

TECHNICAL PROGRAM OVERVIEW

| PARALLEL SESSION | | RAM – 1 | RAM – 2 | RAM – 3 | CIS – 4 | CIS – 5 | CIS – 6 | Interactive |
|--|----------------------------|---|---|---|---|---|--|--|
| LOCATION | | Song Hall, Level 3 | Tang Hall, Level 3 | Han Hall, Level 3 | Jin Sha Hall, Level 4 | Long Quan Hall, Level 4 | Jia Ling Hall, Level 4 | Foyer, Level 3 |
| MONDAY (22 September, 2008) | 0830 – 0900 0900 – 1000 | <i>Opening Ceremony (Ballroom, Level 3)</i> <i>Plenary Speech 1: Mechatronics Considerations for Assisting Humans by Prof. Masayoshi Tomizuka, University of California, Berkeley, CA, USA (Ballroom, Level 3)</i> | | | | | | |
| | Session 1 1030 – 1230 | MA1 (Invited Session) Emerging Technologies for Industrial Robots | MA2 Control, Haptics, Teleoperation and Network Robotics | MA3 Modeling, Planning and Control I | MA4 Neural Networks I | MA5 Computer Vision I | MA6 Manufacturing Systems | |
| | Session 2 1330 – 1530 | MM1 (Invited Session) Intelligent Control Theory in Aerial Maintenance Engineering I | MM2 Design Evaluation, Scheduling & Discrete Event Dynamic Systems | MM3 Robotics and Automation Applications I | MM4 Soft Computing, Fuzzy Systems I | MM5 Image Processing I | MM6 Quality / Reliability & Systems Engineering | MMP CIS Interactive Session I & RAM Interactive Session I |
| | Session 3 1600 – 1800 | MP1 (Invited Session) Intelligent Control Theory in Aerial Maintenance Engineering II | MP2 Kinematics, Mechanics and Mechanism Design | MP3 Medical Robots & Methodologies for Robotics | MP4 Computational Intelligence I | MP5 Pattern Recognition | MP6 Data Mining and Management | MPP CIS Interactive Session II & RAM Interactive Session II |
| TUESDAY (23 September, 2008) | 0900 – 1000 | <i>Plenary Speech 2: Compliant Mechanisms for MEMS and Flexonics by Prof. Michael Y. Wang, The Chinese University of Hong Kong, NT, Hong Kong, China (Ballroom, Level 3)</i> | | | | | | |
| | Session 1 1030 – 1230 | TA1 Dynamics, Motion Control | TA2 Biologically-Inspired Robots & Petri Net | TA3 Modeling, Planning and Control II | TA4 Soft Computing, Fuzzy Systems II | TA5 Computer Vision II | TA6 Decision Support Systems I | TAP CIS Interactive Session III & RAM Interactive Session III |
| | Session 2 1330 – 1530 | TM1 (Invited Session) Robot Control I | TM2 Sensor Design, Integration, and Fusion | TM3 Robotics and Automation Applications II | TM4 Neural Networks II | TM5 Image Processing II | TM6 Intelligent Transportation System | TMP CIS Interactive Session IV & RAM Interactive Session IV |
| | Session 3 1600 – 1720 | TP1 Control Architecture and Programming | TP2 Teleoperation and Aerial Maintenance Engineering | TP3 Scheduling and Control | TP4 Decision Support Systems II | TP5 Neuro-Fuzzy Systems | TP6 Expert and Knowledge Base Systems | |
| WEDNESDAY (24 September, 2008) | 0900 – 1000 | <i>Plenary Speech 3: Knowledge Discovery from Networks, by Prof. Deyi Li, National Natural Science Foundation of China, China (Ballroom, Level 3)</i> | | | | | | |
| | Session 1 1030 – 1230 | WA1 (Invited Session) Design and Control of Robot with Special Uses | WA2 Maintenance & Manufacturing System Architecture | WA3 Modeling, Planning and Control & Virtual Reality | WA4 Neural Networks III | WA5 Image Processing III | WA6 Computational Intelligence II | WAP CIS Interactive Session V & RAM Interactive Session V |
| | Session 2 1330 – 1530 | WM1 (Invited Session) Robot Control II | WM2 Computer Vision & Motion Control in Vehicles | WM3 Robotics and Automation Applications III | WM4 Neural Networks IV | WM5 Evolutionary Computation | WM6 Optimization | WMP CIS Interactive Session VI & RAM Interactive Session VI |
| | Session 3 1600 – 1800 | WP1 Control Architecture and Programming & Legged Robot | WP2 Control, Wheeled Mobile Robots & Sensor Design | WP3 Robotics and Automation Applications IV | WP4 Sensor Based Robotics | WP5 Genetic Algorithm | WP6 Other Topics in CIS | |

Session MA4

Neural Networks I

- MA4.1 **An Algebraic Criterion for Globally Exponentially Stability of Cohen-Grossberg Neural Networks with Time-Varying Delays**
Xinyuan LIANG, *Tian WANG, **Zhengxia WANG, ***Haixia WU
Chongqing University
**Chongqing Technology and Business University*
***Chongqing Jiaotong University*
****Chongqing Education College*
- MA4.2 **Continuous Attractors of a Class of Recurrent Neural Networks without Lateral Inhibition**
Haixian ZHANG, Stones Lei ZHANG, Jiali YU, Hong QU
University of Electronic Science and Technology of China
- MA4.3 **On-line Identification of Multivariable Processes using EKF Learning-based Adaptive Neural Networks**
Karim SALAHSHOOR, Amin SABET KAMALABADY
Petroleum University of Technology
- MA4.4 **A Method of Remote Fault Diagnosis based on Multilayer SOM**
Wenyu CHEN, Xiaobin WANG, Shixin SUN, *Jingbo LIU
University of Electronic Science and Technology of China
**Chongqing Three Gorges University*
- MA4.5 **An Integrated Intrusion Detection System by using Multiple Neural Networks**
Guisong LIU, Xiaobin WANG
University of Electronic Science and Technology of China
- MA4.6 **Multi-person Location and Tracking Method based on BP Neural Networks**
Wei PAN, Zhizhan LIU, Yi ZOU
Xiamen University

Session MA5

Computer Vision I

- MA5.1 [Effects of Image Alignment Error on Vehicle License Image Reconstruction using Non-uniform Interpolation Method](#)
Shih Chieh LIN, Chih Ting CHEN
National Tsing Hua University
- MA5.2 [A Fast Block Matching Algorithm for Stereo Correspondence](#)
Tangfei TAO, Ja Choon KOO, Hyouk Ryeol CHOI
Sungkyunkwan University
- MA5.3 [A Symbolic Approach to Reconstruct Polyhedral Scene from Single 2D Line Drawing](#)
Ying CHEN, *Hongbo LI
Beijing Electronic Science and Technology Institute
**Chinese Academy of Sciences*
- MA5.4 [A Novel Image Matching Method in Camera-calibrated System](#)
Junwei YU, Lubin WENG, Yuan TIAN, Yanqing WANG, Xianqing TAI
Chinese Academy of Sciences
- MA5.5 [SOM Based Activity Learning for Visual Surveillance System](#)
Lin QU, Fan ZHOU, Yaowu CHEN
Zhejiang University
- MA5.6 [3D Reconstruction from Uncalibrated Images Taken from Widely Separated Views](#)
Chunmei DUAN, Xiangxu MENG, Lu WANG
Shandong University

Session MA6

Manufacturing Systems

- MA6.1 [A Principal-Agent Model on Reverse Supply Chain under Asymmetric Collecting Cost Information](#)
Xiang LI, *Guohua SUN, Yongjian LI, **Xiaoqiang CAI
Nankai University
**Shandong University*
***The Chinese University of Hong Kong*
- MA6.2 [A Research on BPM System based on Process Knowledge](#)
Yaxiong TAO, Guoquan ZHU, Zhen XU, *Boqing LIU
Shanghai Normal University
**Southwest University*
- MA6.3 [Research and Application of the Control Technology for Flexible Manufacturing System based on PROFIBUS](#)
Changqing CAI, *Ying YU, **Rong YANG, ***Chao PANG
Changchun Institute of Technology
**Changchun Equipment and Technology Research Institute*
***Sichuan Power Development Co. Ltd.*
****University of Electronic Science and Technology of China*
- MA6.4 [Correction Model of Carbon Potential using AI Techniques and Mechanism Analysis](#)
Xixia HUANG, Jiansheng PAN, Fanhuai SHI, Shanben CHEN
Shanghai Jiaotong University
- MA6.5 [A Model for Components Library based on Multi-level Assemblies and Parts Family](#)
Dongmin ZHANG, Dachao HU, *Tingxiao TANG
Shanghai Institute of Technology
**Nanjing University of Aeronautics and Astronautics*
- MA6.6 [A Password-based Authenticator: P-Auth](#)
Linna WEI, Zhiguang QIN
University of Electronic Science and Technology of China

Session MM1 (Special Session)

Intelligent Control Theory In Aerial Maintenance Engineering I

- MM1.1 Neural Network Identifier with Iterative Learning for Turbofan Engine Rotor Speed Control System
Kun QIAN, Xiangping PANG, Bangyuan LI
The First Aeronautical Institute of Air Force
- MM1.2 Boundary Controller based on Fuzzy Logic Control for Certain Aircraft
Wenjie YANG, Jianjun DONG, Kun QIAN, Xiangping PANG
The First Aeronautical Institute of Air Force
- MM1.3 The Design of Compensators for Telecontrol System based on Network
Jianwei FAN, Qi WANG, Wei CUI, Duwei YANG
The First Aeronautical Institute of Air Force
- MM1.4 The Importance Analysis of Components in the Aviation System using the Binary Decision Diagrams
Hengcheng XU, Pu CHENG, *Jianguo ZHANG
The First Aeronautical Institute of Air Force
**Beijing University of Aeronautics and Astronautics*
- MM1.5 Design of Intelligent Testing Device for Airplane Navigation Radar
Xianlin ZENG, Lizhen LI
The First Aeronautical Institute of Air Force
- MM1.6 Design on Electromagnetic Compatibility of Aeronautic Electrical Power System Tester
Shengyuan ZHANG, Wenjie YANG, Tao ZOU
The First Aeronautical Institute of Air Force

Session MM4

Soft Computing, Fuzzy Systems I

- MM4.1 [Multi-objective Fuzzy Modeling Using NSGA-II](#)
Zongyi XING, Yong ZHANG, Yuanlong HOU, *Guoqiang CAI
Nanjing University of Science and Technology
**Beijing Jiaotong University*
- MM4.2 [New Method to Measure Pulp Flow Velocity based on Time-frequency Analysis of Pulp Consistency Noise](#)
Qiang ZHOU, Jiuqiang HAN
Xi'an Jiaotong University
- MM4.3 [Simulating Virtual Crowd with Fuzzy Logics and Motion Planning for Shape Template](#)
Jen-Yao CHANG, Tsai-Yen LI
National Chengchi University
- MM4.4 [Fuzzy Neural Network Based Prediction Coding for Bayer Pattern Image](#)
Yongqiang CHENG, Jiang ZHAO, Keming XIE, Gang ZHANG
Taiyuan University of Technology
- MM4.5 [A New Adaptive Neuro-Fuzzy Approach for On-Line Nonlinear System Identification](#)
Morteza HAMZEHNEJAD, Karim SALAHSHOOR
Petroleum University of Technology
- MM4.6 [The SVM Classification Leafminer-infected Leaves based on Fractal Dimension](#)
Dake WU, Chunyan XIE, *Chengwei MA
Southwest University
**China Agricultural University*

Session MM5

Image Processing I

- MM5.1 **Implementation and Optimization of Particle Filter Tracking Algorithm on Multi-DSPs System**
Gongyan LI, Bin LI, Zhou LIU, Xiaopeng CHEN
Chinese Academy of Sciences
- MM5.2 **Facial Expression Recognition based on Histogram Sequence of Local Gabor Binary Patterns**
Xinghua SUN, Hongxia XU, Chunxia ZHAO, Jingyu YANG
Nanjing University of Science and Technology
- MM5.3 **Super Resolution based on Gradient Field**
Qiyong GUO, Hongzhi LIU, Wenbin CHEN, I-Fan SHEN
Fudan University
- MM5.4 **Left Ventricular Segmentation of Cardiac Magnetic Resonance Images using a Novel Edge Following Technique**
Krit SOMKANTHA, Nipon THEERA-JMPON, Sansanee AUEPHANWIRIYAKUL
Chiang Mai University
- MM5.5 **Medical Image Fusion with a Shift-Invariant Morphological Wavelet**
Bo YANG, *Zhongliang JING
Shandong University of Science and Technology
**Shanghai Jiaotong University*
- MM5.6 **Fast Image Segmentation using Region Merging with a k-Nearest Neighbor Graph**
Hongzhi LIU, Qiyong GUO, *Mantao XU, I-Fan SHEN
Fudan University
**Carestream Company*

Session MM6

Quality/Reliability & Systems Engineering

- MM6.1 **The Reuse Policy in Developing Multi-agent System**
Xiao XUE, *Zhi SUN, Junwei LUO
Henan Polytechnic University
**Zhejiang Forestry University*
- MM6.2 **Error Equivalence Methodology for Dimensional Variation Control in Manufacturing**
Qiang HUANG, Hui WANG
University of South Florida
- MM6.3 **Cost-based FMEA and ABC Concepts for Manufacturing Process Plan Evaluation**
Alaa HASSAN, Iman DAYARIAN, Ali SIADAT, Jean-Yves DANTAN
ENSAM
- MM6.4 **An Intelligent FMEA System Implemented with a Hierarchy of Back-Propagation Neural Networks**
Chiang KU, Yun-Shiow CHEN, Yun-Kung CHUNG
Yuan Ze University
- MM6.5 **The Design of Water Supply Network based on GIS**
Zhaoshun WANG, Zukuan WEI, *Qian YIN
University of Electronic Science and Technology of China
**Beijing Normal University*
- MM6.6 **A Method for Detection of Known Objects in Visual Search Tasks**
Andrzej SLUZEK
Nanyang Technological University

Session MMP

CIS Interactive Session I & RAM Interactive Session I

- MMP.01 **A Batch Splitting Job Shop Scheduling Problem with Bounded Batch Sizes under Multiple-resource Constraints using Genetic Algorithm**
Haiyan WANG, Yanwei ZHAO, Xinli XU, Wanliang WANG
Zhejiang University of Technology
- MMP.02 **ABIS: A Language of Intelligent Systems**
Alecsey POLETYKIN, Mihail BYVAYKOV, Artur BAYBULATOV
Russian Academy of Sciences
- MMP.03 **Constructing Scalable TTS System based on Corpus Approach**
Wei ZHANG, *Zhenhua LING, *Lirong DAI
Ocean University of China
**University of Science and Technology of China*
- MMP.04 **Study on Measurement System of Underwater Autonomous Robot**
Qingmei YANG, *Jianmin SUN, Yanxia LIU
Beijing Union University
**Beijing University of Civil Engineering and Architecture*
- MMP.05 **Finding Multiple Real Roots by Neural Networks based on Complete Discrimination System of Polynomial**
Xinli ZHANG, Dayong ZHU, Wang HU
University of Electronic Science and Technology of China
- MMP.06 **An Immune Algorithm based on Danger Model**
Chenggong ZHANG, Guisong LIU, Wang HU
University of Electronic Science and Technology of China
- MMP.07 **Path Planning in an Unknown Environment on the Basis of Observations of Occluded Areas**
Shuichi UTSUGI, Hisashi SUZUKI
Chuo University
- MMP.08 **Image Space Reconstruction Based Overcomplete ICA Algorithm**
Shangming YANG, Min WAN, Hua YAN
University of Electronic Science and Technology of China
- MMP.09 **Function Approximation based on Twin Support Vector Machines**
Chengfu YANG, Zhang YI, Lin ZUO
University of Electronic Science and Technology of China
- MMP.10 **A New Algorithm for Extracting Specific Signals with Temporal Structure**
Min WAN, Shangming YANG, Hua YAN
University of Electronic Science and Technology of China
- MMP.11 **Fuzzy-GA and Multi-Objective Transportation Optimization**
Shurong ZOU, *Hongwei ZHANG, *Kunkun WANG
Southwest Jiaotong University
**Chengdu University of Information Technology*
- MMP.12 **A Parallel Training Algorithm of Support Vector Machines based on the MTC Architecture**
Lei WANG, Huading JIA
Southwest University of Finance and Economics
- MMP.13 **A Note on the Robust Stability of Genetic Regulatory Networks with Time-Varying Delays**
Wei FENG, *Wei ZHANG, **Guangxia XU, *Haixia WU
Chongqing University
**Chongqing Education College*
***Chongqing University of Posts and Telecommunications*
- MMP.14 **An Iterative Modified Kernel for Support Vector Regression**
Fengqing HAN, Zhengxia WANG, Ming LEI, Zhixiang ZHOU
Chongqing Jiaotong University
- MMP.15 **Least Squares Support Vector Machine Classifiers using PCNNs**
Yongsheng SANG, Haixian ZHANG, Lin ZUO
University of Electronic Science and Technology of China

- MMP.16 [Research on Rotary Dump Health Monitoring Expert System based on Causality Diagram Theory](#)
Quan LIU, Jingsong LI
Wuhan University of Technology
- MMP.17 [Forecasting Share Price using Wavelet Transform and LS-SVM based on Chaos Theory](#)
Jianguo ZHOU, Tao BAI, Aiguang ZHANG, Jiming TIAN
North China Electric Power University, Baoding
- MMP.19 [An Information Integration Framework based on XML to Support Mechatronics Multi-disciplinary Design](#)
Luyan BI, Zongxia JIAO
Beijing University of Aeronautics and Astronautics
- MMP.20 [VT Position Code Communication Technology and its Implementation](#)
Shiying ZHOU, Guihe QIN, Yubo JIN
Jilin University
- MMP.21 [Adaptive Optimal Locomotion of Snake Robot based on CPG-Network using Fuzzy Logic Tuner](#)
Shahir HASANZADEH, Ali AKBARZADEH TOOTOONCHI
Ferdowsi University of Mashhad
- MMP.22 [Immune Network Algorithm based on Improved APF for On-Line Dynamic Planning](#)
Mingxin YUAN, Sun'an WANG, Jian ZHUANG, Kunpeng LI
Xi'an Jiaotong University
- MMP.23 [Production Control of a Polymerization Plant using a Reduced Set of Control Variables](#)
Vladimir JOVAN, Dejan GRADISAR, Sebastjan ZORZUT
Jozef Stefan Institute
- MMP.24 [Planar Visual Metrology using Partition-based Camera Calibration](#)
Dongtai LIANG, Xuanyin WANG
Zhejiang University
- MMP.25 [Adaptive Bandwidth Mean Shift Object Detection](#)
Xiaopeng CHEN, *Haiyan HUANG, Haibo ZHENG, Chengrong LI
Chinese Academy of Sciences
**Jiujiang University*
- MMP.26 [Image-based Visual Servoing of a Real Robot using a Quaternion Formulation](#)
Thomas KOENIG, Y DONG, Guilherme N DESOUZA
University of Missouri
- MMP.27 [Unloading Performance Analysis of Main Generator in Aeronautic AC Power Supply based on Ansoft](#)
Feng GONG, Zhen MA, Jianlei LI, Xianjiang ZHANG
Binzhou University
- MMP.28 [Robust Guaranteed Cost Control for a Class of Two-dimensional Discrete Systems with Shift-Delays](#)
Shuxia YE, Weiqun WANG, Yun ZOU, Juan YAO
Nanjing University of Science and Technology
- MMP.29 [Fuzzy Control of Inverter Pendulum Robot via Perturbed Time-Delay Affine T-S Fuzzy Models](#)
Wen-Jer CHANG, Wei-Han HUANG, Wei CHANG
National Taiwan Ocean University
- MMP.30 [Modeling and Intelligent Control of Vehicle Active Suspension System](#)
Jianmin SUN, *Qingmei YANG
Beijing University of Civil Engineering and Architecture
**Beijing Union University*
- MMP.31 [Application of the Optimal Input Design in Shaking Table Experimental System](#)
Jianqiu CHEN, Xinzheng ZHANG, *Ping TAN, *Fulin ZHOU
University of Guangdong Technology
**University of Guangzhou*
- MMP.32 [Architectural Mismatch Detection between Component and Aspect based on Finite Automaton](#)
Yang ZHANG, *Jingjun ZHANG, *Hui LI
Hebei University of Science and Technology
**Hebei University of Engineering*

Session MP1 (Special Session)

Intelligent Control Theory In Aerial Maintenance Engineering II

- MP1.1 [Technique of Predictive Function Control of Reference Path based on Fuzzy Inference](#)
Tansheng ZHOU, Hengcheng XU, Shengyuan ZHANG
The First Aeronautical Institute of Air Force
- MP1.2 [Intelligent Control for Aerodynamics Research Test](#)
Jianming JIA, Yaohui CHENG, Huiming LIU
The First Aeronautical Institute of Air Force
- MP1.3 [The Over-Loading Protecting Research based-on the Fuzzy Control in Aero Power Supply System](#)
Hengcheng XU, Pu CHENG, Wenjie YANG
The First Aeronautical Institute of Air Force
- MP1.4 [Design of SDLC Synchronous Serial Communication based on Intel 8274](#)
Qi WANG, Jianwei FAN, Wei CUI, Duwei YANG
The First Aeronautical Institute of Air Force
- MP1.5 [Research on Application of Artificial Neural Network in the Network Loss Calculation of Power System](#)
Hang XU, Huiming LIU, Jie LI
The First Aeronautical Institute of Air Force
- MP1.6 [Information Unloading and Processing Synthesis System for Airborne Flight Parameter](#)
Kun ZHANG, Xianlin ZENG, Kai LIU, Xiaolei LI
The First Aeronautical Institute of Air Force

Session MP4

Computational Intelligence I

- MP4.1 SVM Parameters Tuning with Quantum Particles Swarm Optimization
Zhiyong LUO, *Wenfeng ZHANG, **Yuxia LI, Min XIANG
Chongqing University of Posts and Telecommunications
**Northwestern Polytechnical University*
***University of Electronic Science and Technology of China*
- MP4.2 An Improved Particle Swarm Optimization Algorithm based on Velocity Updating
Jinglei GUO, Zhijian WU, Zhejun WU
Wuhan University
- MP4.3 Experience Based Learning in Policy Control of Multiagent System
Ariuna DAMBA, Shigeyoshi WATANABE
University of Electro-Communications
- MP4.4 Knowledge Evolutionary Algorithms based on Granular Computing
Yongqin TAO, Duwu CUI, Taishan YAN
Xi'an University of Technology
- MP4.5 Genetic Algorithm for Power Load Dispatch
Chao-Lung CHIANG
Nan-Kai Institute of Technology
- MP4.6 The Integrated Methodology of Rough Set Theory and Fuzzy SVM for Customer Classification
Jianguo ZHOU, Tao BAI, Aiguang ZHANG, Jiming TIAN
North China Electric Power University, Baoding

Session MP5

Pattern Recognition

- MP5.1 **Detection of Seizures in EEG Signal using Weighted Locally Linear Embedding and SVM Classifier**
Yaozhang PAN, Shuzhi Sam GE, Abdullah Al MAMUN, *Feng Ru TANG
National University of Singapore
**National Neuroscience Institute*
- MP5.2 **Learning the Boundary of One-Class-Classifier Globally and Locally**
Aimin FENG, Bin CHEN, Xuejun LIU
Nanjing University of Aeronautics and Astronautics
- MP5.3 **Face Recognition Method based on Within-class Clustering SVM**
Yan WU, Xiao YAO, Ying XIA
Tongji University
- MP5.4 **Gabor-based Discriminant Locality Preserving Projections for Face Recognition**
Lei ZHU, Lihua LI
Hangzhou Dianzi University
- MP5.5 **Formation of Standard Tibetan Syllables and Comparison as well as Analysis of the Statistical Results**
Weilan WANG, La DUO
Northwest University for Nationalities
- MP5.6 **Making Discriminative Common Vectors Applicable to Face Recognition with One Training Image per Person**
Lei ZHU, *Yongying JIANG, Lihua LI
Hangzhou Dianzi University
**Wenzhou University*

Session MP6

Data Mining and Management

- MP6.1 [Similarity Search based on Random Projection for High Frequency Time Series](#)
Wei WU, Jingtao HU
Chinese Academy of Sciences
- MP6.2 [Applying Multiple Time Series Data Mining to Large-Scale Network Traffic Analysis](#)
Weisong HE, Guangmin HU, Xingmiao YAO, Guangyuan KAN, Hong WANG, *Hongmei XIANG
University of Electronic Science and Technology of China
**Chongqing College of Electronic Engineering*
- MP6.3 [On the Application of Data Mining Technique and Genetic Algorithm to an Automatic Course Scheduling System](#)
Yao Te WANG, *Yu Hsin CHENG, *Ting Cheng CHANG, *S M JEN
Providence University
**Ling Tung University*
- MP6.4 [The Research of Association Rules Mining Algorithm based on Binary](#)
Gang FANG, Zukuan WEI, *Qian YIN
University of Electronic Science and Technology of China
**Beijing Normal University*
- MP6.5 [Text Mining for Chat Message Analysis](#)
Siu Cheung HUI, *Yulan HE, Haichao DONG
Nanyang Technological University
**The University of Reading*
- MP6.6 [A Novel Model for Stock Portfolio based on ARX, RS and a New Grey Relational Grade Theories](#)
Kuang-Yu HUANG, Chuen-Juan JANE
Ling Tung University

Session MPP

CIS Interactive Session II & RAM Interactive Session II

- MPP.01 High Accuracy Measurement Technology of CCD and its Industrial Application
Pengfei HAO, Xiaodong ZHANG, Yuanzong LI, Lihong ZHENG
Taiyuan University of Technology
- MPP.02 Design of a DSP-based CMOS Imaging System for Embedded Computer Vision
Fen XU, Jianjun ZENG, Yunlong ZHANG
North China University of Technology
- MPP.03 3D Object Recognition using Multiple Features and Neural Network
Sheng XU, Qicong PENG
University of Electronic Science and Technology of China
- MPP.04 Convergence Analysis of Background Neural Networks with Two Subnetworks
Fang XU, Lei ZHANG, Hong QU
University of Electronic Science and Technology of China
- MPP.05 Group Selection by using Lotka-Volterra Recurrent Neural Networks
Stones Lei ZHANG, Zhang YI, Peng Ann HENG
University of Electronic Science and Technology of China
- MPP.06 ECOC-Based Training of Neural Networks for Face Recognition
Nima HATAMI, *Reza EBRAHIMPOUR, **Reza GHADERI
Shahed University
**Shahid Rajaei University*
***Mazandaran University*
- MPP.07 Application of Intelligent PID Control for Robot
Lixin MA, Minxuan CHEN, Daonian SHI, Xiaoqin WANG
University of Shanghai for Science and Technology
- MPP.08 The Scale Self-Adjusting Multi-Resolution Network Traffic Anomaly Detection
Xingjian QI, Guangmin HU, Dan YANG, Zonglin LI
University of Electronic Science and Technology of China
- MPP.09 A Chaotic Encryption System using PCA Neural Networks
Xiao FEI, Guisong LIU, Bochuan ZHENG
University of Electronic Science and Technology of China
- MPP.10 A Novel k -Times Short Digital Signature Scheme using Pairing
Jianhong ZHANG, *Jianjun XIE
North China University of Technology
**Hebei Normal University*
- MPP.11 A New Image Encryption Arithmetic based on a Three-dimensional Map
Feng HUANG, Chao WANG, Shijun LI
Hunan Institute of Engineering
- MPP.12 An Automatic Co-stimulation Algorithm for LAN Artificial Immune Systems
Tieshan ZHAO, Zengzhi LI, *Wanbiao MAO, *Jiajun ZHU
Xi'an Jiaotong University
**Xichang Satellite Launch Center*
- MPP.13 Extension of Statistical Process Control (SPC) Methodology to Dynamic Systems Controlled via Output Feedback
Raphael LINKER
Technion - Israel Institute of Technology
- MPP.14 Improve Go AI based on BP-Neural Network
Jianming LIAO, Difei ZOU, Rui LUO
University of Electronic Science and Technology of China
- MPP.15 A New Palmprint Identification Algorithm based on Gabor Filter and Moment Invariant
Shuang WANG, Yong XU
Harbin Institute of Technology, Shenzhen

- MPP.16 [An Improved Grey Self-Organizing Map Based DOS Detection](#)
Rui CHEN, Jinyu WEI, Hefeng YU
Tianjin University of Technology
- MPP.17 [Apply Anomaly Grey Forecasting Algorithm to Cyberspace Situation Prediction](#)
Weisong HE, Guangmin HU, *Hongmei XIANG
University of Electronic Science and Technology of China
**Chongqing College of Electronic Engineering*
- MPP.18 [Review on the Application of Artificial Intelligence in Antivirus Detection System](#)
Xiaobin WANG, Guangyuan YANG, Yichao LI, Dan LIU
University of Electronic Science and Technology of China
- MPP.19 [Fuzzy-SMC-PI Flux and Speed Control for Induction Motors](#)
Haider A F MOHAMED, En Lai LAU, Soo Siang YANG, Mahmoud MOGHAVVEMI
University of Malaya
- MPP.20 [Stochastic State Estimation and Control for Stochastic Descriptor Systems](#)
Zhiwei GAO, Xiaoyan SHI
Tianjin University
- MPP.21 [Transient Performance Simulation and Analysis of AC Exciter in Aeronautic AC Power Supply based on Maxwell 2D](#)
Jianlei LI, Yanyan CAO, Zhen MA, Xianjiang ZHANG
Binzhou University
- MPP.22 [The Ground-based Validation Technology of Teleoperation for Space Robot](#)
Xueqian WANG, *Bin LIANG, *Cheng LI, *Wenfu XU
Harbin Institute of Technology, Shenzhen
**Harbin Institute of Technology*
- MPP.23 [Efficient Speaker Recognition based on Multi-class Twin Support Vector Machines and GMMs](#)
Hanhan CONG, Chengfu YANG, Xiaorong PU
University of Electronic Science and Technology of China
- MPP.24 [Apparatus for Ensuring Seat Belt Usage and Checking Blood Alcohol Concentration](#)
Smriti BHATNAGAR, Richa GUPTA, Kapil Kumar SINGLA
Jaypee Institute of Information Technology
- MPP.25 [Decreasing Vibration of Vehicle using Combined Suspension System](#)
Jianmin SUN, *Qingmei YANG
Beijing University of Civil Engineering and Architecture
**Beijing Union University*
- MPP.26 [A Robust Motion Detection Algorithm for Complex Background using Statistical Models](#)
Zhen YU, Yanping CHEN
Xiamen University
- MPP.27 [Study on Stability of Electric Power Steering System](#)
Li ZUO, *Wenjiang WU
Beijing Institute of Petrochemical Technology
**Shijiazhuang Railway Institute*
- MPP.28 [Analysis and Research on Mismatch in Tailored Blank Laser Welding](#)
Liming XIN, Zhigang XU, Mingyang ZHAO, Tianxu ZHU
Chinese Academy of Sciences
- MPP.29 [Extension of the Second Paden-Kahan Sub-problem and its' Application in the Inverse Kinematics of a Manipulator](#)
Yuesheng TAN, *Aiping XIAO
Beijing Forest University
**Chinese Academy of Sciences*
- MPP.30 [Three Modulation Modes of SVM for AC-AC Matrix Converter](#)
Yougui GUO, Jianlin ZHU, Cheng DENG
Xiangtan University
- MPP.31 [Study on Ultimate Performance of Light-duty Electro-Hydraulic Torque-Load Simulator](#)
Yaoxing SHANG, Shuai WU, Zongxia JIAO, Xiaodong WANG
Beijing University of Aeronautics and Astronautics

MPP.32 Backlash Detection in CNC Machines based on Experimental Vibration Analysis

S Ali A MOOSAVIAN, *Ebrahim MOHAMMADI ASL

K. N. Toosi University of Technology

**Mapna Turbine Manufacturing Co.*

Session TA4

Soft Computing, Fuzzy Systems II

- TA4.1 **Intelligent Control of Thermal Comfort in Automobile**
Yadollah FARZANEH, Ali AKBARZADEH TOOTOONCHI
Ferdowsi University of Mashhad
- TA4.2 **Resilient Robust H_∞ Fuzzy Controller Design for a Class of Nonlinear Systems with Time-Varying Delays in States**
Junsheng REN
Dalian Maritime University
- TA4.3 **A Systematic and Simple Approach for Designing Takagi-Sugeno Fuzzy Controller with Reduced Data**
Yadollah FARZANEH, Ali AKBARZADEH TOOTOONCHI
Ferdowsi University of Mashhad
- TA4.4 **Online Multivariable Identification of a Nonlinear Distillation Column using an Adaptive Takagi-Sugeno Fuzzy Model**
Karim SALAHSHOOR, *Somayeh GHARIBSHAIYAN
Petroleum University of Technology
**Islamic Azad University*
- TA4.5 **Study on Fuzzy-Extension Control System for Marine Steering**
Minghui WANG, Yongquan YU, Yimin YANG, Fei WANG
Guangdong University of Technology
- TA4.6 **An LMI Approach to Robust Controller Designs of Takagi-Sugeno fuzzy Systems with Parametric Uncertainties**
Li QI, Junyou YANG
Shenyang University of Technology

Session TA5

Computer Vision II

- TA5.1 Segmentation of Fingerprint Images using the Gradient Vector Field
Jin QI, Mei XIE
University of Electronic Science and Technology of China
- TA5.2 Research of Cues Selection in Pedestrian Detector based on Adaboost
Chunhui ZHAO, Yan LIANG, Yongmei CHENG, Zhaoxia LU
Northwestern Polytechnical University
- TA5.3 Color Pattern Diffusion : Verification for Wide Baseline Matching
Xinhai LIU, Kangling FANG, Wangming XU, Jin WU
Wuhan University of Science and Technology
- TA5.4 Webcam Calibrations for Ground Texture Visual Servo
Takeshi MATSUMOTO, David POWERS, Nasser ASGARI
Flinders University
- TA5.5 Designing non Constant Resolution Vision Sensors via Photosites Rearrangement
Sio-Hoi IENG
University Pierre and Marie Curie
- TA5.6 Study on Change Detection for Multi-temporal Polarimetric SAR Images
Juntuan ZHANG, *Shiqi HUANG, **Zhenfu LI, Jun LIN
Jilin University
**Xi'an Research Institute of Hi-Tech*
***Xi'an Communication Institute*

Session TA6

Decision Support Systems I

- TA6.1 [Research on Prediction Technique of Network Situation Awareness](#)
Juan WANG, Zhiguang QIN, Li YE
University of Electronic Science and Technology of China
- TA6.2 [A Maximum Entropy Model for Product Feature Extraction in Online Customer Reviews](#)
Gamgarn SOMPRASERTSRI, Pattarachai LALITROJWONG
King Mongkut's Institute of Technology Ladkrabang
- TA6.3 [A Particle Filter using SVD Based Sampling Kalman Filter to Obtain the Proposal Distribution](#)
Bin LIU, Xiaochuan MA, Chaohuan HOU
Chinese Academy of Sciences
- TA6.4 [3D Topological Relations for 3D Spatial Analysis](#)
Mochammad ZULIANSYAH, Suhono HARSO SUPANGKAT, Yoga PRIYANA, Carmadi MACHBUB
Bandung Institute of Technology
- TA6.5 [A Model-free Adaptive Control of Welding Pool Dynamics during Arc Welding](#)
Fenglin LV, Jifeng WANG, Chongjian FAN, Shanben CHEN
Shanghai Jiaotong University
- TA6.6 [Sliding Mode Control based on Delay Estimation Online for Networked Control System with Model Uncertainties and Stochastic Less Delay](#)
Chunlai YU, Hualong XU, Shiqi HUANG
Xi'an Research Institute of Hi-Tech

Session TAP

CIS Interactive Session III & RAM Interactive Session III

- TAP.01 **A Novel Algorithm of Constructing LDPC Codes with Graph Theory**
Yan CUI, Xinhui SI, Yanan SHEN
University of Science and Technology Beijing
- TAP.02 **Using Hopfield Neural Networks to Solve DEA Problems**
Shing-Cheng HU, Yun-Kung CHUNG, Yun-Shiow CHEN
Yuan Ze University
- TAP.03 **Hospital Linens Inventory Control Re-engineering based on RFID**
Yuanyuan JIAO, Yiwen ZHEN, *Jianxin, Roger JIAO
Nankai University
**Nanyang Technological University*
- TAP.04 **Evolution-generated Communications in Digital Business Ecosystem**
Juan WANG, *Philippe de WILDE
Shenzhen University
**Heriot-Watt University*
- TAP.05 **Reasoning of Fuzzy Causality Diagram with Interval Probability**
Xinyuan LIANG, *Qingxi SHI
Chongqing University
**Chongqing Technology and Business University*
- TAP.06 **Analytical Design of Decoupling Control for Variable-Air-Volume Air-conditioning System**
Jiangjiang WANG, Chunfa ZHANG, Youyin JING
North China Electric Power University, Baoding
- TAP.07 **Web-based Remote Human Pulse Monitoring System with Intelligent Data Analysis for Home Healthcare**
Chih-Ming CHEN, *Chin-Ming HONG, *Chia-Meng HUANG, **Tai-Hung LEE
National Chengchi University
**National Taiwan Normal University*
***National Hualien University of Education*
- TAP.08 **Mining Interactive Social Network for Recommending Appropriate Learning Partners in a Web-based Cooperative Learning Environment**
Chih-Ming CHEN, *Chin-Ming HONG, *Chia-Cheng CHANG
National Chengchi University
**National Taiwan Normal University*
- TAP.09 **Design of the Intelligent Heat Meter based on MSP430FW425**
Bingjiang GONG, Yan LIU
Hebei University of Engineering
- TAP.10 **A Adaptive Grey Fuzzy Prediction Controller Design based on the Improving Residual Error Model**
Rongcheng LIU, Wenzhan DAI, Sen XU
Zhejiang Sci-Tech University
- TAP.11 **MRPlanner: An Agent-Based MMRP Constraint Programming System**
Junwei YANG, *Xiaojing HUO, Zhongxiang HU, Xiaojun SHI
Academy of Armored Force Engineering
**Hebei Agricultural University*
- TAP.12 **The Design of Softman-Based Digital Copyright Protection System in Internet**
Fucheng YOU
Beijing Institute of Graphic Communication
- TAP.13 **A Web Services Based Wide-area Corporation Multi-agent System Platform for Power System**
Xiaoyang TONG
Southwest Jiaotong University
- TAP.14 **Logical Control for a Class of Nonlinear Systems**
Wenhao YANG, Wenzhan DAI
Zhejiang Sci-Tech University

- TAP.15 [A Coloured Petri Net Model for Composite Behaviors in Multi-Agent System](#)
Jindian SU, Heqing GUO, *Shanshan YU
South China University of Technology
**Sun Yat-sen University*
- TAP.16 [Automatic Text Classification based on Knowledge Tree](#)
Lu PENG, Yibo GAO, Yiping YANG
Chinese Academy of Sciences
- TAP.17 [An Improved EPC Gen-2 Slot Random Anti-collision Algorithm based on Active Strategy](#)
Jinghe TIAN, *Yushun FAN, Yunlong ZHU, Ruizi ZHANG
Chinese Academy of Sciences
**Tsinghua University*
- TAP.19 [A Vision Based Inspection Method for Wood Veneer Classification](#)
Mengxin LI, Chengdong WU
Northeastern University
- TAP.20 [Machinery Fault Diagnosis based on Improved Algorithm of Support Vector Domain Description and SVMs](#)
Qiang WU, Chuanying JIA, *Wenying CHEN, **Xiaoshuai DING
Dalian Maritime University
**Tsinghua University*
***Tibet Nationalities Institute*
- TAP.21 [Research on Agile Infrastructure for Collaborative Manufacturing and Agile Supply Chain](#)
Jinlong SU, *Zhonghui OUYANG, *Yimin CHEN
Shanghai University
**Quanzhou Normal University*
- TAP.22 [Multiple Mobile Robots Map Building based on DSMT](#)
Peng LI, Xinhan HUANG, Min WANG, Xiangjin ZENG
Huazhong University of Science and Technology
- TAP.23 [Consensus-based Strategy for Parallel Motion of Multiple Mobile Robots](#)
Guansheng XING, Jianxun ZHANG, Hao JU
Nankai University
- TAP.24 [Vision-based Fuzzy Coordination Control for Multiple Robots](#)
Li YANG, Zhiqiang CAO, Min TAN, *Guoping LIU
Chinese Academy of Sciences
**University of Glamorgan*
- TAP.25 [Formation Control for Multi-Robot Teams using a Data Glove](#)
Nuttapon BOONPINON, Attawith SUDSANG
Chulalongkorn University
- TAP.26 [Affine Transformation of Multiple Mobile Robot Formation by Generalized Ant Colony Optimization](#)
Xuebo CHEN, Ying ZHANG
Liaoning University of Science and Technology
- TAP.27 [Research on the Nonlinear Governor of Diesel Engine with Variable Structure Control Theory](#)
Xiaobing MAO, Kaisheng LU
Wuhan University of Technology
- TAP.28 [Cooperative Coverage by Multiple Robots with Contact Sensors](#)
Zongbo HAO, Nan SANG, Hang LEI
University of Electronic Science and Technology of China
- TAP.29 [Multi-agent Planning for Ship Collision Avoidance](#)
Yuhong LIU, *Chunsheng YANG, **Xuanmin DU
Shanghai Maritime University
**National Research Council*
***Shanghai Marine Electronic Equipment Research Institute*
- TAP.30 [Backlash Detection in CNC Machines based on Experimental Vibration Analysis](#)
- TAP.30 [Modeling for a Dual Three-Phase Induction Motor based on a Winding Transformation](#)
Bulai WANG, Zhesong GONG, Wei GU, Jianxin CHU, Yi GUO
Shanghai Maritime University
- TAP.31 [Dissimilar Redundancy Measurement of Swashplate Angle of Variable Pump based on the Exact Linearization Model of EHCA](#)
Yan LANG, Yunhua LI
Beijing University of Aeronautics and Astronautics

TAP.32 Fault Diagnosis for Wireless Sensor Network's Node based on Hamming Neural Network and Rough Set

Lin LEI, Houjun WANG, Chuanlong DAI

University of Electronic Science and Technology of China

Session TM4

Neural Networks II

- TM4.1 **A Fast Algorithm for Solving Large Scale Nonlinear Optimization Problems using RNN**
Xiaoliang XU, *Huajin TANG, **Xiaoxin SHI
Hangzhou Dianzi University
**Institute for Infocomm Research*
***Sichuan University*
- TM4.2 **Chinese Word Segmentation based on the Improved Particle Swarm Optimization Neural Networks**
Jia HE, *Lin CHEN
University of Electronic Science and Technology of China
**Chengdu University of Information Technology*
- TM4.3 **Representations of Continuous Attractors of Discrete-Time Cellular Neural Networks**
Jiali YU, Zhang YI, Lei ZHANG
University of Electronic Science and Technology of China
- TM4.4 **Bifurcation of a Class of Discrete-time Neural Networks**
Xiaoliang ZHOU, Xueliang GAO
Sichuan University
- TM4.5 **A Maneuvering Target Detecting Method based on Lifting Wavelet Transform Algorithm**
Jianfang SHI, Le QI, Chengwei HE
Taiyuan University of Technology
- TM4.6 **Diesel Engine Common Rail Pressure Control based on Neuron Adaptive PID**
Shijie AN, Limin SHAO
Naval University of Engineering

Session TM5

Image Processing II

- TM5.1 **The Research of the Improved 3D L-System and its Application in Plant Modeling**
Ke GUAN
Chinese Academy of Sciences
- TM5.2 **A New Image Thresholding Method based on Isoperimetric Ratios**
Zuoyong LI, Chuancai LIU, Yong CHENG
Nanjing University of Science and Technology
- TM5.3 **Skin-Color based Particle Filtering for Human Face Tracking**
Tianrui WU, Yuexian ZOU, Wei WANG
Peking University
- TM5.4 **A Hybrid Face Recognition Algorithm based on WT, NMFs and SVM**
Pei JIANG, Yongjie LI
University of Electronic Science and Technology of China
- TM5.5 **A Survey of the Image Copy Detection**
Yuehua WAN, Qiaoling YUAN, Shiming JI, Limin HE, Yaliang WANG
Zhejiang University of Technology
- TM5.6 **Multi-object Segmentation based on Pulse Coupled Neural Network**
Xiaofang LIU, Dansong CHENG, Xianglong TANG, Jiafeng LIU
Harbin Institute of Technology

Session TM6

Intelligent Transportation System

- TM6.1 **Research of the Active Control for High-Speed Train Pantograph**
Shudong WANG, *Jingbo GUO, *Guosheng GAO
Beijing Jiaotong University
**Shijiazhuang Railway Institute*
- TM6.2 **Land Vehicle Navigation using Odometry/INS/Vision Integrated System**
Wei WANG, Dan WANG
Beijing University of Aeronautics and Astronautics
- TM6.3 **Short-term Traffic Flow Prediction based on Embedding Phase-space and Blind Signal Separation**
Hong XIE, Zhonghua LIU
Shanghai Maritime University
- TM6.4 **Adaptive and Coordinated Traffic Signal Control based on Q-Learning and MULTIBAND Model**
Shoufeng LU, Ximin LIU, *Shiqiang DAI
Changsha University of Science and Technology
**Shanghai University*
- TM6.5 **An Optimization Approach for Intersection Signal Timing based on Multi-Objective Particle Swarm Optimization**
Hao PANG, Feng CHEN
University of Science and Technology of China
- TM6.6 **Limitations of the Narrow Fuzzy-Control and the Concept of Generalized Fuzzy-Control**
Zhongxu HAN, Huanpao HUANG, *Dan LI, *Chuangxin ZHOU
China Electric Power Research Institute
**Beijing Guodian Zhishen Control Technology Ltd*

Session TMP

CIS Interactive Session IV & RAM Interactive Session IV

- TMP.01 **Topological Optimization Method and its Application Research in the Rear Platen' 3-D Structure Design**
Jing LI, Ganwei CAI, *Yonghui ZHANG
Guangxi University
**Guangzhou Navigation Mark Office*
- TMP.02 **Solving TSP using Lotka-Volterra Neural Networks without Self-Excitatory**
Manli LI, Jiali YU, Stones Lei ZHANG, Hong QU
University of Electronic Science and Technology of China
- TMP.03 **Multivariable Generalized Predictive Scheme for Gas Turbine Control in Combined Cycle Power Plant**
L X NIU, Xiangjie LIU
North China Electric Power University, Beijing
- TMP.04 **UAV Route Planning using Multiobjective Ant Colony System**
Zhenhua WANG, Weiguo ZHANG, Jingping SHI, Ying HAN
Northwestern Polytechnical University
- TMP.05 **Optimizing Voice over Internet Protocol (VoIP) Networks based-on Extended E-model**
Yoanes BANDUNG, Carmadi MACHBUB, Armein Z R LANGI, Suhono H SUPANGKAT
Bandung Institute of Technology
- TMP.06 **A Simulation of Ant Formation and Foraging using Fuzzy Logic and Reinforcement Learning**
Sepideh AFSHAR, Mohammad J MAHJOOB
University of Tehran
- TMP.07 **The Discrete Fuzzy Numbers on a Fixed Set with Finite Support Sets**
Guixiang WANG, Chenglin WEN, *Qing ZHANG, *Xianjun CUI
Hangzhou Dianzi University
**Handan College*
- TMP.08 **LMI-based Criterion for the Robust Guaranteed Cost Control of 2-D Systems Described by the Roesser Model**
Jiangtao DAI, Weiqun WANG
Nanjing University of Science and Technology
- TMP.09 **An Example of Balanced Truncation Method and its Surprising Time Domain Performance**
Sheng Guo WANG, *Ben WANG
University of North Carolina -- Charlotte
**IBM USA*
- TMP.10 **Study on the Structure and Algorithm of a Feedback Fuzzy Controller**
Shengli QU, Bo QIAN, Xinzhi ZHU, Wenlong XU
Xidian University
- TMP.11 **An Algorithm of Maneuvering Target Tracking based on Interacting Multiple Models and Fuzzy Neural Network**
Jianfang SHI, Le QI, Yue HUANG
Taiyuan University of Technology
- TMP.12 **A Scene Recognition Algorithm based on Covariance Descriptor**
Yinghui GE, *Jianjun YU
Ningbo University
**Shanghai Jiaotong University*
- TMP.13 **A Novel Unsupervised Feature Extraction based on Image Matrix**
Yongzhi LI, *Zuoyong LI, *Songsong WU, *Jingyu YANG, Linfeng GU
Nanjing Forestry University
**Nanjing University of Science and Technology*
- TMP.14 **An Improved Adaptive CUSUM Control Chart for Monitoring Process Mean**
Jun DU, *Zhang WU, *Jianxin, Roger JIAO
Tianjin University
**Nanyang Technological University*
- TMP.15 **Multi-agent Test Environment for BPEL-based Web Service Composition**
Wenli DONG
Chinese Academy of Sciences

- TMP.16 [A New Strip Temperature Control Method for the Heating Section of Continuous Annealing Line](#)
Ming ZHOU, Datai YU, *Jiangang ZHOU
University of Science and Technology Beijing
**Baoshan Iron & Steel Co.,Ltd.*
- TMP.17 [Coverage Control in Wireless Sensor Networks based on Improved Ant Colony Algorithm](#)
Lin LEI, Houjun WANG, Zhao XU
University of Electronic Science and Technology of China
- TMP.18 [New Method for Approximating Vague Sets to Fuzzy Sets based on Voting Model](#)
Liu JIAN, Shunxiang WU, Zhizhan LIU, Yongjian ZHANG
Xiamen University
- TMP.19 [Variable Structure Control for Parameter Uncertain Stochastic Systems with Time-Varying Delay](#)
Hailong XING, Wenjie ZHAO, *Donghai LI
North China Electric Power University, Baoding
**Tsinghua University*
- TMP.20 [Application on Unloading Transient Electromagnetic Computation of Brushless AC Exciter with Magnet](#)
Zhen MA, Jianlei LI, Feng GONG, Xianjiang ZHANG
Binzhou University
- TMP.21 [Stabilization and Path Following of a Spherical Robot](#)
Daliang LIU, Hanxv SUN, Qingxuan JIA
Beijing University of Posts and Telecommunications
- TMP.22 [Formation Control of Multiple Mobile Robots based on Orientation Bias](#)
Xuebo CHEN, Wangbao XU
Liaoning University of Science and Technology
- TMP.23 [Automatic Shift with 4-parameter of Construction Vehicle based on Neural Network Model](#)
Dingxuan ZHAO, Gongjie CUI, Yingjie LI, Jie GONG, Shubo LIU, Yuankun ZHANG
Jilin University
- TMP.24 [A Method of Remote Fault Diagnosis based on Analytical Hierarchy Process](#)
Xiaobin WANG, Wenyu CHEN, Shixin SUN, *Jingbo LIU
University of Electronic Science and Technology of China
**Chongqing Three Gorges University*
- TMP.25 [Investigation on Key Techniques of Measurement Device of Position and Attitude Applied in Large-Scale Pushing Bridge Construction Machinery](#)
Qi ZHENG, Chao LI, Yunhua LI, Mei SHUAI
Beijing University of Aeronautics and Astronautics
- TMP.26 [The Issue of Robot Education in China's Basic Education and its Strategies](#)
Guomin ZHANG, Jianping ZHANG
Zhejiang Normal University
- TMP.27 [Fast Calibration for Robot Welding System with Laser Vision](#)
Suyi LIU, *Guorong WANG
Nanchang University
**South China University of Technology*
- TMP.28 [A Novel 3-DOF HIP Exoskeleton for Kinematically Establishing Animal Model of Avascular Necrosis of the Femoral Head](#)
Yu ZHANG, Jiafan ZHANG, Yiming DONG, Canjun YANG, Ying CHEN, Jianhua LI, Tao WU
Zhejiang University
- TMP.29 [Analysis of Contact Forces for Forging Manipulator Grippers](#)
Qunming LI, Dan GAO, Hua DENG
Central South University
- TMP.30 [Study on a Pipe Welding Robot based on Laser Vision Sensing](#)
Jiqiang HUANG, Junfen HUANG, Yong ZOU, Lipei JIANG, Long XUE, Minshuang HUANG
Beijing Institute of Petrochemical Technology
- TMP.31 [Delay-Dependent Robust Reliable Guaranteed Cost Control for Nonlinear Systems with Time-Varying State Delays](#)
Nan XIE, Ping CHEN, Lei ZHAO, Bin XIA
Shandong University of Technology

TMP.32 Robotic Machining: A Force-Control-Based Fast Programming Method
Jingguo GE, Fusheng TAN, Hui ZHANG
ABB Corporate Research China

Session TP4

Decision Support Systems II

- TP4.1 **A Novel Ring Signature Scheme with Multi-designated Verifiers**
Jianhong ZHANG, *Jianjun XIE
North China University of Technology
**Hebei Normal University*
- TP4.2 **Validating Multiattribute Decision Making Methods for Supporting Group Decisions**
Chung-Hsing YEH, *Yu-Hern CHANG
Monash University
**National Cheng Kung University*
- TP4.3 **A Novel Contract Net Negotiation Model based on Trust Mechanism**
Zude ZHOU, Songlin CHENG, Quan LIU
Wuhan University of Technology
- TP4.4 **The Discrete Surface Kernel: Framework and Applications**
Naoufel WERGHI
University of Dubai

Session TP5

Neuro-Fuzzy Systems

- TP5.1 **Adaptive Fuzzy Multivariable Controller Design based on the Lyapunov Scheme**
Sajjad POURMOHAMMAD, Ali Reza YAZDIZADEH
Power and Water University of Technology
- TP5.2 **Delay-Dependent Guaranteed Cost Control for T-S Fuzzy Descriptor Systems with Time Delays**
Weihua TIAN
Shenyang Institute of Engineering
- TP5.3 **Intelligent Fault Diagnosis of Distillation Column System based on PCA and Multiple ANFIS**
Peyman AKHLAGHI, Amir Reza KASHANIPOUR, *Karim SALAHSHOOR
Islamic Azad University
**Petroleum University of Technology*
- TP5.4 **Precise Determination of Non-additive Measures**
Hai-Feng GUO, Wen ZHENG, *Song CI
University of Nebraska at Omaha
**University of Nebraska at Lincoln*
- TP5.5 **Distributed Control on a Model of Mars Rover Spirit**
Rerngwut CHOOMUANG
Sripatum University

Session TP6

Expert and Knowledge Base Systems

- TP6.1 Knowledge Reduction of Dominance-based Fuzzy Rough Set in Fuzzy Decision System
Jun XIE, Yuqing SONG, *Xibei YANG, *Huajiang SUN, *Jingyu YANG
Jiangsu University
**Nanjing University of Science and Technology*
- TP6.2 An Internet Robot Tele-operating System
Quanyu WANG, Haifang CAO, Xin LIU
Beijing Institute of Technology
- TP6.3 Implementing an XML Based Unified Knowledge Manipulation Languages for SOAR Cognitive Architecture
Hamed KHANDAN, *Caro LUCAS
Tehran University of Medical Sciences
**Tehran University*
- TP6.4 Grid Resource Scheduling based on Fuzzy Similarity Measures
Bin LU, Juan CHEN
North China Electric Power University, Baoding
- TP6.5 Adaptive Control of an Aerial Robot using Lyapunov Design
Payam ZARAFSHAN, S Ali A MOOSAVIAN, Mohsen BAHRAMI
K. N. Toosi University of Technology

Session WA4

Neural Networks III

- WA4.1 **Study on Wood Defect Detection Based on Artificial Neural Network**
Dawei QI, Peng ZHANG, Lei YU
Northeast Forestry University
- WA4.2 **Global Asymptotic Stability of Stochastic Neural Networks with Time-Varying Delays**
Zhengxia WANG, Dacheng WANG, *Xinyuan LIANG, **Haixia WU
Chongqing Jiaotong University
**Chongqing University*
***Chongqing Education College*
- WA4.3 **Research on the Fouling Prediction of Heat Exchanger based on Wavelet Neural Network**
Lingfang SUN, Haidi CAI, Yingying ZHANG, Shanrang YANG, *Yukun QIN
Northeast Dianli University
**Harbin Institute of Technology*
- WA4.4 **Fault Diagnosis of Oil Pump based on High Speed and Precise Genetic Algorithm Neural Network**
Meijuan GAO, Jingwen TIAN, Liting CAO, *Jin XU
Beijing Union University
**Beijing University of Chemical Technology*
- WA4.5 **A New Elman Neural Network and its Dynamic Properties**
Yuanchu CHENG, Weimin QI, Jie ZHAO
Wuhan University
- WA4.6 **The Choice of Welding Parameters and Prediction of Weld Seam Dimensions for Welding Rapid Prototyping**
Jianning XU, Hua ZHANG, Guangyun ZHANG, Yulong LI, Ronghua HU
Nanchang University

Session WA5

Image Processing III

- WA5.1 **Real-time Tissue Deformation and Image Rendering for Computer Simulation**
Qian YIN, *Zhiyong YUAN, **Zukuan WEI, Xin ZHENG
Beijing Normal University
**Wuhan University*
***University of Electronic Science and Technology of China*
- WA5.2 **What Statistics is PSNR Related using JPEG2000**
Zhaohui CUI, Jingliang FU, Jiwei LIU, Ang LI
University of Science and Technology Beijing
- WA5.3 **Omnidirectional Structure Element of Mathematical Morphology Applied to Wood Computed Tomography Testing**
Meiheng ZHANG, *Dawei QI, *Lei YU
Mudanjiang Teachers College
**Northeast Forestry University*
- WA5.4 **Automatic Image De-Weathering using Physical Model and Maximum Entropy**
Xin WANG, Zhenmin TANG
Nanjing University of Science and Technology
- WA5.5 **Contour Detection based on the Property of Orientation Selective Inhibition of Nonclassical Receptive Field**
Li LONG, Yongjie LI
University of Electronic Science and Technology of China
- WA5.6 **Film Line Scratch Detection using Neural Network and Morphological Filter**
Kyung-Tai KIM, Eun-Yi KIM
Konkuk University

Session WA6

Computational Intelligence II

- WA6.1 [A Novel Scheme for Image Encryption based on Piecewise Linear Chaotic Map](#)
Jun PENG, Shangzhu JIN, *Yongguo LIU, Zhiming YANG, Mingying YOU, Yangjun PEI
Chongqing University of Science and Technology
**University of Electronic Science and Technology of China*
- WA6.2 [Spam Image Discrimination using Support Vector Machine based on Higher-Order Local Autocorrelation Feature Extraction](#)
Hongrong CHENG, Zhiguang QIN, Qiao LIU, Mingcheng WAN
University of Electronic Science and Technology of China
- WA6.3 [A Polynomial-Based Key Predistribution Scheme for Wireless Sensor Networks using Matrix Decomposition](#)
Hong ZHENG, Hangyang DAI
University of Electronic Science and Technology of China
- WA6.4 [Propagation Modeling of Passive Worms in P2P Networks](#)
Chaosheng FENG, Zhiguang QIN, *Laurence CUTHBET, *Laurissa TOKARCHUK
University of Electronic Science and Technology of China
**University of London*
- WA6.5 [Dataflow Analysis for Known Vulnerability Prevention System](#)
Lifang QIN, Yichao LI, Cao YUE
University of Electronic Science and Technology of China
- WA6.6 [Research on Fuzzy Guidance Law based on Self-adaptive Genetic Annealing Algorithm](#)
Jinyong YU, Ruchuan ZHANG, Hongchao ZHAO
Naval Aeronautical Engineering Institute

Session WAP

CIS Interactive Session V & RAM Interactive Session V

- WAP.01 **A Feature Extraction Method based on Combined Wavelets Filter in Speech Recognition**
Xueying ZHANG, Ying SUN, *Wenjun HOU
Taiyuan University of Technology
**Beijing University of Posts and Telecommunications*
- WAP.02 **Face Recognition by Fusing Binary Edge Feature and Second-order Mutual Information**
Jiatao SONG, Beijing CHEN, Wei WANG, Xiaobo REN
Ningbo University of Technology
- WAP.03 **A Robust Algorithm for Fingerprint Singular Point Detection and Image Reference Direction Determination based on the Analysis of Curvature Map**
Jin QI, Mei XIE
University of Electronic Science and Technology of China
- WAP.04 **Modeling Concept Drift from the Perspective of Classifiers**
Bai SU, Yidong SHEN, *Wei XU
Chinese Academy of Sciences
**NEC Laboratories America, Inc.*
- WAP.05 **Approximate Frequent Itemsets Compression using Dynamic Clustering Method**
Hua YAN, Yongsheng SANG
University of Electronic Science and Technology of China
- WAP.06 **Mining Atypical Groups for a Target Quantitative Attribute**
Sylvie GUILLAUME, Florian GUILLOCHON
Blaise Pascal University
- WAP.07 **3D Spatial Models for Geometric Description of Spatial Objects**
Mochammad ZULIANSYAH, Suhono HARSO SUPANGKAT, Yoga PRIYANA, Carmadi MACHBUB
Bandung Institute of Technology
- WAP.08 **WTMaxMiner: Efficient Mining of Maximal Frequent Patterns based on Weighted Directed Graph Traversals**
Runian GENG, *Xiangjun DONG, Ping ZHANG, Wenbo XU
Jiangnan University
**Shandong Institute of Light Industry*
- WAP.09 **An Improved Fuzzy Comprehensive Evaluation Method using Expanded Least Deviations Algorithm**
Wei CHEN, Xiaohong HAO, Jie LIN
Lanzhou University of Technology
- WAP.10 **A New Genetic Algorithm for Optimization**
Peirong JI, Xinyu HU, Qing ZHAO
China Three Gorges University
- WAP.11 **Model Parameter Selection of Support Vector Machines**
Mingyuan ZHAO, Ke TANG, Mingtian ZHOU, Fengli ZHANG, Ling ZENG
University of Electronic Science and Technology of China
- WAP.12 **Emotion Recognition using Color and Pattern in Textile Images**
Na-Yeon KIM, Yun-Hee SHIN, Young-Rae KIM, Eun-Yi KIM
Konkuk University
- WAP.13 **Extraction of Text Classification Rules based on Multi-Population Collaborative Optimization**
He LIU, Dayou LIU
Jilin University
- WAP.14 **Study on the Design of CRM-Oriented Synthetic Decision Support System**
Jinyu WEI, Rui CHEN, Hefeng YU
Tianjin University of Technology
- WAP.15 **Application of ANP in Production Line Selection - A Case Study for ERP Sand Table Simulation Evaluation**
Jinyu WEI, Ran BI
Tianjin University of Technology

- WAP.16 [Section Optimization Design of Discrete Structure with Improved Genetic Algorithms](#)
Na LI, *Huiying HOU
North China Electric Power University, Baoding
**Baoding Civicism*
- WAP.17 [Modeling Visual and Auditory Integration of Barn Owl Superior Colliculus with STDP](#)
Juan HUO, Zhijun YANG, Alan MURRAY
The University of Edinburgh
- WAP.18 [An Optimized Atmospheric Missed Data Recovery Algorithm based on Singular Spectrum Iteration](#)
Wei LIU, Weidong JIN, *Huizan WANG, *Ren ZHANG
Southwest Jiaotong University
**PLA University of Science and Technology*
- WAP.19 [Tracking Control of Unmanned Trimaran Surface Vehicle: Using Adaptive Unscented Kalman Filter to Estimate the Uncertain Parameters](#)
Yan PENG, Jianda HAN
Chinese Academy of Sciences
- WAP.20 [A New Fast Histogram Matching Algorithm for Laser Scan Data](#)
Quan QIU, Jianda HAN
Chinese Academy of Sciences
- WAP.21 [Force Feedback Model of Electro-hydraulic Servo Tele-Operation Robot based on Velocity Control](#)
Mingde GONG, Dingxuan ZHAO, Shizhu FENG, Hailong WEI, *Hironao YAMADA
Jilin University
**Gifu University*
- WAP.22 [Uncalibrated Visual Servoing using More Precise Model](#)
Qingshan FU, Zhisheng ZHANG, Jinfei SHI
Southeast University
- WAP.23 [AGV Dispatching Strategy based on Theory of Constraints](#)
Shigang SONG, Aiping LI, Liyun XU
Tongji University
- WAP.24 [Algorithms for Real Time Detection and Depth Calculation of Obstacles by Autonomous Robots](#)
Vikas SINGH, Anvaya RAI, Hemanth N, Rohit D A, Asim MUKHERJEE
Motilal Nehru National Institute of Technology
- WAP.25 [Analysis of an Eddy Current Sensor for Liquid Pressure Measuring by FEM Simulation](#)
Linsen XU, Minzhou LUO, *Feng HAN, *Xiaojuan HU
Chinese Academy of Sciences
**Changzhou Institute of Mechatronics Engineering*
- WAP.26 [Grasping Force Estimation Recognizing Object Slippage by Tactile Data using Neural Network](#)
Abdul Md MAZID, *M Fakhru ISLAM
Central Queensland University
**Monash University*
- WAP.27 [Research of Time-frequency Analysis Method of Nonstationary Periodic Signal](#)
Qiang ZHOU, Jiuqiang HAN
Xi'an Jiaotong University
- WAP.28 [The Synchronization Technique of Data Fusion for Integrated Navigation Systems](#)
Wei WANG, *Zongyu LIU
Beijing University of Aeronautics and Astronautics
**Beijing Institute of Control Engineering*
- WAP.29 [Multi-Parameters Optimization and Nonlinearity Analysis of the Grating Eddy Current Displacement Sensor](#)
Hongli QI, Hui ZHAO, Weiwen LIU
Shanghai Jiaotong University
- WAP.30 [Laser Triangulation Displacement Measurement Method using Prism-Based Optical Structure](#)
Haibo ZHANG, Hui ZHAO, Wei TAO, Zhanbin WANG
Shanghai Jiaotong University
- WAP.31 [Research on the Model of Iron and Steel Enterprises Group Production Scheduling Orienting to Group Enterprises Management Pattern](#)
Xiaobing LIU, Yuchun WANG
Dalian University of Technology

Session WM4

Neural Networks IV

- WM4.1 **A Neural Network Approach for Creating a NTC Thermistor Model Library for PSPICE**
Lianming WANG, *Yufen DENG, *Xianlong ZHAO, *Baoliang LIU
Northeast Normal University
**Institute of Hydrographic Surveying and Charting*
- WM4.2 **A Delay-Dependent Stability Criterion for Neural Networks with Interval Time-varying Delays**
Haixia WU, Wei ZHANG, *Wei FENG, **Zhengxia WANG
Chongqing Education College
**Chongqing University*
***Chongqing Jiaotong University*
- WM4.3 **Robust Control based on LS-SVM for Uncertain Nonlinear Systems**
Hong YANG, Fei LUO, Yuge XU
South China University of Technology
- WM4.4 **High Performance Intelligent PID Control System and Application**
Lixin MA, Tao ZHOU, Minxuan CHEN, *Hiromi MIYAJIMA
University of Shanghai for Science and Technology
**Kagoshima University*
- WM4.5 **Research on the Recognition of Surface Defects in Copper Strip based on Fuzzy Neural Network**
Xuewu ZHANG, Yanyun LV, Yanqiong DING, Zhentao ZHOU
Hohai University
- WM4.6 **Infinity Norm Based Neural Network Algorithm for Principal Component Analysis**
Lijun LIU, *Hongjie XING, **Dong NAN
Dalian Nationalities University
**Hebei University*
***Beijing University of Technology*

Session WM5

Evolutionary Computation

- WM5.1 [A Real-Coded Quantum-Inspired Evolutionary Algorithm for Global Numerical Optimization](#)
Chaoyong QIN, *Yongjuan LIU, **Jianguo ZHENG
Guangxi University
**Guangxi University of Technology*
***Donghua University*
- WM5.2 [A Sinusoid Size Ring Structure Quantum Evolutionary Algorithm](#)
Mohammad-H TAYARANI-N, Mohammad-R AKBARZADEH-T
Islamic Azad University of Mashhad
- WM5.3 [A Economic Lot Scheduling Problem for Manufacturing and Remanufacturing](#)
Huiqing OUYANG, Xiangyang ZHU
Shanghai Jiaotong University
- WM5.4 [Co-evolutionary Stability in the Alternating-Offer Negotiation](#)
Yongquan LIANG, Yong YUAN
Shandong University of Science and Technology
- WM5.5 [Adaptation Ethnic Group Evolution Algorithm](#)
Hao CHEN, Duwu CUI, *Xue LI, Zhanmin WANG
Xi'an University of Technology
**Shaanxi Normal University*
- WM5.6 [Manifold Learning with Local Geometry Preserving and Global Affine Transformation](#)
Dong HUANG, Xiaorong PU
University of Electronic Science and Technology of China

Session WM6

Optimization

- WM6.1 **Support Vector Regression Hybrid Algorithm based on Rough Set**
Jiuying DENG, Qiang CHEN, *Zongyuan MAO, *Xiangjun GAO
Guangdong Institute of Education
**South China University of Technology*
- WM6.2 **A Heuristic Method for Job-Shop Scheduling with an Infinite Wait Buffer - From One-Machine to Multi-Machine Problems**
Zhengyi, John ZHAO, *Ji Young KIM, **Ming LUO, ***Hoong Chuin LAU, Shuzhi Sam GE, J B ZHANG
National University of Singapore
**Institute of Transportation and Logistics UTAC*
***Singapore Institute of Manufacturing Technology*
****Singapore Management University*
- WM6.3 **Probabilistic Optimization Algorithms for Numerical Function Optimization Problems**
Mohammad-H TAYARANI-N, Mohammad-R AKBARZADEH-T
Islamic Azad University of Mashhad
- WM6.4 **Optimal Control of Polymer Flooding Injection under Nonlinear Inequality Constraints**
Shurong LI, Lanlei GUO, Xiaodong ZHANG
China University of Petroleum
- WM6.5 **Optimizing Cooperative Control based on Genetic Algorithm for ElectroSlag Remelting Process**
Jinchun SONG, Lili ZHAO, Hongyi LIU
Northeastern University
- WM6.6 **Cooperative Task Allocation for Unmanned Combat Aerial Vehicles using Improved Ant Colony Algorithm**
Jun TAO, Yantao TIAN, *Xiangheng MENG
Jilin University
**Aviation University of Air Force*

Session WMP

CIS Interactive Session VI & RAM Interactive Session VI

- WMP.01 Investigation of KLIM Algorithm Applied to Face Recognition
Yunfei JIANG, Rukun HU, Ping GUO, Xin ZHENG
Beijing Normal University
- WMP.02 A New MSBF-based HDR Image Processing Algorithm
Jun WANG, *Yan KANG
China Jiliang University
**The Youse Mapping and Conveying Institute of Zhejiang*
- WMP.03 Counting Method of Heterotrophic Bacteria based on Image Processing
Hong MEN, Yujie WU, Xiaoying LI, Zhen KOU, Shanrang YANG
Northeast Dianli University
- WMP.04 Research Advances and Prospects of Mathematical Morphology in Image Processing
Zijuan YU, Yuqian ZHAO, Xiaofang WANG
Central South University
- WMP.05 Improved Multi-scale and Structuring Element Morphological Detection in the Log CT Image
Lei YU, Dawei QI
Northeast Forestry University
- WMP.06 Delegatability of Designated Verifier Signature
Yongjian LIAO, Zhiguang QIN
University of Electronic Science and Technology of China
- WMP.07 A Technique for the Quantitative Measure of Data Cleanliness
Abhijit WAKCHAURE, Ronald EAGLIN, Bahman MOTLAGH
University of Central Florida
- WMP.08 Operational Separability Criteria and Matrix Reorderings
Wei CHENG
University of Electronic Science and Technology of China
- WMP.09 Research on Common Mode Noise Evaluation Method
Yonggao ZHANG, Yanli GAO, Ming YAO, *Qiang DONG
East China Jiaotong University
**Hubei University of Police*
- WMP.10 Proposal of an ODX Data Exchange System Applied to Automotive Diagnosis
Aurelien CREMMEL, *Armin AZARIAN, Ali SIADAT
ENSAM
**Siemens AG*
- WMP.11 Combining Entropy Weight and TOPSIS Method for Information System Selection
Jingwen HUANG
Guangxi University
- WMP.12 Community Intrusion Detection and Pre-warning System based on Wireless Mesh Network
Meijuan GAO, Jingwen TIAN, *Kai LI, *Hao WU
Beijing Union University
**Beijing University of Chemical Technology*
- WMP.13 Optimal Control of DDoS Defense with Multi-Resource Max-min Fairness
Wei WEI, Yabo DONG, Dongming LU, *Guang JIN
Zhejiang University
**Ningbo University*
- WMP.19 Development of Accelerated Life Test
Sijun ZHAO, Shaoping WANG, Jian SHI, Lan LI
Beijing University of Aeronautics and Astronautics
- WMP.20 Initial Development and Experiments on a Robotic Fish with a Novel Undulating Fin
Fangfang LIU, Canjun YANG, Yanqing XIE, Yin YANG
Zhejiang University

- WMP.21 Underwater Glider Embedded Control System Design based on QNX Real-time Kernel
Xibo WANG, Song LIU, *Ge YU, Qian LI
Shenyang University of Technology
**Northeastern University*
- WMP.22 Electro-Mechanical Heterogeneous Simulation of the Complex NC Machine Tool from Gear Milling and Hobbing
Xiaodiao HUANG, Chunjian YU
Nanjing University of Technology
- WMP.23 Improved Damped Least Squares Solution with Joint Limits, Joint Weights and Comfortable Criteria for Controlling Human-like Figures
Meng NA, Bin YANG, Peifa JIA
Tsinghua University
- WMP.24 Dual-cache Structure Based Large Scale Texture Mapping for Real-time Terrain Rendering
Dong TIAN, Xiaodong WANG, Xin ZHENG
Beijing Normal University
- WMP.25 A Level of Detail Selection Method for Multi-Type Objects based on the Span of Level Changed
Zhuo YU, Xiaohui LIANG, Zhiyu CHEN
Beijing University of Aeronautics and Astronautics
- WMP.26 Modeling and H_∞ Robust Control for Mobile Robot
Wenping JIANG, *Weimin GE
Tianjin University
**Tianjin University of Technology*
- WMP.27 Multi-robot Cooperative Task Processing in Great Environment
Taixiong ZHENG, Rui LI, Wenhao GUO, Liangyi YANG
Chongqing University of Posts and Telecommunications
- WMP.28 Design of Comprehensive High-fidelity/High-speed Virtual Simulation System for Lunar Rover
Liang DING, Haibo GAO, Zongquan DENG, Peilin SONG, Rongqiang LIU
Harbin Institute of Technology
- WMP.29 Object Manipulation by Multiple Arms of a Wheeled Mobile Robotic System
S Ali A MOOSAVIAN, Mahdy ESLAMY
K. N. Toosi University of Technology

Session WP4

Sensor Based Robotics

- WP4.1 **A Novel Object Recognition Method for Mobile Robot Localizing a Single Odor/gas Source in Complex Environments**
Ping JIANG, Ming ZENG, Qinghao MENG, Fei LI, Yanhui LI
Tianjin University
- WP4.2 **Design and Development PIC-Based Autonomous Robot**
Moh Kee GOW, Zainah MD ZAIN, Rahmatul Hidayah SALIMIN
Universiti Malaysia Pahang
- WP4.3 **Accurate Estimation of Posture and Velocity with Application to Coordinated Motion Control of Twin Hoisting-Girder Transportors**
Zhongwei GUO, Yunhua LI
Beijing University of Aeronautics and Astronautics
- WP4.4 **Research on Chaos Dynamic Characteristics of Hybrid Squeeze Film Damper with Electro-hydraulic Active Control**
Yunhua LI, *Chieh-Li CHEN
Beijing University of Aeronautics and Astronautics
**National Cheng Kung University*
- WP4.5 **Robust 3D Line Extraction from Stereo Point Clouds**
Zhao Jin LU, Seung Min BAEK, Suk Han LEE
Sungkyunkwan University
- WP4.6 **Evaluation of a Low-cost Inertial Dynamic Measurement System**
Jian GAO, *Phil WEBB, *Nabil GINDY
Guangdong University of Technology
**The University of Nottingham*

Session WP5

Genetic Algorithm

- WP5.1 Finding the Optimal Number of Clusters using Genetic Algorithms
Yongguo LIU, Mao YE, *Jun PENG, Hong WU
University of Electronic Science and Technology of China
**Chongqing University of Science and Technology*
- WP5.2 A DNA Genetic Algorithm for Beam Angle Selection in Radiotherapy Planning
Jie LEI, Yongjie LI
University of Electronic Science and Technology of China
- WP5.3 Ontology-based Concept Map for Planning Personalized Learning Path
Chih-Ming CHEN, *Chi-Jui PENG, *Jer-Yeu SHIUE
National Chengchi University
**National Hualien University of Education*
- WP5.4 Multiobjective Optimal Secure Routing Algorithm using NSGA-II
Han DAN, Guangmin HU, Lu CAI
University of Electronic Science and Technology of China
- WP5.5 Optimization for the Reliability of TTCAN Bus based on Genetic Algorithms
Xi CHEN, Weijie LV, Luyuan LIU
Tianjin University
- WP5.6 Genetic Algorithm Based Fuzzy Multi-objective Nonlinear Programming of Regional Water Allocation
Shurong LI, Feng WANG, Tao MA, Wei YAN
China University of Petroleum

Session WP6

Other Topics in CIS

- WP6.1 **Study on Fuzzy Automatic Transmission Strategy of Vehicles**
Zhiyi ZHANG, *Dingxuan ZHAO, Bei SUN
Beihua University
**Jilin University*
- WP6.2 **A Fuzzy SERVAQUL Model for Evaluating Service Quality of Service Industry**
Chien-Chang CHOU
National Kaohsiung Marine University
- WP6.3 **An Improved Result for Observer-based 模糊 Fuzzy Control**
Chun Hsiung FANG, Shih Wei KAU, Hong Wei CHEN, Chi Chiuan LU, Te Yi CHIU, Kuan-Hsuan TSENG
National Kaohsiung University of Applied Sciences
- WP6.4 **Theory of Grey Systems and its Application in Electric Load Forecasting**
Peirong JI, Juan CHEN, Wenchen ZHENG
China Three Gorges University
- WP6.5 **Activity Invariant Sets and Stable Attractors of Lotka-Volterra Recurrent Neural Networks**
Lei ZHANG, Zhang YI, Bochuan ZHENG
University of Electronic Science and Technology of China
- WP6.6 **Semi-Automatic Creation of an Emotion Dictionary using WordNet and its Evaluation**
David B BRACEWELL
GE Global Research