		Cattleya
	Time	B. Mechatronic and robotics Engineering, L. Environmental, Food, Health
Date		Science & Technology, CK. Advanced Techniques and Applications for Mobile
		Communication
		Prof. Ying-Ling Chen, Session Chair
		CB9001
	08:00~08:12	Robotic Control by Teleoperation and Delay Time Issues Using the Internet
		Anuntachai Machim, Murray John Lawn, Ikuo Yamamoto
		CB9003
	00.12.00.24	Effective Path Planning for Collision-Free Guidance of a Passive Robot Walking
	08:12~08:24	Helper
		Shu-Ling Cheng, Chun-Hsu Ko, Kuu-Young Young
		CB9006
	08:24~08:36	Path Control iRobot Create2 Based Sensors
		Narong Aphiratsakun, Santi Liwsakphaiboon
		SCK9002
	00.26.00.40	Design and Implementation of a Capacitorless Low Dropout Regulator for Low
	08:36~08:48	Power SoC Applications
		Min-Chin Lee, Yi-Xiang Huang
	08:48~09:00	SCK9003
		Improving the Skills Training of Base Station Maintenance by Using the MR
		Fusion and Image Recognition Techniques
16 th July		Chin-Lun Lai
(Tue.)		SCK9006
	09:00~09:12	Implement an Assisting Equipment of Power Rehabilitation System
		Ching-Sung Wang, Yo-Wei Lin
	09:12~09:24	SCK9007
		Using Mobile Computing Technique for English Education
		Ying-Ling Chen
		CL9003
	09:24~09:36	Reclamation of Nickel in Wastewater as Basic Nickel Carbonate Crystal by
	09.24~09.30	Fluidized-bed Homogeneous Crystallization (FBHC)
		Syuan-Tang Wang, Cheng-Yen Huang, Yu-Jen Shih, Yao-Hui Huang
		CL9006
	09:36~09:48	Recovery of Iron as Goethite in the Presence of Carbonate and Dissolved Oxygen
	09:30~09:48	by Fluidized-bed Homogeneous Granulation(FBHG)
		Tsung-Yen Wu, Pin-Lun Wu, Yu-Jen Shih, Yao-Hui Huang
		CL9010
	09:48~10:00	Investigating the Oxidation Efficiency of Hg0 at Low Temperatures by Using
		CuO/TiO2 Photocatalysts and Their Surface Characteristics
		Shih-Wen Wang, Jun-Zhu Yang, Iau-Ren Ie, Chung-Shin Yuan

Session		Azalea
	Time	D. Optical Engineering, M. Innovation Management, N. Intelligent Computing,
Date		CF. Intelligent Automated Optical Inspection and Measurement, CM.
		Technology of AI and IoT with Wireless and Advanced Networking
		Dr. Madhusudan Raghavan, Session Chair
		CD9006
		Beam Shaping with Collimated Rotation Symmetric Profile from Collimated Light
	08:00~08:12	Source
		Chen-Kang Wu, Cheng-Mu Tsai
		SCF9001
		In-line Automatic Optical Inspection (AOI) in A Non-stop Manufacturing Line
	08:12~08:24	Aided by 6R Robot Arm
		Zai-Gen Wu, Shu-Ping Lin, Wei-Hao Lu, Po Ting Lin
		SCF9002
		Probabilistic Image Classification with Kernel Density Estimation of Image
	08:24~08:36	Quality Factors
		Tso-Han Hsueh, Wei-Hao Lu, Shu-Ping Lin, Po-Ting Lin
		SCF9004
		Instantaneous Analyzing of Shadow Moiré Fringes Phases for Out-of-plane
	08:36~08:48	Displacement Measurement
		Ju-Yi Lee, Ying-Kai Hsu, Hong-Yih Yeh, An-Chi Wei
	08:48~09:00	CM9004
16 th July		The Emergence and Growth Path of Shanzhai Firms
(Tue.)		Jason Shay, Peter Shieh, Ming-Piao Tsai, Hsiang Jui Cheng
		CN9001
	09:00~09:12	Weighted Random Forests for Evaluating Financial Credit Risk
		Tzu-Tsung Wong, Shang-Jung Yeh
		CN9007
	09:12~09:24	The Autonomous Shopping-Guide Robot in Cashier-Less Convenience Stores
		Po-Han Lin, Cheng-Yi Lin, Chen-Ting Hung, Jen-Jee Chen, Jia-Ming Liang
		CN9008
	09:24~09:36	Privacy-preserving Distributed Deep Learning Based on Secret Sharing
		Jia Duan, Jiantao Zhou
	09:36~09:48	CN9009
		Tangency Problem for Circles in Bubble Chart
		Ching-Shoei Chiang, Hung-Chieh Li
		SCM 9003
	09:48~10:00	The Real-time Deep Learning Based Intrusion Detection System to Prevent SSH
		Brute Force Attacks in Software Defined Networks
		Tsung-Han Lee, Chao-Wei Syu, Lin-Huang Chang
		13 12.00, Chart Hot Syn, Line Huang Chang

Session		Lilac
Date	Time	A. Materials Engineering, G. Green Technology & Civil Engineering, H. Industry 4.0 & Automation Engineering, CE. Advances in High Performance Alloys Prof. Jacob Huang, Session Chair
	08:00~08:12	CG9006 High-density Eddy Flow Bioreaction of Anaerobic Ammonium Oxidation Technology with Real-time Monitoring System Tsz Chang, Chi-Chio Ng, Ting-Cih Huang, Hsiu-Yi Tsai, Gema-Syahidan-Akbar Prawira, Wen-Yaw Chung, Yu-Tzu Huang
	08:12~08:24	CA9013 Pellet Formulation and Wire Extrusion for Printing Composite NdFeB Magnets by Fused Deposition Modeling Guan-Lin Hwang, Yen-I Lee, Huang-Wei Chang, Wen-Cheng Chang, Tsung-Wei Chang, Mi-Ching Tsai
	08:24~08:36	CA9014 Fabrication of N-type GaN Thin Film through Si and Ti co-doping on a Glass Substrate by Using Magnetron Sputtering System Wei-Sheng Liu, Chun-Yuan Tan, Yu-Lin Chang, Cheng-Ting Tsai
	08:36~08:48	CA9019 Dual Electro- and Magneto-Response of Poly(diphenylamine)-Magnetite Composite Based Suspension Yu Zhen Dong, Hyoung Jin Choi
16 th July	08:48~09:00	CA9020 AI-assisted Biomimetic Design for Patterned Dry Adhesives Bo-Cheng Chen, Kai-Ming Wu, Siao-Ling Li, Yi-Chang Chung, Tzung-Pei Hong, Chau-Cho Yu, Chih-Hung Wu
(Tue.)	09:00~09:12	CH9003 Machine Learning Models for Gas Transmission Plant Equipment Failure Prediction Prachaya Achariyapagon, Ponkrit Mangkrakupt, Anirut Tongtanee
	09:12~09:24	SCE9005 Vacancy Formation in the CoCrFeMnNi High Entropy Alloys Hung-Sheng Chou, Tu-Ngoc Lam, E-Wen Huang
	09:24~09:36	SCE9006 Synthesis of Graphite Encapsulated Ferromagnetic and Non-ferromagnetic metal nanocrystals by Using an Arc-discharge method Mao-Hua Teng, Yu-Chieh Huang, Jhih-Ying Chen, Tun-Hao Tsai
	09:36~09:48	SCE9007 New Processing and Strengthening/Toughness Mechanisms in Multi-principal-element alloys X. H. Du, W. P. Li, T. Yang, J. C. Huang, C. T. Liu, Q. Li, F. R. Chen, W. S. Chuang, E. W. Huang
	09:48~10:00	SCE9012 Effects of Al Content on Air-oxidation of Ni2FeCoCrAlx High-entropy superalloys at 700–900oC Wu Kai, Fu-Pen Cheng, Feng-Chih Chien, Ji-Jung Kai, Chain-Tsuan Liu, Chaur-Jeng Wang

Paper Award 1

Date	Time	Cattleya
		CC9001
	10 10 10 25	ESD-Protection Design of UHV Circular N-channel LDMOSs by the Drift Region
	10:10~10:25	with Elliptical Cylinder Super-junctions
		Shen-Li Chen, Pei-Lin Wu, Yu-Lin Jhou, Po-Lin Lin, Sheng-Kai Fan, Yu-Jen Chen
		CF9008
	10:25~10:40	Combining Cloud Computing and Artificial Intelligence Scene Recognition in
	10.23~10.40	Real-time Environment Image Planning Walkable Area
		Jia-Shing Sheu, Chen-Yin Han
		CF9024
	10:40~10:55	Frame-synchronous Blind Audio Watermarking for Tamper Proofing and
	10.40~10.55	Self-Recovery
		Hwai-Tsu Hu, Ying-Hsiang Lu
		CN9004
	10:55~11:10	Improved Whale Optimization Algorithm Based on Inertia Weights for Solving
	10:55~11:10	Global Optimization Problems
		I-Ming Chao, Shou-Cheng Hsiung, Jenn-Long Liu
16 th July		SCF9003
(Tue.)	11:10~11:25	Machine Vision and Deep Learning based Rubber Gasket Defects Detection
		Chao-Ching Ho, Eugene Su, Po-Chieh Li, Matthew J. Bolger, Huan-Ning Pan
	11:25~11:40	СЈ9009
		The Design of Mold Clamping Mechanisms with Two Toggle Configurations
		Tzu-Hsia Chen, Long-Chang Hsieh
	11:40~11:55	CH9002
		Remote Monitoring for the Operation Status of CNC Machine Tools Based on
		HTML5
		Yu-Shun Wang, Ling-Song He, Zhi-Qiang Gao, Jun-Feng Wang, Yang-Fan Cao
		CI9005
	11:55~12:10	Robust Adaptive Depth Control of Hybrid Underwater Glider in Vertical Plane
		Ngoc-Duc Nguyen, Hyeung-sik Choi, Han-Sol Jin, Jae-Heon Lee
	12:10~12:25	CL9018
		A Quantitative Study of Public Perceptions in Environmental Risk: Dose Gender
		Matter?
		Chia-Lee Yang, Chao-Chun Chuang, Chang-Wei Yeh, Chang-Huain Hsieh,
		Ching-Chun Hsu

		Azalea
	Time	C. Electrical & Electronic Engineering, CG. System Development, Control, and
Date		Optimization, CH. Control System and Applications, CM. Technology of AI
		and IoT with Wireless and Advanced Networking
		Prof. Chian-C. Ho, Session Chair
		SCG9001
	10:10~10:22	A Fast Design Procedure of 3D Printable Porous Structures
		Guang-Liang Chen, Po Ting Lin
		SCG9002
	10:22~10:34	End Effector Absolute Positioning Under Various Loading Conditions Based on
	10.22~10.34	Cable Measurement Trilateration and Kriging Modeling
		Hsiang-Chih Shih, Po Ting Lin
		SCG9003
	10:34~10:46	Investigation of Soft Actuator Kinematics Based on Parametric DH Functions
		Kai-An Yang, Yu-Ta Yao, Wei-Yao Tan, Po-Ting Lin
		SCG9018
	10:46~10:58	Building a Predicted Corner and Circle Milling Error for a CNC Machine by a
	10.40*10.56	General Regression Neural Network Model
		Yi-Cheng Huang, Zi-Sheng Yang, Hsien-Shu Liao
		CC9011
	10:58~11:10	Cost Optimization and Deadlock Avoidance in iPhoneXS-like Manufacturing
	10:38~11:10	Processes Using Petri Nets
		Ting-Jui Huang, Victor Rong-Lin Shen, Tong-Ying Juang
		CC9013
16 th July	11:10~11:22	Supervised Deep Learning by Petri Nets
(Tue.)		Wen-Hao Chen, Victor R. L. Shen, Tony Tong-Ying Juang
	11:22~11:34	CC9014
		A Time-Frequency Analysis for Intervals of the QRS Complex of
		Electrocardiograms
		Yen-Ching Chang, Chun-Yen Lin, Wei-Shiuan Yan, Tzu-Yun Pan
		SCH9003
	11:34~11:46	Markerless Indoor/Outdoor Augmented Reality Navigation Device Based on
		ORB-visual-odometry Positioning estimation and ORB-visual-mapping Image
		Registration
		Ching-Hsiang Tsai, Chian C. Ho, Nai-Hsin Pan
	11 46 11 50	SCM9001
	11:46~11:58	IoT System Development for Smart Mushroom Greenhouse
		Chuan-Pin Lu, Cheng-Sheng Lin, Sheng-Tung Cheng, Yun-Jie Zhang
	11.50 10.10	SCM9005
	11:58~12:10	Application of Programmable Logic Controller for Smart Home Automation
		Yu-Huei Cheng
	12:10~12:22	SCM9004 The Influence of the Angle of Feetune Point for Indeed Positioning by Mechine
		The Influence of the Angle of Feature Point for Indoor Positioning by Machine
		Vision True Chang Hugng, Van Long Chan, Jian Ligar, Ligar
		Tzu-Cheng Huang, Kun-Leng Chen, Jiun-Jian Liaw

		Lilac
Date	Time	F. Computer & Information Engineering, L. Environmental, Food, Health Science & Technology, O. Other Engineering and Technology related topics, CB. Advances in Computer and Communications Engineering, CE. Advances in High Performance Alloys, CM. Technology of AI and IoT with Wireless and Advanced Networking Dr. Wanpeng Li, Session Chair
	10:10~10:22	CF9003 Cooperative Monitoring Scheduling of PTZ Cameras with Splitting Vision and Its Implementation for Security Surveillance You-Chiun Wang, Ding-Yan Chen
	10:22~10:34	CF9011 Location-Based Linear Regression for Image Super-Resolution You-Sheng Guo, Yan-Jhu Wang, Changsheng Deng, Shih-Lun Chen, Yih-Shyh Chiou, Szu-Yin Lin, Ting-Lan Lin
	10:34~10:46	SCE9014 Nanoscale Structure and Mechanical Properties of Dual Nano-grained metallic glass Wenyu Chen, Chih-Ching Huang, Hsien-Wei Chen
	10:46~10:58	SCE9015 Phase Equilibria and Nano-scaled Creep Response of TiAlV Light-weight Multi-principal Element Alloy at Elevated Temperatures Xiang-Kai Zhang, Han-Ting Ye, Jacob Chih-Ching Huang, Tai-You Liu, Min-Tsang Tsai, Yu-Chin Liao, Jason Shian-Ching Jang
16 th July	10:58~11:10	SCE9016 HAADF, EDS and APT Characterizations of Nano-Precipitated Multi-Principal-Element Alloys Wanpeng Li, Xinghao Du, Tao Yang, Jacob Huang, Fu-Rong Chen, Chain-Tsuan Liu
(Tue.)	11:10~11:22	CO9005 Research on Fleet Scale and Distribution Route of Chain Supermarkets Rongxia Zhou, Shih MIng Ou
	11:22~11:34	CO9008 The Strategy of Energy Saving for Smart Shipping Heiu-Jou Shaw, Fu-Ming Tzu
	11:34~11:46	SCB9005 Design and Implementation of Wireless Mesh Network Video Surveillance System Yih-Chuan Lin, Yen-Tai Liu, Yao-Tang Chang
	11:46~11:58	CL9002 Personalized Rehabilitation Recognition Model upon ANFIS Yao-Chiang Kan, Yu-Chieh Kuo, Hsueh-Chun Lin
	11:58~12:10	SCM9002 Traffic Light Cycle Configuration Based on Single Intersection Traffic Flow Hung-Chi Chu, Yi-Xiang Liao
	12:10~12:22	CL9017 Ultra-Violet Treatment for Fermenting Low-salt Soya Sauce Sophia Ferng, I-Hui Wu, Ang-Yen Li, Cheng-Kuang Hsu, Robin Yih-Yuan Chiou, Ching-Hua Ting

Paper Award 2

Date	Time	Palace Hall East
	13:30~13:45	CG9003
		Side Resistance of Drilled Shafts Socketed into Rocks for Serviceability and
		Ultimate Limit States
		Yit-Jin Chen, Cheng-Chieh Hsiao, Anjerick Topacio
		CI9004
	13:45~14:00	Consensus via Adaptive Gain Controllers Giving Consideration to Relative
	13.45~14.00	Distances for Multi-Agent Systems
		Shun Ito, Kazuki Miyakoshi, Hidetoshi Oya, Yoshikatsu Hoshi, Shunya Nagai
		CO9007
	14:00~14:15	Adaptation of the Higher Education in Engineering to the Advanced
	14:00~14:15	Manufacturing Technologies
		Olivier Bonnaud, Ahmad Bsiesy
16 th July	14:15~14:30	CI9003
(Tue.)		Synthesis of Formation Control Systems for Multi-Agent Systems under Control
(1 ue.)		Gain Perturbations
		Kazuki Miyakoshi, Shun Ito, Hidetoshi Oya, Yoshikatsu Hoshi, Shunya Nagai
	14:30~14:45	SCM9006
		Application-based Online Traffic Classification with Deep Learning Models on
		SDN Networks
		Lin-Huang Chang, Cheng-Wei Su, Tsung-Han Lee
		CJ9008
	14.45 15.00	Obstacle Avoidance for an Unmanned Surface Vehicle Based on
	14:45~15:00	Rapidly-Exploring Random Trees Algorithm
		Mai The Vu, Hyeung-Sik Choi, Dae-Hyung Ji, Hyun-Joon Cho
	15:00~15:15	СЈ9013
		Optimizing Engine Start Systems
		Madhusudan Raghavan

Session		Azalea
Date		C. Electrical & Electronic Engineering, F. Computer & Information
		Engineering, L. Environmental, Food, Health Science & Technology, N.
	Time	Intelligent Computing, O. Other Engineering and Technology related topics,
		CB. Advances in Computer and Communications Engineering
		Prof. Po-Chun Huang, Session Chair
		SCB9003
		The Experimental Implementation of Reconfigurable Wavelength Hopping
	08:00~08:12	
		Protecting against Eavesdropper over Wireless WDM Network
		Yao-Tang Chang
		CL9021
	08:12~08:24	Removal of Acetaminophen with Fe/TiO2 Nanoparticles under UV/Visible Light
		Irradiation
		Po-Han Lee, Yi-Chu Huang
	00.04.00.04	CF9004
	08:24~08:36	Analysis of the Five-round Adaptive Diagnosis on the Crossed-cube
		Y-Chuang Chen, Zhi-We Zeng
		CF9009
	08:36~08:48	Exploiting Data Retention Errors to Assist the Management of Caches based on
		Nonvolatile Memories
		Yi-Hua Chen, Yu-Ping Tang, Ting-Syuan Lin, Yun-Shan Hsieh, Po-Chun Huang
	08:48~09:00	CF9015
		Error Correction Code for In-place Updates on Nonvolatile Memory Caches
17 th July		Yi-Hua Chen, Yi-Han Lien, Yu-Ping Tang, Po-Chun Huang
(Wed.)	09:00~09:12	CF9017
		Blockchain-based Paper Submission System for Author Nonrepudiation and
		Plagiarism Checking
		Shin-Ting Wu, Yi-Hua Chen, Po-Chun Huang
		CF9016
	09:12~09:24	An Efficient Deep Reinforcement Learning Algorithm Based on Bootstrap and
	09.12~09.24	Aggregation
		Jun-Ta Wu, Hui-Yun Li
		CC9009
	09:24~09:36	An Overview of Own Tracking Wireless Sensors with GSM-GPS Features
		Hamed Yassin-Kassab, Marius-Corneliu Rosu
		CN9010
	09:36~09:48	A Deep Learning Based National Flag Recognizer
		Liang-Hwa Chen
		CO9006
	09:48~10:00	Maze and Mirror Workshop Design for Increasing Motivation in Studying Science
		in Elementary School Aged Children
		Sara Hojjat, Dor Abrahamson, Tomoyuki Sowa, Chiaki Ikemoto
		sara појјаг, Dor Abranamson, 10тоуикі Sowa, Спіакі Ікетого

Session		Lilac
	Time	H. Industry 4.0 & Automation Engineering, M. Innovation Management, CF.
Date		Intelligent Automated Optical Inspection and Measurement, CJ. Sustainable
		Innovation
		Prof. Wen-Lih Chen, Session Chair
		SCF9012
	08:00~08:12	Deep Learning Based Character Recognition Using Image Reshaping Technique
		Ming Chang, Kuan-Yu Chen, Pei-Yuan Hung, Tsung-Hung Chien
		CM9005
	00.10 00.04	A Research Survey of Electronic Commerce Innovation: Evidence from the
	08:12~08:24	Literature
		Kai-Yu Tang, Chun-Hua Hsiao, Mei-Chun Chen
		SCJ9001
	08:24~08:36	A Study on the Characteristics of Wind Turbulence Offshore in Changhua Area
		Weng-Han Lin, Jiun-Jih Miau, Yng-Ru Chen, Tzong-Shyng Leu, Yuan-Shiang Tsai
		SCJ9002
	08:36~08:48	Multiphase Flow Microfluidics for Encapsulation of Alginate/PLGA Composite
	06.30~06.46	Microparticles
		Szu-I Yeh
		SCJ9003
	08:48~09:00	Solar-energy Based Water Treatment System Applicable to Remote Area
th		Arsanto Ishadi Wibowo, Keh-Chin Chang
17 th July		SCJ9004
(Wed.)	09:00~09:12	Development of a Compact Watt-level Low-temperature-differential Stirling
		Engine
		Wen-Lih Chen
		SCJ9005
	09:12~09:24	Control Strategy of a Hybrid Renewable Energy System Based on Reinforcement
		Learning Approach for an Isolated Microgrid
		Bao Chau Phan, Ying-Chih Lai
		SCJ9006
	09:24~09:36	Combustion Behavior Optimization of Torrefied Woody Biomass with Proximate
		and Element Analysis Index
		Yueh-Heng Li, Wei-Chieh Kuo, Shuhaimi Mansor
	09:36~09:48	CH9001
		Real-time Fuzzy Control of an Assembly Line Jiage Huo, Felix T.S. Chan, Carman K.M. Lee, Jan Ola Strandhagen
	09:48~10:00	CH9004
		An Intelligent Optimization System of Micro Electroforming Process for the Mesh
		Filter
		Wen-Chin Chen, Pao-Wen Lin, Shi-Bo Lin, Kuan-Ming Lin, Yun-ru Chang
1		

		Azalea
Date	Time	J. Mechanical Engineering, CE. Advances in High Performance Alloys
		Prof. Jason S. C. Jang, Session Chair
		CJ9001
	10:15~10:27	The Design and Analysis of Broadband Acoustic Absorptive Surface
		I-Ling Chang, Jen-Ting Huang
		CJ9002
	10.27, 10.20	Recognizing Stamping Operations from 3D Model of Strip Layout in a Progressive
	10:27~10:39	Die
		Alan C. Lin, Ho Minh Tuan
		СЈ9005
	10:39~10:51	Thermal and Mechanical Analysis of Laser Processing
		Hsuan-Hao Shih, Chih-Kuang Lin
		СЈ9007
	10:51~11:03	Negative Refraction in Two Dimensional Phononic Crystal
		Chih-Chieh Ko, Hao-Wei Kao, I-Ling Chang
		СЈ9010
	11:03~11:15	The Analysis and Experimental Measurement of Lamb Wave Propagating on
	11:05~11:15	Phononic Crystal Plate
		Ming-Wei Wang, Chih-Rui Chen, I-Ling Chang
	11:15~11:27	CJ9012
17 th July		Thermal Transport of Branched Nanotubes with Cross- and T-Junction
(Wed.)		Chi-Lin-Wu, Guan-Shiung Wang, I-Ling Chang
		SCE9009
		Improvement of Fracture Toughness on Fe-based Metallic Glass and Preparation
	11:27~11:39	of Its Powder for Additive Manufacturing
		Pei Hua Tsai, Chiao Guan Chang, Yu Chin Liao, Sin Mao Song, Chia Chuan Chu, Po
		Sung Chen, Wei Tong Ye, Jason Shian Ching Jang, Jeng Rong Ho, Shen Tsao
	11:39~11:51	SCE9011
		Improvement of Mechanical Properties of Magnesium-based Bulk Metallic Glass
		Composite with Adding Fe and TiZr-based Metallic Glass Particles
		Sin-Mao Song, Chih-Wei Chiang, Pei-Chun Wong, Yu-Chin Liao, Pei-Hua Tsai,
	11:51~12:03	Yen-Ting Lin, Yi-Yuan Nian, Jason Shian-Ching Jang, Chih-Hua Chen
		SCE9013 Microstructure and Machanical Proporties of the Neval Light weight Dual Phase
		Microstructure and Mechanical Properties of the Novel Light-weight Dual Phase Al50Ti20CrxMn30-x High Entropy Alloys
		Yu-Chin Liao, Chao-Hsiu Li, Bo-Sen Peng, Li-In Wang, Sin-Mao Song, Pei-Hua Tsai,
		Jason Shian-Ching Jang, Ker-Chang Hsieh, Hsin-Jay Wu, Chih-Yen Chen, Jacob
		Chih-Ching Huang, Yu-Chieh Lo, Chung-Wei Huang
	12:03~12:15	CJ9016
		On the Direction Control a Linear Feeder Driven by Two Piezoelectric Actuators
		Wen-Hsiang Hsieh, Yan-Ping Huang
		The House India, I am I mg Hamig

Session C4

Session	-4	T. 13
	Time	Lilac
Date		O. Other Engineering and Technology related topics, CH. Control System and
		Applications, CJ. Sustainable Innovation
		Prof. Kuo-Lan Su, Session Chair
		SCJ9007
	10:15~10:27	Comparison of Experimental Measurements and Numerical Simulations for
		Vertical Axis Wind Turbine Wakes in an Open-jet Wind Tunnel
		Yu-Ting Wu, Yu-Chung Lee, Hsin-Yun Chang
		SCJ9008
	10:27~10:39	Hydrogen Production via Photocatalytic Water Decomposition by Titanium
	10.27~10.39	Dioxide Supported on Sericite
		Min-Chien Wu, Chao-Wei Huang
		SCJ9009
	10:39~10:51	Study on Flow Meter Measurement Techniques of Aero vehicle Inlets in Subsonic
	10:39~10:31	of Flow Regions
		Yi-Chung Liu, Hung-Yen Chou
		SCJ9010
	10:51~11:03	Aero-thermodynamic Simulations and Analysis of Hypersonic Vehicles in
		Rarefied Flow
		Chung-Chun Hsieh, Ming-Chung Lo
17 th July		SCJ9013
(Wed.)	44.00.44.4	Operating Life Improvement of High Temperature PEM Fuel Cells with SS304
	11:03~11:15	Bipolar Plates
		Chen-Yu Chen, Ping-Hsueh Wu, Wei-Mon Yan
		SCH9001
	11:15~11:27	Develop a Mobile Based Robot Arm Using the KNRm Controller
		Kuo-Lan Su, Bo-Jun Yang, Li-Wei Hsiao
		SCH9002
	11:27~11:39	Automated Optical Inspection for Golf Ball Logo Defect Detection
		Hsien-Huang Wu, Fu-Shung He
		SCH9010
		An Improved Particle Swarm Optimization Method for Optimal Motion Planning
	11:39~11:51	of a Mobile Robot
		Li-Chun Lai, Chia-Nan Ko, Kuo-Lan Su
		CO9003
	11:51~12:03	Recovery of Cerium Oxide Abrasive from Glass Polishing Powder Waste by
		Two-Liquid Flotation Method
		Li-Pang Wang, Yan-Jhang Chen, Yun-Chen Tso, Yu-Hua Jiang
		Li I and Trang, Tun-Strang Citer, Tun-Citer 150, Tu-Hut Hung

Poster I

Date	Time	No.	Foyer
		1	CA9003 0D/2D P-doped ZnxCd1-xS/g-C3N4 Heterojuctions towards Highly Efficient Photocatalytic Hydrogen Evolution Xiaoheng Liu, Hongfei Yin
		2	CA9004 Influences of Al2O3/Nb2O5 Co-Doping on Structural Evolution and Dielectric Properties of Zn0.5Ti0.5-x(Al0.75Nb0.35)xNbO4 ($0 \le x \le 0.3$) Ceramics Enzhu Li, Hongyu Yang
		3	CA9005 Effect of SnO2 Substitution on Microwave Dielectric Characteristics of Zn0.15Nb0.3Ti0.55O2 Ceramics Shuren Zhang, Hongcheng Yang
	08:00 10:00	4	CA9006 Densification Behavior, Microstructure and Property of of ZnO with Multi-oxides Glass Addition at Different Sintering Temperatures Boen Houng, Wei-Chueh Chien, Chen-Kai Sun
16 th July		5	CA9010 The Effects of (Al0.5Nb0.5)4+ on Crystal Structure and Microwave Dielectric Properties of Ba3.75Nd9.5Ti18O54 Ceramics Chaowei Zhong, Bin Tang, Zhe Xiong, Shuren Zhang
(Tue.)		6	CA9011 Effects of Ti Co-substitution of Mg/Nb on Dielectric Properties and Phase Evolution of Li3Mg2-x/3Nb1-2x/3TixO6 Ceramics Bin Tang, Xing Zhang, Shuren Zhang
		7	CA9012 Study on Energy Storage Properties of Sr0.7Ba0.3Nb2O6 Relaxor Ferroelectrics Ying Yuan, Lei Cao, Shuren Zhang
		8	CA9021 Vibration Analysis of Two-Directional Functionally Graded Sandwich Beams Using a Shear Deformable Finite Element Formulation Vu Nam Pham, Dinh Kien Nguyen, Buntara S. Gan
		9	CA9023 Tailoring the Magnetic and Magnetocaloric Properties of the Sr- and Mo-site co-doped Ba1.7Sr0.3FeMo1-xWxO6 Imad Hussain, Hyung Uk Lee, Joo Hyeon Oh, Seok Hwan Huh, Bon Heun Koo
		10	CA9024 Effect of Calcination Temperature on Magnetic Properties in Fe3O4 Nanocrystals Ji Eun Lee, Bulgan Tsedenbal, Hyung Uk Lee, Joo Hyeon Oh, Bon Heun Koo, Seok Hwan Huh

Poster I (Continue)

Date	Time	No.	Foyer	
	08:00 10:00	11	SCA9003 Design and Analysis of Switched Reluctance Motors with Integrated Planetary Gear Trains Guan-Chen Chen, Ruo-Yu Lee, Hong-Sen Yan	
			12	SCA9004 Synthesis of N-Lobed Involute Noncircular Bevel Gears Kan Shi, Chao Su, Kuo-Hung Hsiao, Ji-Dai Wang, Qun-Hong Tian, Chao Chen
		13	SCA9008 Conceptual Design of a 9-Speed Bicycle Transmission Hub with a Magnetic Gear-Shifting Mechanism Yi-Chang Wu, Mi-Ching Tsai, Meng-Yu Hsieh	
		14	SCA9010 Design and Analysis of a Magnetic Gear Transmission with a Traction Mechanism Yi-Chang Wu, Mi-Ching Tsai, Qi-Hua Gu	
16 th July		15	SCA9012 Influence of Changing Mechanical Design Parameters on Induced Torque of a Novel Asynchronous Motor Wan-Tsun Tseng, Chun-Hao Sung	
(Tue.)		16	SCE9010 Optical and Electrical Properties of Zr-based Metallic Glass Film Hsuan-Kai Lin, Hong-An Chen	
		17	CD9007 To Develop a PLC-based Vision Alignment System with High-precision Three-axis Motorized Stage Chun-Jen Chen, Min-Yen Sung, Rong-Jen Kuo, Kuan-Liang Kuo	
		18	SCF9007 3D Reconstruction Algorithm for Structured-Illumination Microscopy Based on Polynomial Fitting Hongzhou Yan, Changchun Chai, Jingyi Wang, Xiaojun Liu	
		19	CF9001 Vehicle Detection and Recognition Using Deep Convolutional Model in Aerial Images Chien-Hao Tseng, Meng-Wei Lin, Jyh-Horng Wu, Fang-Pang Lin	
		20	SCB9009 Partial M-sequence Code Families Applied in P-SAC OCDMA-FSO Networks Shin-Pin Tseng	

Poster II

Date	Time	No.	Foyer
	10:10 12:25	1	CJ9003 Conceptual Design of Dual-way Transmission with Planetary Gearbox for Bicycle Ting-Yu Lin, Chung-Lin Tsai, Kuen-Ming Shu
		2	CJ9011 The Design and Implemention of a CNC Laser Processing Machine Ming-Piao Tsai, Kuang-Chyi Lee, Tzu-Cheng Yang
		3	CJ9014 Acceleration Effect on Supercritical Heat Transfer of NOVEC 649 in an Inclined Miniature Tube Chih-Yun Liu, Ben-Ran Fu
		4	CJ9015 Numerical Analysis of an Industrial-Scale Steam Methane Reformer Chun-Lang Yeh
		5	CC9003 Implementation of an Adjustable Charger Using PSoC Yih-Her Yan, Yi-Hung Chen, Chun-Hui Wu
16 th July (Tue.)		6	CC9004 A 0.6-V Wideband CMOS LNA Using Forward Body Bias Jian-Ming Wu, Chih-Yu Huang, Cheng-Shong Hong, You-Ruei Jhuang
		7	CC9006 Effect of Different Annealing Temperatures on ZnO Flexible Resistive Random Access Memory Bending Tests Cheng-Yen Wu, Hsin-Chiang You, Yu-Hsien Lin
		8	CC9007 Stretchable, Patch-Type Wireless 6-axis Inertial Measurement Unit for Mobile Health Monitoring Jae Keun Lee, Kangil Kim, Sangmin Lee
		9	CC9015 Vital Signal Radar with Applying Automatically Phase Control Technique for Optimal Vital Signal Detection Jun-Ye Wu, Cheng-Qi Huang, Jian-Jia Hu, Yi-Chyun Chiang
		10	CC9017 Comprehensive Power-Saving Diagnoses and Data Analyses Rong-Jong Wai, Zhi-Fu Zhang

Poster II (Continue)

Date	Time	No.	Foyer
	10:10 12:25	11	SCG9004 The Framework of Reversible Data Hiding in Encrypted Image Using Pixel-Value Ordering Cheng-Ta Huang, Chi-Yao Weng, Yu-Ching Wu, Guang-Yih Hsu, Shiuh-Jeng Wang
		12	SCB9001 Intrusion Detection Technology for Wireless Power Private Network Yi-Ying Zhang, Jing Shang, Bo Zhang, Fei Liu, Yuan-Long Ruan, Song Liu
		13	Using MIMO Technology to Improve the System Performance of Wir Eless Orthogonal Frequency and Optical Code Division Multiplexing Systems under the Free Space Optical Setting in a Log-normal Distribution Channel Chih-Ta Yen, Hsin-Han Tsai, Guan-Lin Chen
		14	SCB9004 A Wireless Communication System between Inter-vehicle and Road-side Units Using Software-defined Radio Technology Chi-Hung Huang, Wen-Tzu Chen
16 th July (Tue.)		15	SCG9008 A Study on Development of Intelligent Diagnosis Aid System for Heart Valve Disease Yuan-Chieh Cheng, Jin-Yi Qu, Yun-Kai Tsai, Wen-Hsien Ho, Yen-Ming J. Chen, Jyh-Horng Chou
		16	SCG9010 A Novel Feature Selection Approach for EEG Classification Analysis Chen-Sen Ouyang, Zong-En Cai, Rong-Ching Wu, Lung-Chang Lin, Ching-Tai Chiang, Rei-Cheng Yang, Li-Ju Huang
		17	SCG9012 Surface Defect Inspection by a Fine-tuned YOLO Method for Wafer Fabrication Han-Yu Lin, Jie-YaoYang, Szu-Han Yu, Chih-Yin Liu, Tzuu-Hseng S. Li
		18	SCG9014 Application of Discrete Twin-space Crowding Genetic Algorithm to Multiple Feature Selection Problems Chiu-Hung Chen, I-Chih Hsiung, Wen-Hsien Ho, Tung-Kuan Liu
		19	SCB9006 Design and Construction of an IOT-based Cloud Management System for Elevator Industry Chuen-Ching Wang, Wen-Chung Kuo, Bi-Kai Hsu, Ming-Yao Jheng
		20	CC9018 RTN Analysis for Resistive Switching of ZnO Memristor Chun-Cheng Lin

Poster III

Date	Time	No.	Foyer
	13:30 15:15	1	CC9016 Operation Characteristics of Wireless Power Charging from Copper Antenna at 300 K to Superconducting Receiver at 77K with 13.56 MHz under Different Materials of Cooling Vessels Yoon-Do Chung, Eun-Young Park, Chang-Young Lee, Dae-Wook Kim
		2	CF9005 An Efficient Power Control Algorithm for Organic Light Emitting Diode Displays Shih-Lun Chen, Yao-Tsung Kuo, Chiung-An Chen, Ting-Lan Lin, Yih-Shyh Chiou, Szu-Yin Lin, Hsiao-Chi Chen, Patricia Angela R. Abu
		3	CF9012 Efficient RSU Selection Approaches for Load Balancing in Vehicular Ad Hoc Networks Chi-Fu Huang, Jyun-Hao Jhang
		4	CF9018 Evaluation for Stacked-Layer Data Bus based on Isolated Unit-size Repeater Insertion Chia-Chun Tsai
16 th July (Tue.)		5	CF9019 Cognitive-Radio-Based Multichannel MAC Protocol for Internet-of-Things-Enabled Mobile Ad Hoc Networks Chien-Min Wu, Yen-Chun Kao, Kai-Fu Chang
		6	CF9020 Scrubbing-Based Reliability and Yield Enhancement Techniques for Flash Memory Shyue-Kung Lu, Wen-Chi Tsai, Chun-Lung Hsu, Chi-Tien Sun, Kohei Miyase
		7	CF9022 Noise Reduction by Self-Organizing Map for Wi-Fi Indoor Positioning System Yu-Xiang Huang, Hung-Huan Liu
		8	CF9025 Monitoring Process Means with Multiply-censored Observations Chauchen Torng, Jihhung Huang
		9	SCI9002 Determinants of User's Acceptance and Satisfactions on Cybersecurity Exercise System in Education: An Empirical Study Chia-Lee Yang, Yi-Lang Tasi, Hsing-Yen Ann, Hong-Ji Wei, Yi-Hua Lin
		10	SCG9005 Problem-based Learning to Improve the Knowledge of Mathematics Teaching for Interns: A Case Study of a National University in Taiwan Wei-Ling Tang, Jinn-Tsong Tsai

Poster III (Continue)

Date	Time	No.	Foyer
	13:30 15:15	11	SCG9006 Electrical Analysis of Low-voltage Electricity Consumer by using Fuzzy C-means Method and Multiple Regression Analysis Chin-Hsuan Lin, Po-Yuan Yang, Tsung-Han Ho, Jinn-Tsong Tsai, Jyh-Horng Chou
		12	SCG9007 Classification and Analysis Knee Osteoarthritis Severity by Using Convolutional Neural Network Chun-Chieh Huang, Hong-Siang Huang, Jinn-Tsong Tsai, Wen-Hsien Ho, Tsu-Tian Lee, Jyh-Horng Chou
		13	SCG9009 The Development of Digital Reading of Technological Pedagogical and Content Knowledge Scale of the Elementary Teachers Shin-Feng Chen, Chin-Ya Fang, Jinn-Tsong Tsai
		14	SCG9013 Cost-Effectiveness Analysis of Using the UGT1A1 Genotype to Increase Irinotecan Dose Plus Bevacizumab for Metastatic Colorectal Cancer Hon-Yi Shi, Ei-Len Chen, Yao-Mei Chen, Wen-Hsien Ho, Jinn-Tsong Tsai, Jaw-Yuan Wang
		15	CN9002 Mining Sequential Patterns in a Data Stream Show-Jane Yen, Yue-Shi Lee
16 th July (Tue.)		16	CN9003 Fuzzy Algorithms for Robust Logistic Regression Analysis Tai-Ning Yang, Chih-Jen Lee, Chun-Jung Chen, Shi-Jim Yen
		17	CN9006 Locating the Significant Points of Human Body in Images Using Geometric Characteristic and Color Information Hong-Jhang Jiang, Chia-Feng Juang, I-Fang Chung
		18	CM9001 An Empirical Study of User Satisfaction and Continuance Usage of Virtual Reality Applications Xin Xu, Guang Luo, Yue Feng
		19	CM9006 Innovative Orthosis for Phalanx Extension Neurofacilitation (iOPEN) by 3D Printing Technology for Patients with Stroke Kai Chang, Meng-Heng Lai, Jhih-Ying Ke, Hsin-Yu Hsu, Jer-Hao Chang
		20	CM9009 A Study for Constructing the Measurement of the Service Quality of Hospital Volunteers with Deep Learning Algorithm Yi-Horng Lai, Hui-Yun Xiong, Yi-Ting Feng, Yi-Yung Jian
		21	SCB9010 Designs on a Pronunciation Recognition System with Healthcare by Acoustic and Visual Sensor Data for the Person with Abnormal Faces Ing-Jr Ding, Cheng-Yu Yen

Poster IV

Date	Time	No.	Foyer
	08:00 10:00	1	CL9001 Physicochemical Characteristics and Anti-human Colon Cancer Properties of Fucoidans Extracted from Sargassum Glaucescens Chun-Yung Huang, Ai-Wei Kuan
		2	CL9008 Lipid Recovery of Mortierella Alpine Using Different Cell Disruption Techniques Chang-Chng Ong, Yen-Hui Chen
		3	CL9009 Natural Nanoporous Filter Material as a New High-Efficiency Natural Adsorbent to Remove Textile Dyes Chin-Ya Kuo, Hsiao-Han Liu
		4	CL9016 Determinants, Direct and Indirect Influences of Technological Capabilities on Firm Performance Hai Pham, Soo-Yong Kim
17 th July (Wed.)		5	CL9019 The Role of Irisin in C9orf72-associated Dipeptide Repeats Neurotoxicity in iPSC-derived Neurons and Animal Models of ALS Jia-Xin Gao, Ju-Hui Fu
		6	CL9020 Antibacterial Activity of Chitosan and Polylactate-chitosan Fabricated Plastic Film Guo-Jane Tsai, Ying-Ru Chen, Hsiang-Jung Tseng
		7	CL9022 Manufacturing Heat Insulation Material from Alkali-activation Process Hao-An Dai, Tung-Hsuan Lu, Ying-Liang Chen, Juu-En Chang
		8	CL9024 Roof Insulation Material from Alkali-activated Slag Pai-Haung Shih, Yi-Kuo Chang, Chih-Wei Huang
		9	CL9025 Treatment of the Extracts of TS and AC Exhibited Apoptotic Cell Death in Human Promyelocytic Leukemia Cells Hsin-Ling Yang, Ya-Ting Kuo, Yugandhar Vudhya Gowrisankar, Dony Chacko Mathew, Varadharajan Thiyagarajan
		10	CL9026 Pilot-scale Manufacturing of Porous Fire-proof Materials from Alkali-activated Slag Pai-Haung Shih, Chi-Zhen Pan, Yi-Kuo Chang, Tung-Hsuan Lu, Juu-En Chang

Poster IV (Continue)

Date	Time	No.	Foyer
	08:00 10:00	11	CL9027 Anti-photoaging and Dermato-protective Efficacy of ZER on UVA-irradiated Human Skin Fibroblast Cells You-Cheng Hseu, Chih-Ting Chang, Yugandhar Vudhya Gowrisankar, Xuan-Zao Chen
		12	SCL9001 Third Body and Dissipation Energy in Green Tribology Film Shih-Chen Shi, Shia-Seng Pek
		13	SCL9002 Performance Effects of Different Table Tennis Ball Materials Yu-Fen Chen, Chen-Chih Huang
		14	SCL9003 The Study of Sol-gel coated Double Notched Long Period Grating for CO Gas Sensing Yen-Lung Chou, Hsiang-Chang Hsu, Yu-Cheng Hsieh, Tzu-Hsuan Huang, Chia-Chin Chiang
		15	SCL9004 Mechanical Behavior and Microstructural Evolution of TiAl Based Intermetallic Alloy Tao-Hsing Chen, Ting-Yang Zeng
17 th July (Wed.)		16	SCL9005 Long Period Fiber Grating for Relative Humidity Sensing Chao-Wei Wu, Chia-Chin Chiang
		17	SCL9007 Study on Strain Measurement of Underwater Vessel Shocking by FBG Sensors Ya-Hui Chen, Ching-Yu Hsu, Tso-Sheng Hsieh, Chia-Chin Chiang, Tao-Hsing Chen
		18	SCL9008 Study of Anti-smudge(AS) Coating by Using Microwaves Drying Process Cheng-Chien Wang, Bo-Jun Wang
		19	SCL9009 Surface Topography Simulation of Laser Metal Deposition of Ti-6Al-4V Shang-Ping Wei, Kai-Chun Lin, Poon Sian Zheng, Chen-Yuan Lee, Ah-Der Lin, Chao-Ming Hsu
		20	CF9021 A Text Analysis-based Approach for Cognitive Distortion Recognition You-Cheng Li, Ching-Ting Huang, Wei-Yang Lin, Yu-Chun Juan, Hsin-Chin Chen, Min-Hung Teng
		21	CA9025 Spray-drying synthesis of Fluorine-doped LiNi0.5Mn1.5O4 Cathode for Lithium-ion batteries Chang-Peng Shih, Jeng-Yu Lin

Poster V

Date	Time	No.	Foyer
	10:15 12:00	1	SCH9004 The Vision Based Positioning System Development for Food Service Robot Chia J. Lin, Chun C. Lai, Chin S. Chen, Kuo L. Su
		2	SCH9005 A Study on the Variation of Oceanographic Data in East Sea of the South Korea by Typhoon SOULIK: Construction of Air-Sea Observation Network Node Using the Wave Glider and Underwater Glider Jong-Wu Hyeon, Sung-Hyub Ko, Shinje Lee, TaeJun Moh, Lee-Sun Yoo, Seom-Kyu Jung, Jung-Han Lee
		3	SCH9006 Estimation of the PCB Production Process Using a Neural Network Kuo-Hsien Hsia, Jr. Hung Guo
		4	SCH9007 Patrol Car of Gas Concentration and PM2.5 Detection with Remote Control Kuo-Hsien Hsia, Jr. Hong Guo, Hsiang-Ren Cheng, Meng-Hsiang Yen, Kuo-Lan Su
17 th July		5	SCH9008 An Intelligent Control for Path Optimization System Li-Chun Lai, Chia-Nan Ko
(Wed.)		12:00	SCH9012 Separation of Two-dimensional Mixed Circular Fringe Patterns Based on the Sparsity Characteristics in Fractional Fourier Transform Domain Hsuan-Ting Chang, Tzu-Yao Lin, Chian-Cheng Ho
		7	CG9001 Applications of Membrane Hydrocyclone-Recovery of Silicon Carbide Powder Yen-Cheng Tsai, Chen-Yang Hsu, Rome-Ming Wu
		9	CG9004 Vision Technology Based Traffic Safety Analysis Using Signal Data Wonho Suh, Jung Ryul Kim, Joongmin Cho
			CG9011 Leaching Characteristics of Alkali Activated Cement Mortar Blended with Desulfurization Slags Tsung-Tseng Lin, Jhe-Yu Wu, Juu-En Chang, Dong-Shyuan Lu, Pai-Haung Shih, Yi-Kuo Chang
		10	CG9012 Grade of Calcined MgO on Expansion of Cement Paste Tung-Hsuan Lu, Pai-Haung Shih, Chi-Man Choi, Ying-Liang Chen, Yi-Kuo Chang, Juu-En Chang

Poster V (Continue)

Date	Time	No.	Foyer
- Date	Time	110.	CE9004
	10:15 12:00	11	Synthesis of Stimuli-Responsive Polypeptide Nanogels and Polypeptide/Silica Hybrid Nanogels by Microemulsion for Drug and Protein Delivery Li-Wen Hsiao, Jeng-Shiung Jan
		12	CE9007 Ultrasound Protects against Aβ-Mediated Cell Death Feng-Yi Yang, Tao-Tao Chen
		13	CE9008 Sensory Evaluation and Melting Kinetics of Ice Cream Prepared with Tremella Fuciformis as Replacement for Stabilizer Shu-Yao Tsai, Yu-Tzu Hung, Chun-Ping Lin
		14	CK9001 Hyperthermia Protection of Streptococcus Pyogenes Infection by NIR-irradiated Au Nanoparticles Yau-Sheng Tsai, Tzu-Yin Lin, Yu-Chie Chen, Pei-Jane Tsai
		15	CK9004 Hydrothermally Grown ZnO Nanoflowers on a Template-assisted Ordered Seed Arrays Fang-Hsing Wang, Ching-Shan Wang, Han-Wen Liu
17 th July (Wed.)		16	CO9011 Design and Performance Test of Water Scrubbing and Desulphurization System for Biogas Cheng-Chang Lien, Wei-Cheng Lin
		17	CO9015 Experimental Setup and Preliminary Study of Detecting Eggshell Crack with Thermal Imaging Jeng-Liang Lin, Po-Ting Chou
		18	CO9016 Fatigue Driving Detection Based on Mobile Deep Learning Network Chi-Chen Wang, Shaou-Gang Miaou
		19	SCF9008 Synthesis of Water-soluble Magnetic Nanoparticles Carrying Urokinase for Thrombolysis Qian Li, Xiaojun Liu, Zhen Lu, Ming Chang, Zili Lei
		20	SCB9007 Integrated Circuit Switch-based Random Wavelength Hopping and Intelligent Early-Warning Scheme for Protecting against Eavesdropping Yao-Tang Chang
		21	CM9010 Community Risk Prevention with Big Data Nan Jia, Yongqiang Chen, Jing Qian, Yi Liu