



Conference Program (18/Nov/2017)												
17:30	Welcome Reception											
Conference Program Day 1 (19/Nov/2017)												
08:30	Opening Ceremony by Prof. Guilin YANG											
09:00	Keynote Speech 1 Recent Advances and Open Challenges in Robot Assembly and Inspection by Prof. Frank Chongwoo PARK Seoul National University Editor-in-Chief, IEEE Transactions on Robotics											
10:00	Tea Break											
10:20	Keynote Speech 2 Generative and Discriminative Learnings: A Fuzzy Restricted Boltzmann Machine and a Novel Broad Learning System by Prof. C. L. Philip CHEN The University of Macau, Macau, China Editor-in-Chief, IEEE Transactions on Systems, Man, and Cybernetics: Systems											
11:20	Keynote Speech 3 Design and Control of 6-Legged Parallel-Parallel Robots for Moving and Manufacturing Integration by Prof. Feng GAO Shanghai Jiao Tong University, China											
12:20	Lunch											
13:40	Pacific hall 4A	ID	Author	Paper Name	Pacific hall 4B	ID	Author	Paper Name	Pacific hall 5	ID	Author	Paper Name
13:40	SuAT1: Kinematics & Dynamics of Manipulators Chairs: Guilin Yang / Zhen Zhong	259	Yi Wang, Guilin Yang, Kaisheng Yang and Tianjiang Zheng	The Kinematic Analysis and Stiffness Optimization for an 8-DOF Cable-driven Manipulator	SuAT2: Vehicles and Navigation I Chairs: Dan Wei Wang / Hao Sun	143	Hao Sun, Zehui Meng and Marcelo H. Ang Jr	Semantic Mapping and Semantics-boosted Navigation with Path Creation on a Mobile Robot	SuAT3: Industrial Robotics I Chairs: Fei Zhao / Domenico Campolo	225	Gia-Hoang Phan, Sreekanth Kana and Domenico Campolo	Instrumentation of a grinding tool for capturing dynamic interactions with the workpiece
13:55		179	Dongsheng Zhang, Yundou Xu, Jiantao Yao, Yongsheng Zhao and I-Ming Chen	Rotational axes and inverse kinematics analysis of a novel 5-DOF hybrid manipulator		153	Qiang Zhang and Wen Zhang	Range-Only Navigation Algorithm for Positioning of Deep-Diving AUV		158	Chin-Yin Chen, Junjie Li, Yindan Zhu, Liyan Tu and Wenwu Weng	Automatic Finishing System Research for Industrial Robot
14:10		185	Qun Shi and Jiajun Xie	A research on inverse kinematics solution of 6-DOF robot with offset-wrist based on Adaboost Neural Network		188	Zhong Zhen and Shuzhi Sam Ge	Trajectory tracking control of a Miniature Autonomous Helicopter with Input and Output Constraints		275	Luping Chen, Yuqiang Wu, Zhiguo Du, Tao Tao and Fei Zhao	Development of an Industrial Robot Controller with Open Architecture
14:25		271	Wenji Jia, Guilin Yang, Lefeng Gu and Tianjiang Zheng	Dynamics Modelling of a Mobile Manipulator with Powered Castor Wheels		244	Chen Yunfei and Tibing Xiao	Simulation Research of Heave Compensation Winch Based on Virtual Prototype		104	Hongliang Ren	Modular Design and Actuation System Comparison for Underactuated Tendon-Driven Soft Anthropomorphic Robotic Finger
14:40		217	Bingyuan Zhang, Weiwei Shang and Shuang Cong	Dynamic Control with Tension Compensation of a 3-DOF Cable-driven Parallel Manipulator		272	Yu Yang, Guilin Yang, Tianjiang Zheng, Yingzhong Tian and Long Li	Feature Extraction Method Based on 2.5-Dimensions Lidar Platform for Indoor Mobile Robots		209	Sreekanth Kana, Dhanya Menoth Mohan, Gia-Hoang Phan and Domenico Campolo	Pose interpolation for industrial manipulators under manual guidance
14:55		118	Zhihao Xu, Xuefeng Zhou, Taobo Cheng, Kezheng Sun and Dan Huang	Fuzzy-Neural-Network Based Position/Force Hybrid Control for Multiple Robot Manipulators		254	Hui Zhou and Han Wang	Vision-based Lane Detection and Tracking for Driver Assistance Systems: a Survey		268	Luping Chen, Zhongqi Wei, Fei Zhao and Tao Tao	Development of a Virtual Teaching Pendant System for Serial Robots based on ROS-I
15:10		219	Zhong Zhen, Shuzhi Sam Ge and Yang Xinxin	Tracking and Vibration Control for a Space Robotic System with Rigid and Flexible Manipulators		3	Zhi-Ning Liu, Zhi-Hao Wang, David Leo, Hong-Wei Zhao and Xia-Qing Liu	QUADO: an Autonomous Recharge System for Quadcopter		180	Ching-Yen Weng and I-Ming Chen	The Task-level Evaluation Model for a Flexible Assembly Task with an Industrial Dual-arm Robot
15:25	Tea Break											
15:45	Pacific hall 4A	ID	Author	Paper Name	Pacific hall 4B	ID	Author	Paper Name	Pacific hall 5	ID	Author	Paper Name
15:45	SuBT1: Aerospace Control Systems and Applications Chairs: Lei Liu / Hai Yuan	124	Lixu Wang, Hongyu Tian, Xi Liang, Cheng Wei, Yang Zhao and Lijie Chen	Dynamics Analysis of a Missile Vehicle Considering the Pavement Roughness	SuBT2: Vehicles and navigation II Chairs: Yue Xiao / Shaohui Foong	109	Jiaxin Yuan, Wenhao Xu, Zhan Qiu and Fuxin Wang	A robust global fast terminal sliding mode controller for quadrotor helicopters	SuBT3: Power, Communications and Networks Chairs: Jouni Mattila / Manuel de La Sen	155	You Zheng, Tailong Shi, Xiaohuo Xu, Hongxing Yuan and Tuozhong Yao	Research on WLAN Planning Problem Based on Optimization Models and Multi-Agent Algorithm
16:00		165	Zhou Wenya, Qin Libo, Li Long'En and Jiang Wenhui	Quadrotor attitude control based on nonlinear active disturbance rejection control		114	Longfei Zhao, Yaoxing Shang and Zongxia Jiao	Propulsion efficiency of flapping flight robots		156	Zhili Lin, Xiliang Chen and Bo Zhang	Energy Finite Element Analysis of Vibrating Thin Plates at High Frequency
16:15		203	Hongjie Yang, Lei Liu, Yichen Li, Danqi He and Xinguo Li	Design and Robust Control of Space Debris Laser Removing Satellite		122	Qilong Yuan, Yee Seng Teoh, Qinghua Lu and I-Ming Chen	Task-Orientated Robot Teleoperation using Wearable IMUs		131	Qiyin Deng, Jun Zhong, Yongfeng Liu and Yong Yu	Power Management of Analgesic Equipment Based on STM32
16:30		190	Hai Yun and Lei Liu	Rapid Development of Air Bearing Three-axis Stabilized Satellite		127	Baolai Xu, Xuefeng Zhou, Taobo Cheng, Zerong Su and Junjun Wu	A new proposal for localization of omni-directional mobile robot by DM tag in indoor environment		277	Pan Zheng, Qi Zheng, Liman Yang and Zhankui Zeng	The Signal Integrity design and simulation of Triple Modular Redundant (TMR) Computer
16:45		141	Jingwei Xie and Wanchun Chen	Switching Logic Design for Divert and Attitude Control System of Exoatmospheric Kill Vehicle		232	Yue Xiao, Yongsheng Ou and Wei Feng	Localization of Indoor Robot based on Particle Filter with EKF Proposal Distribution		105	Manuel de La Sen, Raul Nistal, Santiago Alonso-Quesada and Asier Ibeas	A culling switching parallel scheme for an SEIADR epidemic model
17:00	285	Yang Yang Gao, Min Jian Yu and Zi Bo Lin Wang	A New Method of Multi-Target Threat Assessment for Air Combat	238	Chee How Tan, Jake Tze Huan Goh, Wei Jun Ang, Jiong Le Lee, Ervine Shengwei Lin, Gim Song Soh and Shaohui Foong	Design and Development of Micro-Aerial Vehicle for Tree Inspections	125	Liyuan Wang and Wei Yue	Control of Battery-powered NCSs with Channel Assignment and Power Allocation			

Conference Program Day 2 (20/Nov/2017)

Time	Conference Program Day 2 (20/Nov/2017)											
	Pacific hall 4A			Pacific hall 4B			Pacific hall 5					
	ID	Author	Paper Name	ID	Author	Paper Name	ID	Author	Paper Name	ID	Author	Paper Name
08:30	MoAT1: Biomechanics I Chairs: Hwan Ing Hee / Domenico Campolo	224	Gia-Hoang Phan, Clint Hansen and Domenico Campolo	Joint stiffness and mechanical impedance estimation during a tooling task	MoAT2: Devices - Electromagnetic I Chairs: Liang Yan / Jinhua Chen	115	Tianyi Wang, Yuan Cao, Liang Yan and Zongxia Jiao	Design, analysis and experiments of novel short-stroke linear loading system based on axial-magnetized voice-coil motor for linear oscillating actuator	MoAT3: Identification and Control I Chairs: Liman Yang / Silu Chen	108	Shahid Qamar, Shuang Cong and Bilal Riaz	Lyapunov-based Feedback Control of Two-level Stochastic Open Quantum Systems
08:45		195	Shutao Zhang, Guokun Zuo, Changcheng Shi, Jialin Xu, Xiangxing Liu, Jingjing Gao and Guoping Li	The sEMG characteristics of human upper limb during circle drawing on BC-EULRR system		168	Wei Liu, Jin-Hua Chen, Chi Zhang, Zhi-Qin Cui and Xuezhen Wang	Ventilation System Design and Rotor Air Friction Loss of High-Speed Permanent Magnet Machines		164	Xin Zhang, Jinguo Liu and Jindong Liu	Optimal Coordinated Planning Strategy for Space Robots Grasping Targets
09:00		280	Yue Zhang, Weihai Chen, Jianbin Zhang and Jianhua Wang	Extracting Error-related Potentials from Motion Imagination EEG in Noninvasive Brain-Computer Interface		169	Wen-Hao Wu, Yun-De Zhu and Da-Guo Yu	Parametric Analysis of the Magnet Location Based on Straight-shape Internal Permanent Magnet Synchronous Motor		197	Yunbo He, Chang Zhang, Wentao Ye, Zuoxiong He, Xin Chen, Jian Gao, Kai Zhang, Zhijun Yang, Xun Chen, Yun Chen and Hui Tang	A Direct-Drive SCARA Robot for Wafer&Ceramic-Substrate Handling Based on Visual Servoing
09:15		221	Hwan Ing Hee, Kiang Loong Ng, Manolo Sta Cruz, Aloysius Tan, Kavitha Raghavan and Haoyong Yu	Enhancing perioperative transfer of special needs children with THE I-MOVE		172	Zengqiang Ai, Jinhua Chen, Youyong Liao, Chi Zhang and Jianke Du	Analytical Calculation of Air-Gap Magnetic Field of Surface-Mounted Permanent Magnet Motor with Bread-loaf Magnets		274	Langfu Cui, Liman Yang, Xinqiang Yi and Qi Zheng	A Strategy of Network Bandwidth Scheduling based on Time Window Partition for Spacecraft Platform
09:30		222	Monan Wang, Shufeng Wang and Chen Duan	Finite Element Analysis of Femoral Mechanical Properties in MATLAB Environment		263	Liang Yan, Zengliang Ping and Zongxia Jiao	Parameter Analysis of a Novel Planar Motor with Dual-layer Magnetic Array		267	Baoxu Liu and Zongxia Jiao	LQR Lateral-Directional Control Law Design for Distributed Propulsion Layout Flying Wing
09:45		149	Ping Wang, Yabo Wang, He Huang and Feng Ru	Walking trajectory generation for a 3D printing biped robot based on human natural gait and ZMP criteria		167	Zhen Li, Jinhua Chen, Chi Zhang, Liang Liu and Xuezhen Wang	Cogging Torque Reduction in External-rotor Permanent Magnet Torque Motor Based on Different Shape of Magnet		264	Liang Yan, Hongkai Qiao, Zongxia Jiao, Zihao Duan, Tianyi Wang and Ran Chen	Linear Motor Tracking Control Based on Adaptive Robust Control and Extended State Observer
10:00	Tea Break											
10:20	MoBT1: Medical Robotics Chairs: Weihai Chen / Hongliang Ren	147	Haiyang Liu, Hongbo Wang, Xue Yang, Zhennan Jin, Qiang Wang and Shanshan Li	Mechanism Design of the Minimally Invasive Vascular Interventional Surgery Robot System	MoBT2: Devices - Thermo and Hydraulic Chairs: Shunan Li / Silu Chen	269	Yufeng Qu, Bing Li, Shuai Wu, Zongxia Jiao, Hong Xiao and Xuefei Liu	A High accuracy hydraulic pressing actuation system for superplasticity forming equipment	MoBT3: Identification and Control II Chairs: Jouni Mattila / Guilin Yang	110	Tailong He and Wanchun Chen	A New Interpretation of Adjoint Method in Linear Time-Varying System Analysis
10:35		236	Zhongyi Li, Weihai Chen, Jianbin Zhang and Shaoping Bai	Design and Control of a 4-DOF Cable-Driven Arm Rehabilitation Robot (CARR-4)		198	Shunan Li, Yaoxing Shang, Shuai Wu, Yan Zhou and Zongxia Jiao	Investigation the Load Matching of Direct Pressure Valve Controlled Variable Mechanism of Axial Variable Piston Pump		132	Chang Xiao, Weixiang Zhou, Pingfang Zhou, Yueying Wang and Dengping Duan	A fault detection scheme for airship using dynamic principle components analysis with noise canceling based on Kalman filter
10:50		279	Gaojie Yu, Jianhua Wang, Weihai Chen and Jianbin Zhang	EEG-Based Brain-controlled Lower Extremity Exoskeleton Rehabilitation Robot		242	Xingjian Wang, Siru Lin, Shaoping Wang, Jian Shi and Chao Zhang	A Multi-fault Diagnosis Strategy of Electro-Hydraulic Servo Actuation System based on Extended Kalman Filter		138	Dong Liu, Liping Pang, Yunpeng Chen, and Yue Zhou	Aircraft cabin thermal control strategy based on adaptive temperature and thermal sensation
11:05		103	Hongliang Ren	Creation of Statistical Atlas of Nasal Cavity from Computed Tomography Scans		170	Adeyemi Adeleke and Jouni Mattila	Adaptive Backlash Inverse Augmented Virtual Decomposition Control of a Hydraulic Manipulator		142	Pauli Mustalahti and Jouni Mattila	Nonlinear full-model-based controller for unactuated joints in vertical plane
11:20		134	Yuyao Liu, Ronglei Sun and Fusen Zhang	An AR System to Motivate the Trainer during the Robot-Assisted Rehabilitation		201	Yongxi Shen, Zhongsheng Sun, Changrong Yuan and Xiaoning Li	Simulation about contamination influence of hot-film flow sensor on measurement accuracy		148	Manlu Liu, Qiang Ling, Jing Zhang, Liang Xu, Jiaangmei Zhang and Hua Zhang	Bilateral Control of Teleoperation Manipulator Based on Virtual Force Aware Guidance
11:35		182	Zhiyuan Weng, Jie Fang, Zhigang Weng, Ying Cheng and Gang Zhang	Design of Node Controller for Wireless Monitoring System of Central Air Conditioner		266	Chongyang Yang, Shuai Wu, Yufeng Qu and Zongxia Jiao	Temperature Uniformity Control Based on Thermal Resistance Network Model		183	Zhikun Cao, Chi Zhang, Qiang Liu, Hongyuan Lian, Guilin Yang and Silu Chen	Positive Velocity Feedback Control of Flexure-based Actuator for Vibration Suppression
11:50	Lunch											
13:40	MoCT1: Measurements and Estimation Chairs: Wen Chen / Silu Chen	111	Yang Zhang, Fugui Li and Xinmin Wang	Maneuvering Target Estimation for the Optimal Guidance Law of Intercepting Missiles	MoCT2: Mechanisms & Mechanisms Chairs: Wei Lin / Zaojun Fang	241	Tibing Xiao, Jinyong Huang and Youming Ge	Simulation and Control of Heave Compensation Winch for Ultra-depth Floating Drilling	MoCT3: Soft Robotics and Industrial Robotics II Chairs: Jouni Mattila / Motoji Yamamoto	186	Zhenwei Huang, Chi Zhang, Chongchong Wang, Guilin Yang and Chin-Yin Chen	Parameter Identification of Flexible Robotic Joint Based on Multi-sensor Information
13:55		117	Jingyun Wu, Guoliang Liu and Tao Huang	Noise Covariance Identification Using Autocovariance Least-Squares Technique for State Estimation of Quadrotor		247	Hongqiang Chen, Chin-Yin Chen, Zaojun Fang, Huaming Li, Junjie Li and Guiqin Li	Research on Polishing Parameters Analysis for Wheel Hub		288	Qinghua Liu, Chin-Yin Chen, Chongchong Wang and Wen Wang	Common Workspace Analysis for a Dual-Arm Robot Based on Reachability
14:10		140	Liyun Xu, Wei Wei, Yiping Chen and Aiping Li	Preventive Maintenance Planning in a Unreliable Production Line with a Branch Buffer		257	Zheng Li, Qiushuo Chen, Ruodong Zhi, Lingwei Zhang and Qing Chen	Analysis on Oil Film Force of Hydrostatic Bearing for Multi-Degree-of-Freedom PM Motor		261	Deyuan Meng, Wei Wei, Chaoquan Tang, Weiping Wang and Xingwang Ding	Modeling of a 6-DOF parallel manipulator driven by pneumatic muscles
14:25		160	Tuomo Kivelä, Pauli Mustajärvi and Jouni Mattila	Real-time Distance Query and Collision Avoidance for Point Clouds with Heavy-duty Redundant Manipulator		121	Dezhi Yang, Xuefeng Zhou, Taobo Cheng, Kezheng Sun and Dan Huang	Development of rotary shear equipment for preparing short metal fibers		112	Longfei Sun and Lijin Fang	Research on a novel robotic arm with non-backlash driving for industrial applications
14:40		193	Wei Zhang, Danhua Li, Weida Wang, Jian Wang and Haonan Peng	rollover warning algorithm for vehicles based on dangerous speeds considering the suspension and dynamic characteristics		133	Jianhua Tao, Dacheng Li, Tingjun Wu and Yongyan Lu	Research on Modeling and Machining Algorithm of Multi-shear and Multi-punch CNC Transverse Shear Line		126	Haibin Yin, Xutao Zhang, Junfeng Li and Jianguo Cao	Grasping Model and Experiment of a Soft Robot Gripper with Variable Stiffness
14:55		239	Wen Chen, Mu Fang, Yun-Hui Liu and Luyang Li	Monocular Semantic SLAM in Dynamic Street Scene Based on Multiple Object Tracking		177	Bo Zhang, Xiliang Chen, Dishan Huan and Zhili Lin	Dynamic transient analysis of friction noise in the trimmer blade system		129	Shanghai Jin, Shijie Guo, Kazunobu Hashimoto and Motoji Yamamoto	Influence of maximum assistive force of a soft wearable robotic suit on metabolic cost reduction
15:10	292	Xiaogang Tang, Sun'An Wang, Hongyu Di and Litian Liu	A Multi-feature Fusion Moving Target Recognition Method Based On Believability Regression Reasoning	199	Xian Zhang, Gedong Jiang, Chuang Zou and Shuang Wang	modeling of compliance and hysteresis with erasure property in harmonic drive by active loading	162	Xiaolong Zhang, Eelis Peltola and Jouni Mattila	Joint angle estimation for floating base robots utilizing MEMS IMUs			
15:25	Tea Break											
16:00	MoDT1: Aerospace Control Systems and Applications II Chairs: Xiaofei Ma / Lei Liu	107	Xiaofei Ma, Qingzheng Song, Qilong Jia and Houfei Fang	Design and Experiment for A High Precision Reflector	MoDT2: Devices - Electromagnetic II Chairs: Shaoping Bai / Liang Yan	220	Junqiang Li, Chenggong Qin, Shijie Guo and Juan Wang	Magnetic circuit design and performance analysis of a rotary magnetorheological damper with new structure	MoDT3: Identification and Control III Chairs: Teemu Mononen / Shaohui Foong	227	Van Duong Nguyen, Gim Song Soh, Shaohui Foong and Kristin Wood	De-coupled Dynamics Control of a Spherical Rolling Robot for Waypoint Navigation
16:15		166	Peibo Hao, Bindi You, Yiming Sun and Dong Liang	Nonlinear Dynamic Analysis of Deployment of Lamiated Planetary Rover Mast		287	Liang Yan, Qiongfang Zhang, Zihao Duan and Zongxia Jiao (Ran Chen)	Modeling and analysis of servo valve torque motor based on FEM		235	Jinyong Huang, Tibing Xiao and Lei Chen	Study of control mode and control strategy for direct drive volume control actuating unit of heave compensation winch
16:30		176	Yiming Sun, Bindi You, Peibo Hao and Dong Liang	Pointing Behavior of Perimeter Truss Deployable Antenna with a Laminated Reflector		246	Xuerong Li, Shaoping Bai, Weihai Chen and Jingmeng Liu	Torque Modelling and Current Optimization of Spherical Actuators Built as Electro-magnets Driven Spherical Parallel Manipulators		187	Junbo Tie, Meiping Wu, Juliang Cao, Junxiang Lian and Shaokun Cai	The Impact of Initial Alignment on Compensation for Deflection of Vertical in Inertial Navigation
16:45		192	Jian Liang, Min Xiong, Lei Liu and Yanbin Zhao	Design, Modeling and Shape Control of Bending Moment Actuator		249	Ran Chen, Zongxia Jiao and Liang Yan	Modeling and Synchronous Control for Target Motion Simulators Driven by Dual Linear Motors		208	Xiaolong Guan, Haotian Wu, Xilong Hou, Qing Teng, Shiyou Wei and Linfei Xiong	Study of a 6DOF robot assisted ultrasound scanning system and its simulated control handle
17:00		291	Zijun Xiong, Qing Li, Lei Liu and Rui Li	Fast Steering Mirror and Michelson Interferometer Based Laser Beam Pointing and Steering		194	Sheng Lin, Fei Zhao, Jinhua Chen, Chi Zhang and Junping Wang	Design and Control of Eddy Current Damper for Vibration Suppression of Direct Drive Feed System		237	Feixue Chen, Chi Zhang, Long Li, Peng Sun, Zhe Jiang, Yingzhong Tian and Guanjie Yu	A Novel Stable Control Strategy of Single Cylinder Free-piston Linear Generator
17:15		293	Xiang Li, Yang Zhao, Huibo Zhang, Bindi You and Peibo Hao	Dynamic Analysis of Actuated Joint Considering Multiple Clearances Coupling Flexible Manipulator		253	Dian Zhou and Gang Zhang	Study on mechanical properties of radial permanent magnet bearing		214	Teemu Mononen and Jouni Mattila	A Low-Cost Cloud-Extended Sensor Network for Supervisory Control
18:00	Conference Banquet											

Conference Program Day 3 (21/Nov/2017)

Pacific hall 4A	ID	Author	Paper Name	Pacific hall 4B	ID	Author	Paper Name	Pacific hall 5	ID	Author	Paper Name
TuAT1: Devices - Vibrations	120	Xiankai Cheng, Jun Zhong, Qing Zha and Yong Yu	Study on Creep Hysteresis Characteristics of Piezoelectric Ceramics in the Nano-positioning Stage	TuAT2: Machine Learning	135	Yanan Zhang, Hongyu Wang and Fang Xu	Object Detection and Recognition of Intelligent Service Robot Based on Deep Learning	TuAT3: Vision and Inertial Sensing	1	Liu Fang, Lu Lixia and Huang Guangwei	Sparse Autoencoder Based Feature Learning for Unmanned Aerial Vehicle Landforms Image Classification
	212	Shihao Wen and Qingsong Xu	Design of a Two-Stage Force Amplification Frame for Piezoelectric Energy Harvesting		157	Qi Zhang, Quan-Jun Yin and Yue Hu	Modeling CGFs Behavior by an Extended Option Based Learning Behavior Trees		123	Petri Mäkinen and Jouni Mattila	Inertial Sensor-Based State Estimation of Long-Reach Flexible-Link Manipulators
	273	Chongchong Wang, Guilin Yang, Chin-Yin Chen, Zhenwei Huang, Tianjiang Zheng and Silu Chen	An impedance control scheme with lead-lag controller for flexible joint vibration suppression		258	Aymen Mudheher Badr, Muhammad Aamir and Yi Fei Pu	Novel to improved (MIMO-STBC) system Based on Artificial Neural Network		174	Yaguang Kong and Wenqian Li	Research on Recognition Method of Learning Concentration Based on Face Feature
Chairs: Qingsong Xu / Francis Nickols	255	Zheng Li and Peng Guo	Analysis and Experimental Study of Hollow Ring Ultrasonic Motor	Chairs: Aymen Mudheher Badr / Wei Lin	211	Na Guo, Shaobing Gao, Huajin Tang and Rong Xiao	A Neurally Inspired Pattern Recognition Approach with Latency-Phase Encoding and Precise-Spike-Driven Rule in Spiking Neural Network	Chairs: Jianhua Wu / Shaohui Foong	251	Yong Han, Jianhua Wu and Zhenhua Xiong	A Framework of Multi-channel Touch Sensing with Multiple Trackpoints
	223	Shihao Wen, Haochen Feng, Haopeng Zhou and Qingsong Xu	Design and Development of a Novel Piezoelectric Wind Energy Harvester		106	Fei Zhang, Wei Sun, Min Xue, Wenhui Hu and Long Li	An SOM-Based Algorithm with Locking Mechanism for Task Assignment		202	Wei Bu, Jiangjian Xiao, Chuanhong Zhou, Minmin Yang and Chengbin Peng	A Cascade Framework for Masked Face Detection
	226	Francis Nickols and Yueh Jaw Lin	Feathered Tail and Pygostyle for the Flying Control of a Bio-Mimicking Eagle Bird Robot		161	Zhiwei Wen, Biao Chen	Load Dispatch Optimization of AGC System Based on Improved Genetic Algorithm		289	Huijuan Zhang, Chunyan Shao, Zaojun Fang and Si-Lu Chen	Improving accuracy of feature matching in visual SLAM using spatial consistency of point features

Tea Break

Pacific hall 4A	ID	Author	Paper Name	Pacific hall 4B	ID	Author	Paper Name	Pacific hall 5	ID	Author	Paper Name
TuBT1: Parallel Mechanisms & Actuation/Environment	4	Nan Zhang, Weiwei Shang and Shuang Cong	Design and Analysis of an Under-constrained Reconfigurable Cable-Driven Parallel Robot	TuBT2: Biomechanics II	290	Huifeng Lin, Chenguang Yang, Silu Chen, Ning Wang, Zhaojie Ju and Min Wang	Structure Modelling of the Human Body Using FGMM	TuBT3: Aerospace Control Systems and Applications III	200	Wei Li, Xijing Wang, Yanshan Bian and Ying Zhang	Study on Orbit Control Error Propagation Characteristics by Covariance technique
	137	Zhu Xiaorong, Yang Tingli, Yang Sen, Huang Jun and Shen Huiping	Computer-Aided Analysis for Topological Structure of Parallel Mechanisms		233	Monan Wang, Changqing Li, Mingxu Wang and Juntong Jing	Structural Design of Customized Femoral Prosthesis		191	Qing Li, Lei Liu and Shuo Tang	Composite Axis Control System Development of Airborne Electro-Optical Platform
	144	Bin Liao, Lisheng Kuang, Yunjiang Lou and Jiangang Li	Efficiency Based Integrated Design of the V3 Parallel Manipulator for Pick-and-Place Applications		210	Monan Wang and Mingxu Wang	The Finite Element Analysis of the Shape of the Femoral Head Prosthesis on the Influence of the Hip Joint		286	Ran Wang, Yunli Wu, Cheng Wei and Yang Zhao	The Study of Spin Control of Flexible Electric Sail Using the Absolute Nodal Coordinate Formulation
Chairs: Guilin Yang / Weiwei Shang	262	Zhongning Jiang, Yuanxin Luo and Yan Jin	New Cable-Driven Continuum Robot with Only One Actuator	Chairs: Shanhai Jin / Silu Chen	213	Meng Shizhen, Jin Shanhai, Li Junqiang, Hashimoto Kazunobu, Guo Shijie and Dai Shijie	The Analysis of Human Walking Stability Using ZMP in Sagittal Plane	Chairs: Qing Li / Jian Liang	284	Xu Rui Jiang, Ming Gong Wu, Xiang Xi Wen, Congliang Tu and Zi Bo Lin Wang	A Multi-aircraft Conflict Resolution Method Based on Cooperative Game
	252	Sen Cai and Gang Zhang	Fatigue life prediction of high-speed railway bearing based on contact stress		218	Ru Ma, Junqiang Li, Shanhai Jin, Shijie Guo, Hashimoto Kazunobu and Shijie Dai	A speed-independent feedback index for walking pattern recognition for a walking assistive robotic suit		146	Zhiyu Ni, Jinguo Liu, Xinhui Shen and Chenguang Chang	On-orbit identification of spacecraft time-varying moment of inertia using an improved recursive subspace method
	240	Gaoyang Li, Packianather Michael, Chunbao He and Mingguang Liu	Research on Risk Fuzzy Comprehensive Evaluation for Construction Engineering Projects based on AHM								

Lunch

Technical and Cultural Tour

Farewell Reception