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| TP5-15 | A Robot system and Virtual Environment for Therapeutic Exercise in Upper Limb Rehabilitation: Robotic Exercise System <i>Seungyeol Lee(Daegu Gyeongbuk Institute of Science & Technology, Republic of Korea), Hyungjoon Sim(ISOL Technology, Republic of Korea), Jeon-Il Moon(Daegu Gyeongbuk Institute of Science & Technology, Republic of Korea)</i> | 1087 |
| TP5-16 | Gait Pattern Generation for Robotic Gait Rehabilitation System on Treadmill | 1090 |

FA01 Identification, Estimation, and Observers

206A, 09:10~10:40

| | | |
|--------|--|------|
| FA01-1 | Online Black-box Model Identification and Output Prediction for Sampled-data Systems | 1095 |
| | <i>Asim Zaheer, <u>Muhammad Salman</u>(National University of Sciences & Technology, Pakistan)</i> | |
| FA01-2 | An Aircraft's Parameter Identification Algorithm Based on Cloud Model Optimization | 1101 |
| | <i>Wei Zhang, <u>Yi-Lei Liu</u>(Northwestern Polytechnical University, China), Da-peng Guo(AVIC Aerodynamics Research Institute, China), Khayyam Masood, Jing Tian(Northwestern Polytechnical University, China)</i> | |
| FA01-3 | Identification of Continuous-time Hammerstein Models Using Simultaneous Perturbation Stochastic Approximation | 1107 |
| | <i><u>Mohd Ashraf Ahmad</u>, Shun-ichi Azuma, Toshiharu Sugie(Kyoto University, Japan)</i> | |
| FA01-4 | Multi-Target Tracking Algorithm Based on FIR filters | 1112 |
| | <i><u>Changjoo Lee</u>, Kyung Min Min, Hyun Duck Choi, Choon Ki Ahn, Myo Taeg Lim(Korea University, Republic of Korea)</i> | |
| FA01-5 | Observer-based Admissible Control for Singular Delta Operator Systems | 1117 |
| | <i><u>Xin-zhuang Dong</u>, MINGQING XIAO(Southern Illinois University Carbondale, United States), Yushun Wang, Wenxue He(Qingdao University, China)</i> | |
| FA01-6 | Sliding Mode Control of a Rotary Inverted Pendulum using Higher Order Differential Observer | 1123 |
| | <i><u>Philippe Faradja</u>, Guoyuan Qi, Martial Tatchum(Tshwane University of Technology, South Africa)</i> | |

FA02 Controls for Energy Systems

206B, 09:10~10:40

| | | |
|--------|--|------|
| FA02-1 | One-Step ahead Stabilizing Model Predictive Control for a Three-Phase AC/DC Converter | 1128 |
| | <i><u>Seok-Kyoon Kim</u>, Young Il Lee(SeoulTech., Republic of Korea)</i> | |
| FA02-2 | Voltage Regulation System based on ADRC for Doubly Salient Electro-magnetic Generator | 1134 |
| | <i>Jun Ding, <u>Weili Dai</u>, Hao Tian, Juntao Fei(Hohai University, China)</i> | |
| FA02-3 | Hierarchical Control of Power Networks by using Overlapping Information | 1140 |
| | <i>Tomoharu Suehiro, <u>Toru Namerikawa</u>(Keio University, Japan)</i> | |
| FA02-4 | Shunt Active Power Filter Based on a Novel Sliding Mode Backstepping Control for Three-phase Three-wire System | 1146 |
| | <i><u>Lihua Deng</u>, Juntao Fei, Changchun Cai(College of IOT Engineering, Hohai University, China)</i> | |
| FA02-5 | EKF-Based Fault Detection and Isolation for PMSM Driver Inverter | 1152 |
| | <i><u>Dan Luo</u>, Sang Man Seong(Korea Univ. of Tech. and Education, Republic of Korea)</i> | |
| FA02-6 | Developing a Linear Model of RF Power Generators with Pseudo Random Binary Signals (PRBS) | 1158 |
| | <i><u>Haijun Fang</u>(MKS Instruments, United States)</i> | |

FA03 Control of Multi-modal Robots

207A, 09:10~10:40

| | | |
|--------|---|------|
| FA03-1 | Omni-directional walking control for a six-legged robot using differential kinematics algorithm | 1163 |
| | <i>Giang Hoang, Jung Hu Min(Pukyong National University, Republic of Korea), Gyeong Mok Lee, Bong Huan Jun(Korea Research Institute of Ships and Ocean Engineering, Republic of Korea), Hak Kyeong Kim, Sang Bong Kim(Pukyong National University, Republic of Korea)</i> | |
| FA03-2 | Vision-based collaborative lifting using quadrotor UAVs | 1169 |
| | <i>Suseong Kim, Seungwon Choi, Hyeonbeom Lee, H. Jin Kim(Seoul National University, Republic of Korea)</i> | |
| FA03-3 | Pursuit and Evasion in a Recursive Nested Behavioral Control Structure for Unmanned Aerial Vehicles | 1175 |
| | <i>Alexander Alexopoulos, Tobias Schmidt, Essameddin Badreddin(Heidelberg University, Germany)</i> | |
| FA03-4 | 3-Dimensional Kinodynamic Motion Planning for an X4-Flyer Using 2-Dimensional Harmonic Potential Fields | 1181 |
| | <i>Kimiko Motonaka, Keigo Watanabe, Shoichi Maeyama(Okayama University, Japan)</i> | |
| FA03-5 | The Development of a 3D Position Measurement System for Indoor Aerial Robots | 1185 |
| | <i>Keigo Watanabe(Okayama Univ, Japan), Yuya Yamada(OMRON Corporation, Japan), Isaku Nagai(Graduate School of Natural Science and Technology, Okayama University, Japan)</i> | |
| FA03-6 | Hierarchical Backstepping Control for Trajectory-Tracking of Autonomous Underwater Vehicles Subject to Uncertainties | 1191 |
| | <i>Hsiu-Ming Wu, Mansour Karkoub(Texas A&M University at Qatar, Qatar)</i> | |

FA04 Disturbance Observers in Control Engineering

207B, 09:10~10:40

| | | |
|--------|--|------|
| FA04-1 | Design of Q-filters for disturbance observers via BMI approach | 1197 |
| | <i>Jung-Su Kim(Seoul National University of Science and Technology, Republic of Korea), Juhoon Back(Kwangwoon University, Republic of Korea), Gyunghoon Park(Seoul National University, Republic of Korea)</i> | |
| FA04-2 | Reinterpretation of Disturbance Observer as an Add-on Controller | 1201 |
| | <i>Hyungtae Seo, Kyung-Soo Kim, Soohyun Kim(KAIST, Republic of Korea)</i> | |
| FA04-3 | High Order Extended Observer Based Output Feedback Control for Unknown Nonlinear Systems | 1205 |
| | <i>Wonhee Kim(Dong-A University, Republic of Korea), Chung Choo Chung(Hanyang University, Republic of Korea)</i> | |
| FA04-4 | Reduced Order Type-k Disturbance Observer based on Generalized Q-filter Design Scheme | 1211 |
| | <i>Youngjun Joo, Gyunghoon Park(Seoul National University, Republic of Korea)</i> | |
| FA04-5 | Frequency-Shaped Impedance Control for Safe Human-Robot Interaction in Reference Tracking Application | 1217 |
| | <i>Kyoungchul Kong, Sehoon Oh, Hanseung Woo(Sogang University, Republic of Korea)</i> | |
| FA04-6 | Application of a Disturbance Observer for Wireless Network Control Systems | 1223 |
| | <i>Yeongtae Jung, Joonbum Bae(UNIST, Republic of Korea)</i> | |

FA05 Electric Vehicle Control

208A, 09:10~10:40

| | | |
|--------|---|------|
| FA05-1 | Integrated Estimation of Vehicle States, Tire Forces, and Tire-Road Friction Coefficients | 1227 |
| | <i>Tesheng Hsiao, Jing-Yuan Lan(National Chiao Tung University, Taiwan), Hanping Yang(Industrial</i> | |

Technology Research Institute, Taiwan)

| | | |
|--------|---|------|
| FA05-2 | A CAN-Based Design for the Control of Electric Vehicle | 1233 |
| | <i>Der-Cherng Liaw, Cheng-Yu Yu, Kuo-Chen Wu(National Chiao Tung University, Taiwan)</i> | |
| FA05-3 | A TDMA Based Scheme for the Construction of R2R Communication Platform | 1238 |
| | <i>Der-Cherng Liaw, Chia-Wei Yeh, Sung-Ming Lo(National Chiao Tung University, Taiwan)</i> | |
| FA05-4 | An Anti-Racing PWM-based Battery Pack Equalization | 1244 |
| | <i>Lan-Rong Dung(National Chiao Tung University, Taiwan)</i> | |
| FA05-5 | A New Method for Three-dimensional Measurement with Two Horizontally-aligned Omni-directional Cameras | 1249 |
| | <i>Sheng-Fuu Lin, Jau-Chi Ke, Hsin-Yi Liu, Jiao-Rou Liao(National Chiao Tung University, Taiwan)</i> | |

FA06 Basics on Collaborative Filtering and Recommendation System

208B, 09:10~10:40

FB01 Robust Control

206A, 13:30~15:00

| | | |
|--------|---|------|
| FB01-1 | H-infinity Performance Analysis of Singular Systems via Delta Operator Method | 1255 |
| | <i>Xin-zhuang Dong, MINGQING XIAO(Southern Illinois University Carbondale, United States)</i> | |
| FB01-2 | Robust PI compensators design for FOPDT systems with large uncertainty | 1261 |
| | <i>Pedro Mercader, Alfonso Baños(University of Murcia, Spain)</i> | |
| FB01-3 | Adaptive Sliding Mode Control for Dual Missile | 1267 |
| | <i>Seunghyun Kim, H. Jin Kim(Seoul National University, Republic of Korea)</i> | |
| FB01-4 | Linear Quadratic Evolution Algorithm Optimizer for Model Predictive Control at Model Uncertainty | 1272 |
| | <i>Haitham Osman(King Khalid University, Saudi Arabia)</i> | |
| FB01-5 | Modal Parametric Optimization of Control Laws with Special Structure | 1278 |
| | <i>Evgeny I. Veremey, Margarita V. Sotnikova, Vladimir V. Eremeev, Maxim V. Korovkin(Saint Petersburg State University, Russian Federation)</i> | |
| FB01-6 | Robust L2-L∞ Filtering for Uncertain Neutral Stochastic System with Markovian Jumping Parameters and Time Delay | 1284 |
| | <i>Huasehng Tan, Mingang Hua(Hohai University, China)</i> | |

FB02 Bio-systems and Process Control

206B, 13:30~15:00

| | | |
|--------|---|------|
| FB02-1 | Automatic Segmentation of Phalanges Regions in CR Images Based on MSGVF Snakes | 1290 |
| | <i>Shota Kajihara, Seiichi MURAKAMI, Hyoungeop KIM, Joo Kooi TAN, Seiji ISHIKAWA(Kyushu Institute of Technology, Japan)</i> | |
| FB02-2 | Dynamic analysis of the spinal-pelvic motion match during feline galloping for speed increase into quadruped robotic system | 1294 |
| | <i>Young Kook Kim, Jongwon Park, Byungho Yoon, Kyung-Soo Kim, Soohyun Kim(KAIST, Republic of Korea)</i> | |
| FB02-3 | Soft sensor design with state estimator for lipid estimation of microalgal photobioreactor system | 1299 |
| | <i>Sung Jin Yoo, Jung Hun Kim, Jong Min Lee(Seoul National University, Republic of Korea)</i> | |

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|--------|---|------|
| FB02-4 | Optimal Design and Operation of an Extractive Fermentation Process for Continuous Biobutanol Production | 1305 |
| | <i>Boeun Kim, Hong Jang, Moon-Ho Eom, Jay H. Lee(KAIST, Republic of Korea)</i> | |
| FB02-5 | Development of CAD for Zone Dividing of Process Control Networks to Improve Cyber Security | 1311 |
| | <i>Hiroki Moritani(Nagoya Institute of Technology, Japan)</i> | |
| FB02-6 | A Conceptual Approach to Construction of Large Information Systems International | 1317 |
| | <i>Bikesh Khaidarovna Kurmangalieva, Raissa Kabievna Uskenbayeva, Abu Abdykadyrovich Kuandykov(International Information Technology University, Kazakhstan), Young Im Cho(University of Suwon, South Korea, Republic of Korea), Gulnara Umitkulovna Bektemyssova(International Information Technology University, Kazakhstan)</i> | |

FB03 Robot Systems Control

207A, 13:30~15:00

| | | |
|--------|---|------|
| FB03-1 | Input shaper design using impulse-time perturbation method | 1321 |
| | <i>Chang-Wan Ha(KIMM, Republic of Korea), Keun-Ho Rew(Hoseo University, Republic of Korea), Kyung-Soo Kim(KAIST, Republic of Korea)</i> | |
| FB03-2 | Posture Control Strategy of a Platform using a RP Manipulator | 1325 |
| | <i>M. M. Gor, P. M. Pathak(Indian Institute of Technology Roorkee, India), A. K. Samantaray(Indian Institute of Technology Kharagpur, India), J.- M. Yang(Kyungpook National University, Republic of Korea), S. W. Kwak(Keimyung University, Republic of Korea)</i> | |
| FB03-3 | Impedance Controlled Twisted String Actuators for Tensegrity Robots | 1331 |
| | <i>In-Won Park, Vytas SunSpiral(NASA Ames Research Center, United States)</i> | |
| FB03-4 | A Novel PID Controller Gain Tuning Method for a Quadrotor Landing on a Ship Deck using the Invariant Ellipsoid Technique | 1339 |
| | <i>Chun Kiat Tan, Jianliang Wang(Nanyang Technological University, Singapore)</i> | |
| FB03-5 | Wheel Angular Velocity Stabilization using Rough Encoder Data | 1345 |
| | <i>Margarita V. Sotnikova, Evgeny I. Veremey, Natalia A. Zhabko(Saint-Petersburg State University, Russian Federation)</i> | |
| FB03-6 | Consensus of Networked Multi-Agent Systems With Communication Delay Compensation | 1351 |
| | <i>Xieyan Zhang, Jing Zhang(Hunan University, China)</i> | |

FB04 Statistical Inference and Data Mining

207B, 13:30~15:00

| | | |
|--------|--|------|
| FB04-1 | Movement Characteristics of Entire Bodies in Dancers' Interaction | 1357 |
| | <i>Nao Shikanai(Japan Women's University, Japan), Worawat Choensawat(Bangkok University, Thailand), Kozaburo Hachimura(Ritsumeikan University, Japan)</i> | |
| FB04-2 | Statistical Mechanical Bayesian Inference and Its Applications | 1362 |
| | <i>Yohei Saika(Gunma National College of Technology, Japan)</i> | |
| FB04-3 | Retrieval of Similar behavior data using Kinect Data | 1368 |
| | <i>Kenta Sakurai, WOONG CHOI(Gunma National College of Technology, Japan), Liang Li, Kozaburo Hachimura(Ritsumeikan University, Japan)</i> | |
| FB04-4 | Tasks scheduling and resource allocation in distributed cloud environments | 1373 |
| | <i>Raissa K. Uskenbayeva, Abu A. Kuandykov(International IT University, Kazakhstan), Young I. Cho(The University of Suwon, Republic of Korea), Zhyldyz B. Kalpeyeva(K.I.Satpayev KazNTU, Kazakhstan)</i> | |

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|--------|---|------|
| FB04-5 | Sparse Representation Approach to Inverse Halftoning in Terms of DCT Dictionary <i>Toshiaki Aida, <u>Yuhri Ohta</u>(Okayama University, Japan)</i> | 1377 |
|--------|---|------|

FB05 Measurement, Control, and Systems in the Steel Industry

208A, 13:30~15:00

| | | |
|--------|--|------|
| FB05-1 | Design of a disturbance observer for discrete-time linear systems <i><u>Dongyeop Kang</u>(POSCO, Republic of Korea)</i> | 1381 |
| FB05-2 | Estimation of Electrode Consumption using Mast Position in Electric Arc Furnace <i><u>Kyuhwan Kim</u>, Jae Jin Jeong(Pohang University of Science and Technology, Republic of Korea), Taewon Kim(Research Institute of Science and Technology, Republic of Korea), Sang Woo Kim(Pohang University of Science and Technology, Republic of Korea)</i> | 1384 |
| FB05-3 | An edge detection algorithm for steel bar in hot rolling process <i><u>JinWoo Yoo</u>, Won Il Lee(POSTECH, Republic of Korea), NamWoong Kong, Yong-Joon Choi(POSCO, Republic of Korea), PooGyeon Park(POSTECH, Republic of Korea)</i> | 1389 |
| FB05-4 | Development of HILS Simulator for Steering Control in Hot Strip Finishing Mill <i><u>wookyong Kwon</u>, SungBin Kim, Sangchul Won(POSTECH, Republic of Korea)</i> | 1392 |

FB06 Meet the Expert: Prof. Kazerooni

208B, 13:30~15:00

FP1 Advanced Mechatronics

212&213, 16:30~18:00

| | | |
|-------|--|------|
| FP1-1 | Pose Graph SLAM-Based Displacement Estimation for a Multiple Structural Displacement Monitoring System <i><u>Donghwa Lee</u>, Haemin Jeon, Hyun Myung(KAIST, Republic of Korea)</i> | 1395 |
| FP1-2 | Development of a Continuum Robot using Pneumatic Artificial Muscles <i>Bong-Soo Kang, <u>Ryeong-Hyeon Kim</u>(Hannam University, Republic of Korea)</i> | 1401 |
| FP1-3 | A study on methodology to improve the power factor of high power LED module <i><u>Young Hwan Lho</u>, Sang Yong Lee(Woosong University, Republic of Korea)</i> | 1404 |
| FP1-4 | Trajectory Generation for a Car-Like Mobile Robot using Closed-Loop Prediction <i><u>Byungjae Park</u>(ETRI, Republic of Korea)</i> | 1407 |
| FP1-5 | Design and system configuration on the radiation tumor therapy system with safe robotic arms <i><u>seungho kim</u>, Yeong Geol Bae, Kyung Min Jung, Sung Uk Lee, Hocheol Shin, Hyeonseok Na(KAERI, Republic of Korea)</i> | 1411 |
| FP1-6 | Control of an Robotic Vehicle for Entertainment Using Vision in University Campus <i>Seul Jung, <u>Sungteak Cho</u>(Chungnam National University, Republic of Korea)</i> | 1415 |

FP2 Vehicle Control Systems

212&213, 16:30~18:00

| | | |
|-------|--|------|
| FP2-1 | Estimation of Vehicle clutch torque using combined sliding mode observers and unknown input observers <i><u>Kyoungseok Han</u>, Seibum Choi, Jiwon Oh(KAIST, Republic of Korea)</i> | 1418 |
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|-------|---|------|
| FP2-2 | Decision Making Methods Based on Nonlinear Model Predictive Control for Emergency Collision Avoidance in Complex Situations <i><u>HYUNGJUNE BAE</u>, YEONSIK KANG(Kookmin University, Seoul, Korea, Republic of Korea)</i> | 1424 |
| FP2-3 | Development of auto-tuning shift-pattern in Auto-cruise vehicles <i><u>Hyunsub Lee</u>, Changwoo Shin(Seoul National University, Republic of Korea), wonsik Lim(Seoul National University of science and technology, Republic of Korea), sukwon Cha(Seoul National University, Republic of Korea), Yongdal Lee, Jeongwook Kim(Hyundai-Kia motors, Republic of Korea)</i> | 1428 |
| FP2-4 | ECU-in-the-Loop Real-Time Simulation Technique for Developing Integrated Vehicle Safety System <i><u>Kyoung-Soo We</u>, Chang-Gun Lee, Junyung Lee, Kyuwon Kim, Kyongsu Yi(Seoul National University, Republic of Korea), Jong-Chan Kim(Kookmin University, Republic of Korea)</i> | 1432 |
| FP2-5 | Implementation of Approach to Functional Safety Compliant Brushless DC Motor Control System <i><u>Ki-Ho Lee</u>, Chanwoo Moon, Hyun-Sik Ahn(Kookmin University, Republic of Korea)</i> | 1438 |
| FP2-6 | Development of Lateral Control System for Autonomous Vehicle Based on Adaptive Pure Pursuit Algorithm <i><u>myungwook park</u>, sangwoo Lee, wooyoung Han(ETRI, Republic of Korea)</i> | 1443 |
| FP2-7 | Lane Confidence Assessment and Lane Change Decision for Lane-level Localization <i><u>Heong-tae Kim</u>, Ohjoon Kwon, Bongsob Song(Ajou university, Republic of Korea)</i> | 1448 |
| FP2-8 | Integrated Risk Management for Automated Driving <i><u>Junyung Lee</u>, Beomjun Kim, Kyongsu Yi(Seoul National University, Republic of Korea)</i> | 1452 |

FP3 e-Government System

212&213, 16:30~18:00

| | | |
|-------|---|------|
| FP3-1 | Overview of Seamless Mobility in Heterogeneous Wireless Networks <i><u>Aray Meyrambaykizi Kassenkhan</u>(KAZAKH NATIONAL TECHNICAL UNIVERSITY named after K. Satpaev, Kazakhstan), Raisa Kabievna Uskenbayeva(International University of Information Technologies, Kazakhstan)</i> | 1458 |
| FP3-2 | Construction of Recognition System at the Uranium Production Process <i><u>Syrymbet Iskakov</u>(International University of Information Technologies, Kazakhstan), Gulnara Umitkulovna Bektemyssova(International Information Technology University, Kazakhstan), Cho Young Im(University of Suwon, South Korea, Republic of Korea), Ravil Muhamediyev(Information Systems Management Institute, Latvia., Latvia), Kuandykov Abu, Alim Khamitov(International Information Technology University, Kazakhstan)</i> | 1462 |
| FP3-3 | Multidimensional indexing structure development for the optimal formation of aggregated indicators in OLAP hypercube <i><u>Nurzhan Kakenovich Mukazhanov</u>, Raissa Kabievna Uskenbayeva(International Information Technology University, Kazakhstan), Young Im Cho(The University of Suwon, Republic of Korea), Gulnar Umitkulovna Bektemyssova(International Information Technology University, Kazakhstan), Dinara Khanatovna Kozhamzharova(Kazakh National Technical University named after K.I. Satpayev, Kazakhstan), Bikesh Kurmangalieva(International Information Technology University, Kazakhstan)</i> | 1466 |
| FP3-4 | Main Principles of Task Distribution in Multi-Agent Systems and Defining the Basic Parameters <i><u>Dinara Khanatovna Kozhamzharova</u>(Kazakh National Technical University named after K.I. Satpayev, Kazakhstan), Raissa Kabievna Uskenbayeva, Abu Abykadyrovich Kuandykov(IITU, Kazakhstan), Young Im Cho(The University of Suwon, Republic of Korea), Olimzhon Abdukhakimovich Baimuratov(Suleyman Demirel University , Kazakhstan)</i> | 1471 |

FP4 Control Theory and Applications III

212&213, 16:30~18:00

| | | |
|-------|---|------|
| FP4-1 | The Application Methods of Wireless Technology for Operating Nuclear Power Plants <i>Songhae Ye(Korea Hydro & Nuclear Power Co.(KHNP), Republic of Korea)</i> | 1475 |
| FP4-2 | Implementation of Fault-tolerant Architecture for Central Data Processing System in Space Center <i>YONGTAE CHOI(Korea Aerospace Research Institute, Republic of Korea), SUNGWOONG RA(ChungNam National University, Republic of Korea)</i> | 1479 |
| FP4-3 | On-Board Computer Design & Implementation for Korean LEO Satellites <i>Lee Yun Ki(KARI (Korea Aerospace Research Institute), Republic of Korea), Kim Ji Hoon(Chungnam National University, Republic of Korea)</i> | 1484 |
| FP4-4 | Applicability test on black-box testing tool of railway signaling system in consideration of the convenience of use <i>Jong-Gyu Hwang, Jong-Hyun Baek, Kam-Mi Lee, Hyun-Jeong Jo(Korea Railroad Research Institute, Republic of Korea)</i> | 1489 |
| FP4-5 | Global Dynamic Neuroadaptive Tracking Control of Strict-Feedback Systems <i>Jeng-Tze Huang(Chinese Culture University, Taiwan)</i> | 1496 |
| FP4-6 | Part-based Face Detection using SLBP <i>Jeonghyun Baek, jisu kim, Euntai Kim(Yonsei University, Republic of Korea)</i> | 1501 |
| FP4-7 | T-S Fuzzy H_infinity Control of IPMSM Using Weighted Integral <i>Seungkyu Park, Hokyun Ahn(Changwon National University, Republic of Korea)</i> | 1504 |
| FP4-8 | The Semantic Alignment of H-FOAF, DOMAIN and <i>syed hassan(GNU, Sweden), Abid Fareedi(Jonkoping university, Sweden)</i> | 1508 |
| FP4-9 | THE IMPACT OF SOCIAL MEDIA NETWORKS ON HEALTHCARE PROCESS KNOWLEDGE MANAGEMENT (USING OF SEMANTIC WEB PLATFORMS) <i>syed hassan(GNU, Sweden), abid fareedi(Jonkoping University, Sweden)</i> | 1514 |

FP5 Controls in Industry and Practice III

212&213, 16:30~18:00

| | | |
|-------|---|------|
| FP5-1 | A Modular DC-DC Converter with Zero Voltage Switching Capability <i>Seyed Hossein Hosseini, Farzad Sedaghati, Mehran Sabahi(University of Tabriz, Iran, Islamic Republic of), Gevorg Gharehpetian(Amirkabir University of Technology, Iran, Islamic Republic of)</i> | 1520 |
| FP5-2 | Closed-Form Formulas for Continuous/Discrete-Time PID Controllers' Parameters <i>Thanit Trisuwannawat, Numchai Narkvitul, Prapart Ukakimaparn(King Mongkut's Institute of Technology Ladkrabang (KMITL), Thailand)</i> | 1526 |
| FP5-3 | Estimation of Burn-Through Point in the Sinter Process <i>JIWUNG JEONG, Bo-Ram Kim, Kang-Bak Park(Korea University, Republic of Korea), Dongchang Han, Keonho Hwang, Jongjun Lee, Jaejun Lee(Hyundai Rotem Company, Republic of Korea)</i> | 1531 |
| FP5-4 | Integration of the Microalgae Droop Model with the Metabolic Network System for Biodiesel Production <i>Minkyu Jeon, Boeun Kim, Min-Gyu Sung, Jay H. Lee(Korea Advanced Institute of Science and Technology, Republic of Korea)</i> | 1534 |
| FP5-5 | Arrangement of array microphones for hearing aids based on delay-weight-sum beamforming methods | 1540 |

Jihyeon Jeong(KAIST, Republic of Korea)

| | | |
|--------|---|------|
| FP5-6 | Analog Filter Circuits Feature Selection Using MRMR and SVM <i>Yongkui Sun, <u>Lei Ma</u>, Na Qin, Meilan Zhang, Qianyong Lv(Southwest Jiaotong University, China)</i> | 1543 |
| FP5-7 | The Development of System of Accommodation To Faults of Navigation Sensors of Underwater Vehicles with Resistance to Disturbance <i>Aleksander Protchenko(Far Eastern Federal University, Russian Federation)</i> | 1548 |
| FP5-8 | Mobile Anchor Assisted Distributed Localization for Wireless Sensor Networks with Holes <i>Longfei Wen, Fenxi Yao, Guang Ye, <u>Lingguo Cui</u>, Baihai Zhang(Beijing Institute of Technology, China)</i> | 1554 |
| FP5-9 | Extended Virtual Force-Based Coverage Scheme for Heterogeneous Wireless Sensor Networks <i>Guang Ye, Baihai Zhang, Longfei Wen, Senchun Chai, <u>Lingguo Cui</u>, Jun Li(Beijing Institute of Technology, China)</i> | 1560 |
| FP5-10 | An Enhanced Histogram Specification Method Using Multiresolution <i><u>Kang su-min</u>, Huh Kyung-Moo(Dankook University, Republic of Korea), Joo Young-Bok(Korea University of Technology & Education, Republic of Korea), Park Se-Hyuk(Dankook University, Republic of Korea)</i> | 1565 |
| FP5-11 | Fuzzy-EKF for the Mobile Robot Localization Using Ultrasonic Satellite <i><u>Haiyun Wang</u>(Inha University, Republic of Korea)</i> | 1571 |
| FP5-12 | High Resolution Time Delay Estimator of Transient Detection Using Non-Uniform Sampling Model Based Parameter Estimator <i>Songkord Thirachai(National Electronics and Computer Technology Center, NECTEC, Thailand), <u>Sunisa Sornmuang</u>(National Electronics and Computer Technology Center, Thailand), Jittiwut Suwatthikul(National Electronics and Computer Technology Center, NECTEC, Thailand)</i> | 1576 |
| FP5-13 | Vibration Adaptive Vision Inspection System <i><u>Kap-Ho Seo</u>(Korea Institute of Robot and Convergence, Republic of Korea)</i> | 1581 |

FP6 Robotics and Systems III

212&213, 16:30~18:00

| | | |
|-------|--|------|
| FP6-1 | Playing Alkagi with a Humanoid Robot <i><u>JOONSIG GONG</u>, Songhwai Oh(Seoul National University, Republic of Korea)</i> | 1587 |
| FP6-2 | Portable Serial Robot Manipulator with Distributed Actuation Mechanism <i><u>Sung-Hwan Kim</u>, Byungho Yoon, Ho Ju Lee, Soohyun Kim, Kyung-Soo Kim(KAIST, Republic of Korea), Jong Cheol Kim, Tae Yang Noh(Hyundai Heavy Industries, Republic of Korea)</i> | 1590 |
| FP6-3 | Mechanism and kinematic analysis of a robotic gadget for assisting hand movements of persons with severe disabilities to promote their community participation <i><u>Seungmin Jung</u>, Kwangok An(Korea National Rehabilitation Center, Ministry of Health & Welfare, Republic of Korea), Jongbae Kim(Yonsei University, Republic of Korea), Hyungsik Kim(Korea National Rehabilitation Center, Ministry of Health & Welfare, Republic of Korea)</i> | 1594 |
| FP6-4 | Design of Mobile Robot for Real World Application in Path Planning Using ZigBee Localization <i><u>Natthapol Watthanawisuth</u>, Adisorn Tuantranont(National Electronics and Computer Technology Center Pathumthani, Thailand, Thailand), Teerakiat Kerdcharoen(Faculty of Science, Mahidol University, 272 Rama 6 Rd, Ratchatawee, Bangkok 10400, THAILAND, Thailand)</i> | 1600 |
| FP6-5 | Soil sensing survey robots based on electronic nose <i>Teerakiat Kerdcharoen, <u>Theerapat Pobkrut</u>(Faculty of Science, Mahidol University, 272 Rama 6 Rd, Ratchatawee, Bangkok 10400, THAILAND, Thailand)</i> | 1604 |

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