
Wang, Jianying	CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Wang, Lan	CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Yan, Nan	CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems

FrDT3	Room A601
Advanced Medical Technology 2 (Regular Session)	
Chair: LI, Peng	Harbin Institute of Technology (Shenzhen)
Co-Chair: Dario, Paolo	Scuola Superiore Sant'Anna

16:45-17:00 FrDT3.1

Automating Robot Motion Planning for Magnetic Resonance Navigation Using Q-Learning, pp. 304-307.

Wang, Xiaoyan	Yuxi Normal University
An, Zhenzhou	Yuxi Normal University
Zhou, Yihang	Medical Physics and Research Department, Hong Kong Sanatorium An
Wang, Haifeng	CAS
Chang, Yuchou	University of Houston - Downtown

17:00-17:15 FrDT3.2

A Novel Intestinal Microcapsule Endoscope Robot with Biopsy Function, pp. 308-312.

Pan, Xiaofei	Harbin Institute of Technology (Shenzhen)
Ma, Tao	Harbin Institute of Technology(Shenzhen)
LI, Peng	Harbin Institute of Technology (Shenzhen)
Jiang, Xin	Harbin Institute of Technology Shenzhen Graduate School
Song, Shuang	Harbin Institute of Technology Shenzhen Graduate School
Meng, Max Q.-H.	The Chinese University of Hong Kong

17:15-17:30 FrDT3.3

Automating Regularized Sensitivity Encoding Reconstruction Via Genetic Algorithm for MRI Robotics, pp. 313-316.

Wang, Xiaoyan	Yuxi Normal University
An, Zhenzhou	Yuxi Normal University
Zhou, Yihang	Medical Physics and Research Department, Hong Kong Sanatorium An
Wang, Haifeng	CAS
Chang, Yuchou	University of Houston - Downtown

17:30-17:45 FrDT3.4

3D Path Planning for Anterior Spinal Surgery Based on CT Images and Reinforcement Learning, pp. 317-321.

Zhang, Qi	Harbin Institute of Technology at Shenzhen
Li, Meng	Shenzhen Institutes of Advanced Technology, CAS
Qi, Xiaozhi	Shenzhen Institutes of Advanced Technology, CAS
HU, Ying	Shenzhen Institute of Advanced Technology, CAS
Sun, Yongmei	Peking University Shenzhen Hospital
Yu, Gang	Harbin Institute of Technology at Shenzhen

Saturday October 27, 2018

SaAT1	Room A504
Advanced Intelligent Computing and Control Approaches (Organized Session)	
Chair: Zhou, Yimin	CAS
Co-Chair: Yang, Zhile	Shenzhen Institutes of Advanced Technology, CAS
Organizer: Zhou, Yimin	CAS
Organizer: DEVEERASETTY, KRANTHI	Shenzhen Institutes of Advanced Technology, CAS
Organizer: Yang, Zhile	Shenzhen Institutes of Advanced Technology, CAS
10:15-10:30	SaAT1.1
Unsupervised Learning Based on Artificial Neural Network: A Review (I), pp. 322-327.	
Dike, Happiness Ugochi	Shenzhen Institutes of Advanced Technology, CAS
Zhou, Yimin	CAS
DEVEERASETTY, KRANTHI	Shenzhen Institutes of Advanced Technology, CAS
Wu, Qingtian	SIAT
10:30-10:45	SaAT1.2
A Review of Target Tracking Algorithm Based on UAV (I), pp. 328-333.	
Hao, Jingxuan	Tianjin University
Zhou, Yimin	CAS
Zhang, Guoshan	Tianjin University
lv, qin	Shenzhen Institutes of Advanced Technology CAS
Wu, Qingtian	SIAT
10:45-11:00	SaAT1.3
Event-Triggered Consensus Tracking of Disturbed Nonlinear Multi-Agent Systems (I), pp. 334-339.	
Liu, Yang	Beihang University
Guo, Xiaohong	Xi'an Satellite Control & Measurement Center
Yuan, Tong	BeiHang University
Song, Jia	Beihang University
11:00-11:15	SaAT1.4
Human Localization and Tracking System Based on Multiple Depth Cameras in VR Scene (I), pp. 340-345.	
Zhou, Feixiang	Shanghai University
Wang, Haikuan	Shanghai University
Zhou, Wenju	Shanghai University
Du, Dajun	Shanghai University
Yang, Zhile	Shenzhen Institutes of Advanced Technology, CAS
11:15-11:30	SaAT1.5
Process Monitoring of Fused Deposition Modeling through Profile Control (I), pp. 346-350.	
Zhou, Yimin	CAS
Wu, Yi	School of Mechanical Engineering, University of Science and Tech
He, Ketai	School of Mechanical Engineering, University of Science and Tech
Hu, Huaqing	University of Science & Technology Beijing
11:30-11:45	SaAT1.6
Robust Control Design for the Trajectory Tracking of a Quadrotor (I), pp. 351-356.	
DEVEERASETTY, KRANTHI	Shenzhen Institutes of Advanced Technology, CAS
Zhou, Yimin	CAS
Yang, Zhile	Shenzhen Institutes of Advanced Technology, CAS
Wu, Qingtian	SIAT

SaAT2	Room A503
Mobile Robots (Regular Session)	
Chair: Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
Co-Chair: Ming, Aiguo	The University of Electro-Communications
10:15-10:30	SaAT2.1
An Adaptive Fuzzy Sliding Mode Controller for the Depth Control of an Underactuated Underwater Vehicle, pp. 357-362.	
Liu, ShuQi	Shandong University at Weihai
Chen, Yuan	Shandong University at Weihai
Ma, Guang Ying	Shandong University at Weihai

10:30-10:45	SaAT2.2
Design of a Novel Water Jet Thruster for Amphibious Jumping Robot, pp. 363-369.	
Mo, Jixue	Shenzhen Graduate School, Harbin Institute of Technology
Miao, Zhihuai	Shenzhen Graduate School, Harbin Institute of Technology
Zhang, Yunlu	Shenzhen Graduate School, Harbin Institute of Technology
Guo, Miaochen	Shenzhen Graduate School, Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
10:45-11:00	SaAT2.3
Study of a Gas-Powered Liquid Jet Thruster for Amphibious Jumping Robot, pp. 370-377.	
Zhang, Yunlu	Shenzhen Graduate School, Harbin Institute of Technology
Mo, Jixue	Shenzhen Graduate School, Harbin Institute of Technology
Miao, Zhihuai	Shenzhen Graduate School, Harbin Institute of Technology
Huang, Hailin	Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
11:00-11:15	SaAT2.4
Design and Motion Control of an Underwater Micro-Robot, pp. 378-384.	
Guo, Miaochen	Harbin Institute of Technology Shenzhen Graduate School
Mo, Jixue	Shenzhen Graduate School, Harbin Institute of Technology
Miao, Zhihuai	Shenzhen Graduate School, Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
11:15-11:30	SaAT2.5
A Bias Compensation Strategy for Wheeled Mobile Robot Odometric Self-Localization Algorithm, pp. 385-390.	
Xu, Sheng	SIAT, CAS/University of South Australia
Ou, Yongsheng	CAS
Wu, Xinyu	CAS
Feng, Wei	Shenzhen Institutes of Advanced Technology, CAS
11:30-11:45	SaAT2.6
Development of a Bipedal Robot with Bi-Articular Muscle-Tendon Complex between Hip and Knee Joint, pp. 391-396.	
Hiasa, Shuma	The University of Electro-Communications
Sato, Ryuki	The University of Electro-Communications
Ming, Aiguo	The University of Electro-Communications
Meng, Fei	Beijing Institute of Technology
Liu, Huaxin	Beijing Institute of Technology
Fan, Xuxiao	Beijing Institute of Technology
Chen, Xuechao	Beijing Institute of Technology
YU, Zhangguo	Beijing Institute of Technology
Huang, Qiang	Beijing Institute of Technology

SaAT3	Room A601
Measurement and Analysis of Brain Signal (Regular Session)	
Chair: Takayama, Toshio	Tokyo Institute of Technology
Co-Chair: Wang, Xin	Harbin Institute of Technology, Shenzhen
10:15-10:30	SaAT3.1
Decoding Brain States Based on Microcircuits, pp. 397-400.	
Chen, Rong	University of Maryland School of Medicine
Lin, Da-Ting	National Institute on Drug Abuse
10:30-10:45	SaAT3.2
An EEG Signal Denoising Method Based on Ensemble Empirical Mode Decomposition and Independent Component Analysis, pp. 401-405.	
Sun, Huimin	Shenzhen Institutes of Advanced Technology
Cheng, Jun	Shenzhen Institutes of Advanced Technology
Ma, Zheng	Shenzhen Institutes of Advanced Technology
10:45-11:00	SaAT3.3
CortexBot: 3D Visual Fusion of Robotic Neuronavigated TMS System, pp. 406-411.	
Xiao, Zhenlong	Harbin Institute of Technology, Shenzhen
Ruan, Qi	Harbin Institute of Technology
Wang, Xin	Harbin Institute of Technology, Shenzhen

11:00-11:15	SaAT3.4
The Application of Transfer Learning in P300 Detection, pp. 412-417.	
Liu, Yang	South China University of Technology
Yang, Chenguang	South China University of Technology
Li, Zhijun	South China University of Technology

11:15-11:30	SaAT3.5
Efficient Channel Selection Approach for Motor Imaginary Classification Based on Convolutional Neural Network, pp. 418-421.	
MZURIKWAO, DEOGRATIAS	University of Kent
Chee Siang, Ang	Uni of Kent
Samuel, Oluwarotimi Williams	Shenzhen Institutes of Advanced Technology, CAS
Asogbon, Mojisola Grace	Shenzhen Institutes of Advanced Technology, CAS
Li, Xiangxin	Shenzhen Institutes of Advanced Technology, CAS

11:30-11:45	SaAT3.6
Determining the Optimal Window Parameters for Accurate and Reliable Decoding of Multiple Classes of Upper Limb Motor Imagery Tasks, pp. 422-425.	
Samuel, Oluwarotimi Williams	Shenzhen Institutes of Advanced Technology, CAS
Asogbon, Mojisola Grace	Shenzhen Institutes of Advanced Technology, CAS
Geng, Yanjuan	Shenzhen Institutes of Advanced Technology, CAS
Sandeep, Pirbhulal	Shenzhen Institutes of Advanced Technology, CAS
MZURIKWAO, DEOGRATIAS	University of Kent
Chen, Shixiong	Shenzhen Institutes of Advanced Technology
Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS

SaBT1	Room A504
Advanced Manipulation (Organized Session)	
Chair: Namiki, Akio	Chiba University
Co-Chair: Yamakawa, Yuji	The University of Tokyo
Organizer: Namiki, Akio	Chiba University

13:00-13:15	SaBT1.1
Human-Robot Collaborative Manipulation Using a High-Speed Robot Hand and a High-Speed Camera (I), pp. 426-429.	
Yamakawa, Yuji	The University of Tokyo
Matsui, Yutaro	The University of Tokyo
Ishikawa, Masatoshi	University of Tokyo

13:15-13:30	SaBT1.2
Experimental Study on Set-Point Regulation of Human Elbow Joint by Electric Stimulation under Various Visual Feedback Rate (I), pp. 430-434.	
Huang, Shouren	University of Tokyo
Murakami, Kenichi	University of Tokyo
Akiyama, Takanori	University of Tokyo
Tatsuno, Sho	University of Tokyo
Hayakawa, Tomohiko	University of Tokyo
Ishikawa, Masatoshi	University of Tokyo
Yamakawa, Yuji	The University of Tokyo

13:30-13:45	SaBT1.3
Visual Support System for Tele-Operated Hand Robot (I), pp. 435-439.	
Mouri, Tetsuya	Gifu University
Yamamura, Hibiki	Gifu University
Kawasaki, Haruhisa	Gifu University

13:45-14:00	SaBT1.4
Paper State Estimation Using Physical Model and Trajectory Planning of Multi Finger Robot Hand (I), pp. 440-444.	
Sueishi, Satoru	Chiba University
Namiki, Akio	Chiba University

14:00-14:15	SaBT1.5
Robotic Physical Interaction Using Deformation Control Based on the Zener Model (I), pp. 445-448. *Video Clip*	
Senoo, Taku	University of Tokyo
Murakami, Kenichi	University of Tokyo

Ishikawa, Masatoshi	University of Tokyo

14:15-14:30 SaBT1.6

Learning Compliant Manipulation Tasks from Force Demonstrations, pp. 449-454.

Duan, Jianghua	SIAT, CAS(CAS)
Ou, Yongsheng	CAS
Xu, Sheng	SIAT, CAS/University of South Australia
Wang, Zhiyang	Shenzhen Institutes of Advanced Technology, CAS
Peng, Ansi	Univ. of Chinese Academy of Sciences
Wu, Xinyu	CAS
Feng, Wei	Shenzhen Institutes of Advanced Technology, CAS

SaBT2 Room A503

Cyborg Mechanism (Regular Session)

Chair: Shi, Qing	Beijing Institute of Technology
Co-Chair: Wu, Yanlin	Harbin Institute of Technology, Shenzhen

13:00-13:15 SaBT2.1

Design of a Compact Rat-Inspired Waist Mechanism for a Biomimetic Robot, pp. 455-459.

Ma, Mengchao	Beijing Institute of Technology
Shi, Qing	Beijing Institute of Technology
Li, Chang	Beijing Institute of Technology
Gao, Zihang	Beijing Institute of Technology
Wang, Shengjie	Beijing Institute of Technology
Zou, Mingjie	Beijing Institute of Technology
Huang, Qiang	Beijing Institute of Technology
Fukuda, Toshio	Meijo University

13:15-13:30 SaBT2.2

Design and Analysis of a Quadrangular Truss-Shaped Deployable Robotic Manipulator for Grasping Large Scale Objects, pp. 460-465.

Wu, Yanlin	Harbin Institute of Technology, Shenzhen
Huang, Hailin	Harbin Institute of Technology
Yang, Xiaojun	Shenzhen Graduate School, Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
Jia, Guanglu	Harbin Institute of Technology (Shenzhen)
Cao, Qidi	Harbin Institute of Technology

13:30-13:45 SaBT2.3

Design of a Locking-Release Device Using Shape Memory Alloy, pp. 466-471.

Fan, Lingfeng	Harbin Institute of Technology(shenzhen)
Huang, Hailin	Harbin Institute of Technology
Li, Bing	Shenzhen Graduate School, Harbin Institute of Technology
Ning, Yinghao	Shenzhen Graduate School, Harbin Institute of Technology

13:45-14:00 SaBT2.4

Design and Analysis of a Cable-Driven Flexible Finger Based on Continuum Mechanism, pp. 472-477.

chen, xinjie	Harbin Institute of Technology, Shenzhen
YUAN, HAN	Harbin Institute of Technology
Xu, Wenfu	Harbin Institute of Technology

SaBT3 Room A601

Measurement and Analysis of Muscle Signal 1 (Regular Session)

Chair: Yokoi, Hiroshi	The University of Electro-Communications
Co-Chair: Yu, Wenwei	Chiba University

13:00-13:15 SaBT3.1

Development of New Flexible Dry Electrode for the Myoelectric Sensor Using Conductive Silicone, pp. 478-482.

Mouri, Yasuhiro	The University of Electro-Communications
Murai, Yuta	The University of Electro-Communications
Yabuki, Yoshiko	The University of Electro-Communications
Togo, Shunta	The University of Electro-Communications
Jiang, Yinlai	The University of Electro-Communications

Yokoi, Hiroshi	The University of Electro-Communications

13:15-13:30 SaBT3.2

Improving the Robustness of Myoelectric Control System Using Linear Regression Classifier, pp. 483-488.

Geng, Yanjuan	Shenzhen Institutes of Advanced Technology, CAS
Samuel, Oluwarotimi Williams	Shenzhen Institutes of Advanced Technology, CAS
Chen, Shixiong	Shenzhen Institutes of Advanced Technology, CAS
Li, Guanglin	Shenzhen Institutes of Advanced Technology ,CAS

13:30-13:45 SaBT3.3

Reduction of Malfunction of Myoelectric Shoulder Prosthesis by Removing ECG Noise, pp. 489-493.

Matsumoto, Kazuaki	The University of Electro-Communications
Kimitsuka, Susumu	The University of Electro-Communications
Togo, Shunta	The University of Electro-Communications
Jiang, Yinlai	The University of Electro-Communications
Yokoi, Hiroshi	The University of Electro-Communications

13:45-14:00 SaBT3.4

To Realize Bimanual Coordination for Trans-Humeral Prosthesis Users in a Box-Lifting Task with Various Box Configurations, pp. 494-499.

Muraguchi, Yohei	Chiba University
Yu, Wenwei	Chiba University

14:00-14:15 SaBT3.5

The Cortical-Muscular Functional Coupling Performance Evaluation Based on Harmonic Wavelet and Symbolic Phase Transfer Entropy, pp. 500-504.

Chen, Xiaobi	School of Mechanical Engineering, Xi'an Jiaotong University
Xu, Guanghua	Xi'an Jiaotong University
Zhang, Sicong	Xi'an Jiaotong University
Li, Min	Xi'an Jiaotong University

14:15-14:30 SaBT3.6

Deep Reinforcement Learning Apply in Electromyography Data Classification, pp. 505-510.

Song, Chengjie	Shenzhen Institutes of Advanced Technology, CAS
Chen, Chunjie	SIAT
Li, Yanjie	Harbin Institute of Technology (Shenzhen)
Wu, Xinyu	CAS

SaCT1 Room A504

Sensing and Control of Biomimetic Prosthetic Hands (Organized Session)

Chair: Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS
Co-Chair: Lan, Ning	Shanghai Jiao Tong University
Organizer: Lan, Ning	Shanghai Jiao Tong University
Organizer: Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS

14:45-15:00 SaCT1.1

Anodic Electrode Displacement Affect the Efficiency of Transcranial Direct Current Stimulation: A Modeling Study on the Electrode Sizes (I), pp. 511-514.

Chen, Luyao	Huazhong University of Science and Technology
Wang, Shirong	Beijing Institute of Technology
Ke, Ang	Huazhong University of Science and Technology
Zou, Xuecheng	Huazhong University of Science and Technology
He, Jiping	Beijing Institute of Technology

15:00-15:15 SaCT1.2

Flexible Integrated Sensor Array for Pressure, Humidity and Temperature Sensing (I), pp. 515-519.

Li, Tie	Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),
Li, Lili	I-Lab, Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),
Cao, Zhiguang	I-Lab, Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),
Zhang, Ting	I-Lab, Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),

15:15-15:30 SaCT1.3

An Implementation of Brain-Machine Interface by Decoding Predictive Intracortical Signals Toward a Moving Object (I), pp. 520-523.

Li, Chenyang	Institute of Neuroscience, CAS, Shanghai
Zhang, Yiheng	Institute of Neuroscience, Shanghai Institutes for Biological Sci

Wang, Tianwei	Institute of Neuroscience, CAS
Xu, Xinxiu	Institute of Neuroscience, CAS
Wang, Qifan	Institute of Neuroscience, CAS
Cui, He	Institute of Neuroscience, CAS

15:30-15:45 SaCT1.4

Influence of Functional Electrical Stimulation on Muscle and Nerve Rehabilitation in Post Targeted Muscle Reinnervation Surgery (I), pp. 524-527.

HUANG, JIANPING	Shenzhen Institutes of Advanced Technology, CAS
Samuel, Oluwarotimi Williams	Shenzhen Institutes of Advanced Technology, CAS
Wang, Yuanyuan	Shenzhen Institutes of Advanced Technology CAS
Cui, Han	Shenzhen Institutes of Advanced Technology, CAS
Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS
Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS

15:45-16:00 SaCT1.5

Design of a Biomimetic Control System for Tendon-Driven Prosthetic Hand (I), pp. 528-531.

Luo, Qi	School of Biomedical Engineering, Shanghai Jiao Tong University
Zhang, Zhuozhi	School of Biomedical Engineering, Shanghai Jiao Tong University
Liu, Jiayue	School of Biomedical Engineering, Shanghai Jiao Tong University
Chou, Chih-Hong	Shanghai Jiao Tong University
Hao, Manzhao	Shanghai Jiao Tong University
Lan, Ning	Shanghai Jiao Tong University
Niu, Chuanxin M.	Ruijin Hospital, School of Medicine, Shanghai Jiao Tong University

SaCT2 Room A503

Rehabilitation (Regular Session)

Chair: Zhu, Chi	Maebashi Institute of Technology
Co-Chair: Song, Rong	Sun Yat-Sen University

14:45-15:00 SaCT2.1

Design of 6-DOF Parallel Ankle Rehabilitation Robot, pp. 532-536.

Li, Weiguang	South China University of Technology
Huang, Jian	South China University of Technology
Wang, Chunbao	Shenzhen Second People's Hospital, the First Affliated Hospital,
Duan, Lihong	Shenzhen Institute of Geriatrics and Shenzhen Second People's Hospital
Liu, Quanquan	The First Affiliated Hospital of Shenzhen University
Sun, Tongyang	South China University of Technology
shang, wanfeng	Xian University of Science and Technology
Shen, Yajing	City University of Hong Kong
Lin, Zhuohua	Waseda University
Lu, Zhixiang	MK Smart Robot Ltd
chen, xiaojiao	Mingkai Smart Medical Robot Co., LTD
Wu, Zhengzhi	Shenzhen Institute of Geriatrics and Shenzhen Second People's Hospital
Xia, Jinfeng	Guangxi University of Science and Technology

15:00-15:15 SaCT2.2

Motion Control of Cable-Driven Rehabilitation Devices with Large Deformation Cables, pp. 537-543.

Xiong, Hao	Purdue University
Diao, Xiumin	Purdue University

15:15-15:30 SaCT2.3

Safe Tension Control of Cable-Driven Rehabilitation Devices with Elastic Cables, pp. 544-548.

Xiong, Hao	Purdue University
Diao, Xiumin	Purdue University

15:30-15:45 SaCT2.4

Inertia Parameters of Human Body Identification by Using the Inequality Constraints Derived from the Dynamic Equations, pp. 549-553.

Liang, Wenyuan	National Research Center for Rehabilitation Technical Aids

15:45-16:00	SaCT2.5
A Bio-Feedback Training and Evaluation System for Directional Control of Pinch Force, pp. 554-558.	
Hao, Zaijun	Shandong University
Hu, Wenjing	Shandong University
Wei, Na	Qilu Hospital, Shandong University
Li, Ke	School of Control Science and Engineering, Shandong University
16:00-16:15	SaCT2.6
Velocity Control of an Upper-Limb Cable-Driven Rehabilitation Robot, pp. 559-563.	
Li, Xianming	Sun Yat-Sen University
Yang, Qianqian	Sun Yat-Sen University
Song, Rong	Sun Yat-Sen University

SaCT3	Room A601
Measurement and Analysis of Muscle Signal 2 (Regular Session)	
Chair: Chen, Shixiong	Shenzhen Institutes of Advanced Technology
Co-Chair: Zhou, Hui	Nanjing University of Science and Technology
14:45-15:00	SaCT3.1
Muscle Synergy Analysis of Step Cutting Task in Basketball Athletes: Preliminary Results, pp. 564-567.	
Xu, Yilin	Jiangsu Research Institute of Sports Science
Yuan, Peng	Jiangsu Research Institute of Sports Science
WANG, DAN	Nanjing University of Chinese Medicine
Zhou, Hui	Nanjing University of Science and Technology
15:00-15:15	SaCT3.2
Evaluating the Stability of Muscle Synergies During Circle Tracking, pp. 568-571.	
Lin, Jiayin	Sun Yet-Sen University
Fan, Mengying	Sun Yat-Sen University
Luo, Jie	Sun Yat-Sen University
15:15-15:30	SaCT3.3
Contraction Patterns of Neck Muscles During Phonating by High-Density Surface Electromyography, pp. 572-575.	
Zhu, Mingxing	The CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Lu, Lin	Rehabilitation Department, Nanshan Hospital Affiliated to Shenzhen
Yang, Zijian	CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Wang, xin	The CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Liu, Zhenzhen	CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems
Wei, Wenhao	Guilin University of Electronic Technology
Chen, Fei	Southern University of Science and Technology
Li, Peng	The Third Affiliated Hospital of Sun Yat-Sen University
Chen, Shixiong	Shenzhen Institutes of Advanced Technology
Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS
15:30-15:45	SaCT3.4
Effect of Window Conditioning Parameters on the Classification Performance and Stability of EMG-Based Feature Extraction Methods, pp. 576-580.	
Asogbon, Mojisola Grace	Shenzhen Institutes of Advanced Technology, Shenzhen
Samuel, Oluwarotimi Williams	Shenzhen Institutes of Advanced Technology, CAS
Geng, Yanjuan	Shenzhen Institutes of Advanced Technology, CAS
Chen, Shixiong	Shenzhen Institutes of Advanced Technology
MZURIKWAO, DEOGRATIAS	University of Kent
Fang, Peng	Shenzhen Institutes of Advanced Technology, CAS
15:45-16:00	SaCT3.5
Research on Recognition of Forearm Semg Signal Based on Different Motion Modes, pp. 581-584.	
Fu, Menglong	Shenzhen Institutes of Advanced Technology, CAS
Xue, Jinwei	Shenzhen Institutes of Advanced Technology, CAS
huang, pingao	Shenzhen Institutes of Advanced Technology, CAS
Chen, Zhenxin	Institute of Automation Engineering, Shandong University

Wei, Wenhao	Guilin University of Electronic Technology
Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS
Chen, Shixiong	Shenzhen Institutes of Advanced Technology

16:00-16:15 SaCT3.6

*SEMG-Based Torque Estimation Using Time-Delay ANN for Control of an Upper-Limb Rehabilitation Robot**, pp. 585-591.

Wang, Chen	Institute of Automation, CAS
Peng, Liang	CAS
Hou, Zeng-Guang	CAS
Luo, Iincong	Institute of Automation, CAS
Chen, Sheng	Institute of Automation, CAS
Wang, Weiqun	Institute of Automation, CAS

SaDT1 Room A504

Prosthetic Arm and Leg (Regular Session)

Chair: Alvaro, Rios Poveda	Universidad La Salle, CDMX
Co-Chair: Wang, Qining	Peking University

16:15-16:30 SaDT1.1

Design and Development of an Open Anthropomorphic Robotic Hand Development System, pp. 592-596.

Amezcua Peregrina, Miguel	N/A
Alvaro, Rios Poveda	Universidad La Salle, CDMX

16:30-16:45 SaDT1.2

Development of an Intuitive Operation Type Shoulder Prosthesis Hand System Using the Surface Myoelectric Potential of Trunk, pp. 597-602.

Kimutsuka, Susumu	The University of Electro-Communications
Togo, Shunta	The University of Electro-Communications
Jiang, Yinlai	The University of Electro-Communications
Yokoi, Hiroshi	The University of Electro-Communications

16:45-17:00 SaDT1.3

Design of a Low-Cost and Humanoid Myoelectric Prosthetic Hand Driven by a Single Actuator to Realize Basic Hand Functions, pp. 603-606.

Zheng, Yue	Shenzhen Institutes of Advanced Technology, CAS
Li, Xiangxin	Shenzhen Institutes of Advanced Technology, CAS
Tian, Lan	Shenzhen Institutes of Advanced Technology, CAS
Li, Guanglin	Shenzhen Institutes of Advanced Technology, CAS

17:00-17:15 SaDT1.4

Performance Analysis of Hardware Acceleration for Locomotion Mode Recognition in Robotic Prosthetic Control, pp. 607-611.

Mai, Jingeng	Peking University
Chen, Wanwen	Peking University
Zhang, Shichang	Peking University
Xu, Dongfang	Peking University
Wang, Qining	Peking University

17:15-17:30 SaDT1.5

Intra-Limb Coordination During Gait in Hemiplegia, pp. 612-615.

Luo, Haizhen	Sun Yat-Sen University
Luo, Jie	Sun Yat-Sen University

SaDT2 Room A503

Anthropometric Sensing Device (Regular Session)

Chair: Arata, Jumpei	Kyushu University
Co-Chair: Tanaka, Yoshiyuki	Nagasaki University

16:15-16:30 SaDT2.1

Analysis and Modeling of Lower Limb Parameters on the Cantonese Youth, pp. 616-623.

Hou, Zengtao	Siat
Yang, Zhaolan	Shenzhen Institutes of Advanced Technology, CAS
Xu, Dazhong	Shenzhen Institutes of Advanced Technology, CAS
Zhang, Qinli	Shenzhen Institutes of Advanced Technology

Xu, Rong	Shenzhen Institute of Technology
Liu, Jia	Shenzhen Institutes of Advanced Technology, CAS
Shang, Peng	Siat

16:30-16:45 SaDT2.2

Dual-Channel Speed-Adaptive Control of Functional Electrical Stimulation of Tibialis Anterior (TA) and Gastrocnemius (GAS) for Dropfoot Correction, pp. 624-627.

Jiang, chao	Sun Yat-Sen University
Song, Rong	Sun Yat-Sen University

16:45-17:00 SaDT2.3

Effect of Deep Breathing on Interaction between Sympathetic and Parasympathetic Activities, pp. 628-631.

tian, na	Sun Yat-Sen University
liu, guanzheng	Sun Yat-Sen University
Song, Rong	Sun Yat-Sen University

17:00-17:15 SaDT2.4

Patient-Tailored Classification for a NIRS Triggered Hand Rehabilitation Robot, pp. 632-636.

Takemura, Shunki	Kyushu University
Lee, Jongseung	Kyushu University
Mukae, Nobutaka	Kyushu University Hospital
Kiguchi, Kazuo	Kyushu University
Iihara, Koji	Kyushu University
Hashizume, Makoto	Kyushu University
Arata, Jumpei	Kyushu University

17:15-17:30 SaDT2.5

Altered Regional Homogeneity and Amplitude of Low-Frequency Fluctuations in Sub-Acute Ischemic Stroke: A Resting-State Fmri Study, pp. 637-640.

Liang, Liuke	Sun Yat-Sen University
Hu, Rongliang	Jiangmen Central Hospital
Long, Wansheng	Jiangmen Central Hospital
Feng, Bao	Jiangmen Central Hospital
Song, Rong	Sun Yat-Sen University

SaDT3 Room A601

Biological Signal Based Robotics (Regular Session)

Chair: Iwasaki, Yukiko	Waseda University
Co-Chair: Maruyama, Hisataka	Nagoya University

16:15-16:30 SaDT3.1

Upper Limb Joint Angular Velocity Synergies of Human Reaching Movements, pp. 641-646.

Tang, Shangjie	Chongqing University
Barsotti, Michele	Scuola Superiore Sant'Anna - TeCIP Institute - PercroLaboratory
Stroppa, Fabio	Scuola Superiore Sant'Anna
Frisoli, Antonio	Scuola Superiore Sant'Anna
Wu, Xiaoying	Chongqing University
Hou, Wensheng	Chongqing University

16:30-16:45 SaDT3.2

Design of an Underactuated Prosthetic Hand with Flexible Multi-Joint Fingers and EEG-Based Control, pp. 647-651.

Teng, Zhicheng	Xi'an Jiaotong University
Xu, Guanghua	Xi'an Jiaotong University
LIANG, RENGHAO	Xi'an Jiaotong University
Li, Min	Xi'an Jiaotong University
Zhang, Sicong	Xi'an Jiaotong University
Chen, Jiazhou	Xi'an Jiaotong University
Han, Chengcheng	Xi'an Jiaotong University

16:45-17:00 SaDT3.3

A sEMG-Controlled Robotic Hand Exoskeleton for Rehabilitation in Post-Stroke Individuals, pp. 652-655.

Zeng, Haibin	Shandong University
Li, Ke	School of Control Science and Engineering, Shandong University
Wei, Na	Qilu Hospital, Shandong University
Song, Rui	Shandong University

Tian, Xincheng — Shandong University

17:00-17:15 — SaDT3.4

Adaptive Sliding Mode Control for Biped Robots with sEMG Signals, pp. 656-661.

Li, Mengyao — Shenzhen Institutes of Advanced Technology, CAS
Hu, Yingbai — South China University of Technology
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17:15-17:30 — SaDT3.5

A Face Vector - the Point Instruction-Type Interface for Manipulation of an Extended Body in Dual-Task Situations, pp. 662-666.

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