Special session name	
Computational Collective Intelligence	

Paper ID	Paper Title
#1897	Local and Global Consensus in Asynchronous Group Communications
#1927	A Method for Ontology based User Profile Adaptation in Personalized Document Retrieval Systems
#2353	Academic event recommendation based on similarity research and exploring interaction of authors
#2453	Bisimilarity for Paraconsistent Description Logics
#2499	An Approach to Machine Classification Based on Stacked Generalization and Instance Selection

Granular Computing (I)

Paper ID	Paper Title
#1212	Ant Colony Optimization Solutions for Logistic Route Planning with Pick-up and Delivery
#1368	WUN-MINER: A NEW METHOD FOR MINING FREQUENT WEIGHTED UTILITY ITEMSETS
#1453	A Competitive QUasi-Affine TRansformation Evolutionary (C-QUATRE) Algorithm for Global Optimization
#1456	Application of Granular Computing and Three-way decisions to Analysis of Competing Hypotheses
#1521	Parallel Coral Reef Algorithm for Solving JSP on Spark

Granular Computing (II)

Paper ID	Paper Title
#1738	Communication Scheduling Scheme Based on Big-Data Regression Analysis and Genetic Algorithm for Cyber-Physical Factory Automation
#1900	Efficient Mining of Short Periodic High-Utility Itemsets
#2138	A Novel method for stock prediction by using relationship between various stock prices fluctuation
#2395	Construction of Linguistic Variables in Information Table based on Rule Induction and Concept Hierarchy
#1113	DSS: A biclustering method to identify diverse and state specific gene modules in gene expression data

Intelligent Internet Systems (I)

Paper ID	Paper Title
#1371	Fuzzy-Based Indoor Zone Positioning System in Wireless Sensor Networks
#1599	Action Classification Using Data Mining and Paris of SURF-Based Trajectories
#1669	A Compact Self-Decoupling Dual Band MIMO Antenna
#1703	Design of a secure medical data sharing system via an authorized mechanism
#1875	Selecting the Best Model of Particle Swarm Optimization Based on the Previous Performance

Intelligent Internet Systems (I)

Paper ID	Paper Title
#1913	On Design of A Dynamic Carpooling System Based on Vehicle Information Shared Through the VANET
#1917	Optical Transceiver with Deficit Round Robin and RS232 Interface for Synchronous Optical Networking
#1940	SmartCam to see through darkness
#2012	Research on Affinity Propagation Algorithm Based on Common Neighborhood
#2029	Performance of Frequency Resource Assignment Schemes for Cognitive Radio Based Cooperative Communication Systems

Soft Computing (I)

Paper ID	Paper Title
#1082	Principal Component Selection of Machine Learning Algorithms Based on Orthogonal Transformation by Using Interactive Evolutionary Computation
#1112	Improving Gene Expression Programming using Diversity Preservation Tournament and Its Application in Grid Cell Modeling
#1229	Sliding Mode Control for State Delayed Systems subject to Persistent Disturbance
#1348	DBM vs ELM: A Study on Effective Training of Compact MLP
#1377	Electricity Load Demand Time Series Forecasting with Empirical Mode Decomposition based Random Vector Functional Link Network

Soft Computing (II)

Paper ID	Paper Title
#1564	Improvement of MF-ARTMAP Classification Accuracy Using Simulated Annealing
#1707	How to Transform Partial Order Between Degrees into Numerical Values
#1714	Fuzzy-Inspired Hierarchical Version of the von Neumann-Morgenstern Solutions as a Natural Way to Resolve Collaboration-Related Conflicts
#1727	Advanced Fuzzy Possibilistic C-means Clustering Based on Granular Computing
#1877	The Imaginary Particle Swarm Optimizer for Dynamic Maximum Power Point Tracking

Soft Computing (III)

Paper ID	Paper Title
#2382	Timed-Fuzzy Cognitive Maps: An overview
#1469	Particle Swarm Optimization applied to Relational Data Clustering
#2292	Image-based Nutrition Composition Analysis with a Local Orientation Descriptor
#1587	A Novel Particle Swarm Optimization Algorithm for Non-Separable and Ill-Conditioned Problems
#1991	EigenAnt assisted IACOR for continuous global optimization

Human Centered Transportation Systems (I)

Paper ID	Paper Title
#1200	Study on Relation between Operator and Trainee's Mental Workload for Ship Maneuvering Simulator Exercise Using Heart Rate Variability
#1231	Evaluation of Mixed Culture Bridge Teammates??Mental Workload Using Heart Rate Variability: Simulator-based Ship Handling
#1240	Development of actual ship experiment system for developing automatic pier docking system
#1400	Operation Support System for Water Transit Service
#1405	Feasibility Study for Telexistence on a Ship - Measurement of Delay Time of Satellite Communication -

Human Centered Transportation Systems (II)

Paper ID	Paper Title
#1545	Embedding Explicit Representation of Cyber-Physical Elements in Task Models
#1611	Operational assistance system for obstacle collision avoidance and load sway suppression in overhead traveling crane
#2268	Providing safe and affordable transportation service for female passengers: A case study on college girls in rural Bangladesh
#2383	Navigation in Human-Robot and Robot-Robot Interaction using Optimization Methods
#2445	Two Meta-heuristics to Solve a Coordinated Air Transportation and Production Scheduling Problem with Time Windows for the Due Date

Interactive and Wearable Computing and Devices

Paper ID	Paper Title
#1174	CanoeSense: Monitoring Canoe Sprint Motion using Wearable Body Sensor Networks
#2336	A Comparison of Wearable and Stationary Sensors for Stress Detection
#1268	A Sensor to Acquire the Relative Movement between Residual Limb and Prosthetic Socket
#2100	Collaborative Classification for Daily Activity Recognition with a Smartwatch
#1117	Object-alignment performance in a head-mounted display versus a monitor

Collaborative Wireless Sensor Networks and Internet of Things

Paper ID	Paper Title
#1997	Edge enabled development of Smart Cyber-Physical Environments
#2020	Mitigating Sensor Differences for Phone-based Human Activity Recognition
#2123	Big IoT data mining for real-time energy disaggregation in buildings
#2373	Design and Implementation of a Gateway for Pervasive Smart Environments
#1996	An Embedding Approach for Context-Aware Collaborative Recommendation and Visualization

Shared Control (I)

Paper ID	Paper Title
#1062	A Trouble Shared Is a Trouble Halved ??Usability Measures for Human-Robot Collaboration
#1154	Analysis of Human-Machine Cooperation When Driving with Different Reliabilities of Shared Control Systems
#1183	A Shared Control in Risk Predictive Braking Manoeuvre for Preventing Collision with Pedestrian
#1283	Towards adaptability of levels of automation with Human-Machine cooperation approach
#1600	Evaluation of Haptic Support System for Training Purposes in a Tracking Task

Shared Control (II)

Paper ID	Paper Title
#1715	Driver's trust in automated driving when sharing of spatial awareness
#1757	Authority Transfer Method from Automated to Manual Driving via Haptic Shared Control
#1932	Using Learning from Demonstration to Generate Real-time Guidance for Haptic Shared Control
#1983	A Multiple-Input Single-Output Model for Human Force Perception in Pedaling
#2130	Shared automation of lane change for avoiding forward obstacle

Conflict Resolution (I)

Paper ID	Paper Title
#1081	An efficiency-adjusted fair mechanism for house allocation problem with existing tenants
#1092	Misperception in Nationalization of the Suez Canal
#1473	Belief Preference in Graph Model for Conflict Resolution with Two Decision-Makers
#1479	Automated Extraction of a Game Model using Natural Language Processing: National Strategies of the Asian Infrastructure Investment Bank
#1565	Trade and Disaster Risk Sharing in Open Economy Model

Conflict Resolution (II)

Paper ID	Paper Title
#1690	Analyzing the Financing Dilemma of Brownfield Remediation in China by using GMCR
#2010	Evaluation on the Innovative Capacity of Provincial High-tech Industries in China based on Integrated Theil and TOPSIS

#2053	Composition and Stability Concepts in the Graph Model for Conflict Resolution
#2263	Empirical Analysis of the Reference Point Effect in Residential Choices under the Risk of Slope Disasters
#2337	Strategic Analysis of the European Gas Crisis

Intelligent Learning in Control Systems (I)

Paper ID	Paper Title
#1118	Implementation of Odometry with EKF for Localization of Hector SLAM Method
#1143	Intelligent Sliding-Mode Formation Control for Uncertain Networked Heterogeneous Mecanum-Wheeled Omnidirectional Platforms
#1356	Maximum Power Point Tracking of Photovoltaic Generation Systems under Partial Shaded Conditions
#1412	A Bayesian Network Based Method for Activity Prediction in a Smart Home System
#1696	3-D Model Reconstruction from C-arm Images

Intelligent Learning in Control Systems (II)

Paper ID	Paper Title
#1902	PSO and Neural Network based Intelligent Posture Calibration Method for Robot Arm
#1809	Hierarchical Data-Driven Model-Free Iterative Learning Control Using Primitives
#1966	Trend Classification Based Weather Forecast
#1251	Actuated Green Wave Control for Grid-like Network Traffic Signal Coordination
#1163	Tracking of A Random Target by Circular Pattern of Mobile Agents With A Leader

Logistics Informatics and Knowledge Acquisition in Intelligent

Paper ID	Paper Title
#1125	Dual Sourcing Problem with Real Option
#2104	An Efficient and Effective Method to Find Uninteresting Items for Accurate Collaborative Filtering
#2245	Collaborative Image Triage with Humans and Computer Vision
#1899	Numerical Analysis of the Transportation Efficiency in a Network Considering Route Choice
#1258	Trajectory Optimization with Memetic Algorithms: Time-to-Torque Minimization of Turbocharged Engines

Medical Mechatronics (I)

Paper ID	Paper Title
#1408	Joint Angle Estimation using the Distribution of the Muscle Bulge on the Forearm Skin Surface of an Upper Limb Amputee
#1518	Integration of Visual Feedback System and Motor Current Based Gait Rehabilitation Robot for Motor Recovery
#1594	The Use of Deep Learning and Mean Shift to Learn Global and Local Processing in Human Visual Perception
#1807	Decoupled PID Control with Gain Adaptation for a Cycling Dynamic Knee Rig
#1810	Adaptive Sliding Mode Control of a Lower-limb Exoskeleton Rehabilitation Robot

Medical Mechatronics (II)

Paper ID	Paper Title
#2030	An Accelerometer-based Festinating Gait Detection Algorithm and Its Application to Parkinson? Disease Development
#1695	Relation between Magnitude of Applied Torque during Pre-Swing Phase and Toe Clearance Change to Prevent Trip of Elderly People
#1053	A Medication Adherence Monitoring System for People with Dementia
#1652	Cognitive Workload in Conventional Direct Control vs. Pattern Recognition Control of an Upper-limb Prosthesis
#1130	Evidence of Usability: Evaluation of Burn ICU Clinician Decision Support

Intelligent Media and New-Generation Software

Paper ID	Paper Title
#1151	A Study on an Emotion Estimation of Narratives Using Cognitive Appraisals of the Reader
#1222	The Effect of Education and Learning Using Note-Taking Application
#1260	Discovering Inductive Theorems Using Rewriting Induction
#1436	Distance Based Multiple Swarms Formation Method in Particle Swarm Optimization
#2273	System for Game Enhancement using Scene Recognition in Emulated Consoles

Distributed Adaptive Systems

Paper ID	Paper Title
#1265	A Visualization Tool for Adaptive Collaboration
#1562	Evolutionary Strategies for Novelty-Based Online Neuroevolution in Swarm Robotics
#1832	An Evaluation Method for Self-Adaptive Systems
#1920	Group Role Assignment Based on Multi-Criteria in Collaboration System
#2216	Adaptive Workload Distribution for Local and Remote Clouds

Distributed Adaptive Systems and Biometric systems

Paper ID	Paper Title
#2470	Simulating Tolerance: A Collective Behavior Observed in Dynamic Social Networks
#1484	Applications of the Viable System Model in Automotive and Battery Storage Systems
#1853	Part-Based Representation and Classification for Face Recognition
#2103	Smartphone Enabled Person Authentication Based on Ear Biometrics and Arm Gesture
#2328	GRiD: Gathering Rich Data from PubMed using One-class SVM

Discrete Event and Hybrid Systems

Paper ID	Paper Title
#1109	Analysis and Control of Wafer Delays in a Dual-armed Cluster Tools for a K-Cyclic Schedule
#1717	Place Invariant Simplification in Optimal Supervisor Synthesis for FMS
#1871	Modeling Cyber Attacks by Stochastic Games and Timed Petri Nets
#1304	A Petri Net Based Methodology for Modelling, Analysis, Demand Forecast and Optimal Planning of Batch Production Systems
#1407	Modeling and Control of Urban Expressways with Emergency using Hybrid Petri Nets

Grey System Theory and Application (I)

Paper ID	Paper Title
#1034	A new decision model to solve the clustering dilemma
#1067	The model TMGM(1,N) based on the development trend of multiple driving variables and its application
#1203	The Application of Grey-Incidence Decision Making In the Analysis of Brownfield Redevelopment Project
#1269	Universities-industry collaboration (UIC) partner selection based on Grey Fuzzy Evaluation
#1563	Rough approximation model based on grey dominance relation

Grey System Theory and Application (II)

Paper ID	Paper Title
#1783	A novel grey nearness incidence model for visual inspection on composite materials subjected to low-velocity impact damage
#1881	A Study on the Assessment of Power System Security Risk based on Grey Clustering and Maximum Entropy Theory
#1480	An Improved Prediction Model for Interval Grey Number
#2311	Grey Relational Analysis Based on Velocity and Acceleration and its Application on Research
#2457	An Evolutionary Optimization based Interval Type-2 Fuzzy Classification System for Human Behaviour Recognition and Summarisation

Grey System Theory and Application (III)

Paper ID	Paper Title
#2406	R-Fuzzy Sets and Grey System Theory
#1108	A Study on the Equilibrium of Regional Industrial Spatial Distribution based on Grey Prediction Model
#1036	Surface Vibration Displacement Prediction based on a Non-equidistant Grey Model
#1443	Study on Spatial Correlation Mechanism of Industries between Different Major Functional Areas Based on Grey Target Theory
#1475	Fuzzy Zoning: A Lagrangean Relaxation Approach

Matrix Analysis and Feature Learning for Multimedia Understanding (I)

Paper ID	Paper Title
#1115	Data-driven Facial Animation via Hypergraph Learning
#1292	Distributed Graph Regularized Non-negative Matrix Factorization with Greedy Coordinate Descent
#1401	Photo Aesthetic Quality Assessment via Label Distribution Learning
#1560	Multi-Organ Plant Identification With Multi-Column Deep Convolutional Neural Networks
#2468	Class Specific Dictionary Learning based Kernel Collaborative Representation for Fine-grained Image Classification

Matrix Analysis and Feature Learning for Multimedia Understanding (II)

Paper ID	Paper Title
#2135	Configurable Privacy Management for Secure Video Surveillance in Energy-constrained Systems
#1693	A Three Level Adaptive Video Streaming Framework Over LTE
#1579	Personalizing Information Retrieval: a New Model for User Preferences Elicitation
#1942	Camera-based document image spotting system for complex linguistic maps
#1369	Optimized Per-Joint Compression of Hand Motion Data

Computational Awareness (I)

Paper ID	Paper Title
#1216	Time series processing at the age of big data: any change of paradigm?
#1349	Brain Source Separation for Motor Imagery Classification Using Tensor Decomposition
#1358	Guide Data Generation for On-Line Learning of DBM-Initialized MLP
#1362	Location Awareness Based on Infrared Sensor Array
#1632	Measuring computational awareness in contextual neural networks

Computational Awareness (II)

Paper ID	Paper Title

Paper ID	Paper Title
#2018	Analysis of Data Distribution to Classify Data Based on Taxonomy Hierarchy
#2019	An efficient algorithm for incoherent analysis dictionary learning based on proximal operator
#2037	Modified SA-based Household Reconstruction from Statistics for Agent-Based Social Simulations
#2045	Automatic Detection of Driver's Awareness with Cognitive Task from Driving Behavior
#2069	Incorporating Awareness in Expert Systems - Learning from Expert's Selective Attention and Perception

Computational Awareness (III)

Paper ID	Paper Title
#2260	Modeling Learning and Strategy Formation as Phase Transitions in Cortical Networks
#1733	Music Emotion Recognition using Chord Progressions
#1734	Automated Music Video Generation Using Emotion Synchronization
#1576	Applying connectivism? Does the connectivity of concepts make a difference for learning and assessment?
#2396	A Pareto Optimal Solution Visualization Method using SOM-NG with Learning Parameter Optimization

Cybermatics for Cyber-enabled Worlds (I)

Paper ID	Paper Title
#1071	A Kinect-Based System for Promoting Healthier Living at Home
#1184	A State-Prediction-based Control Strategy for UAVs in Cyber-Physical Systems
#1185	Workflow Fragments of Layer Hierarchy Detection and Recommendation
#1343	Growth Scheduling and Processing in Cyber-I Modeling
#1427	STLF: Spatial-Temporal-Logical knowledge representation and object mapping Framework

Cybermatics for Cyber-enabled Worlds (II)

Paper ID	Paper Title
#1540	Distributed Embedded Deep Learning based Real-time Video Processing
#1849	The Design and Implementation of a Kinect-Based Framework for Selective Human Activity Tracking
#1867	Programmable matter as a cyber-physical conjugation
#1396	Active Bayesian Observer Correcting Overconfidence Effects Due to E-type Confirmatory Bias
#2472	The Evolution of Ethnic Cultural Industry Towards a Cyberspace: A Perspective of Generalized Ecosystem

Better Artificial Intelligence Methods for Bigger Data Mining (I)

Paper ID	Paper Title
#1959	A Novel Approach to Generating an Interval Type-2 Fuzzy Neural Network Based on a Well-Behaving Type-1 Fuzzy TSK System
#1753	Spreading Fuzzy Random Forests with MapReduce
#1955	Genetic-Fuzzy Mining with MapReduce
#1968	An Instance Selection Framework for Mining Data Streams to Predict Antibody-Feature Function Relationships on RV144 HIV Vaccine Recipients
#2126	A Supervised Feature Selection Framework in relation to Prediction of Antibody Feature-Function Activity Relationships in RV144 Vaccines

Better Artificial Intelligence Methods for Bigger Data Mining (II)

Paper ID	Paper Title
#2150	prediction of splice site using AdaBoost with a new sequence encoding approach
#1170	A Proposal of Hierarchical Vertex Clustering Based on the Gosper Curve
#1458	Dimensionality Reduction-Based Diagnosis of Bearing Defects in Induction Motors
#1631	Topological Analysis of Ancient Glyphs
#1533	Associative Search through Formal Concept Analysis in Criminal Intelligence Analysis

Machine Learning with Big Data

Paper ID	Paper Title
#1767	Deep Neural Networks with Pseudoinverse Learning Algorithm and its Application to Astronomical Spectral Data
#1865	An Approach to Sample Selection from Big Data for Classification
#1644	HMSNN: Hippocampus inspired Memory Spiking Neural Network
#2288	Approach to Integrate Episodic Memory into Cogency-based Behavior Planner for Robots
#2085	Cogent Confabulation-based Hierarchical Behavior Planner for Task Performance

Innovative Computational Intelligence, Learning Representation of Data, and Industrial Applications

Paper ID	Paper Title
#1344	An Adaptive Learning Method of Restricted Boltzmann Machine by Neuron Generation and Annihilation Algorith
#1365	Particle Swarm Optimization Using Clustering
#1685	Time Series Classification using MACD-Histogram-based SAX and Its Performance Evaluation
#1769	Objective Measurement for Satisfaction Values to Sightseeing Spots and Route Recommendation System
#1973	Deterministic Geometric Semantic Genetic Programming with Optimal Mate Selection

Machine Learning

Paper ID	Paper Title
#2099	An Online Universal Classifier for Binary, Multi-class and Multi-label Classification
#1442	A New Faster First Order Iterative Scheme for Sparsity-based Multitask Learning
#1728	Intelligent Team Navigation and Coordination for Undersea Environments
#2291	Semantic Text Classification with Tensor Space Model-based Naïve Bayes
#2419	Intelligent Anticipatory Agents for Changing Environments

Pattern Recognition and Image Processing (I)

Paper ID	Paper Title
#2137	Detecting Korean Characters in Natural Scenes by Alphabet Detection and Agglomerative Character Construction
#1305	A New Method for Blood Smear Good Working Area Identification Based on Hough Transform
#2330	Laser Stripe Model for Sub-Pixel Peak Detection in Real-Time 3D Scanning
#2374	Deep Convolution Neural Network with Stacks of Multi-scale Convolutional Layer Block using Triplet of Faces for Face Recognition in the Wild
#1713	Objective Quality Assessment of Image Retargeting Based on Line Distortion

Pattern Recognition and Image Processing (II)

Paper ID	Paper Title
#1099	Effective Subpixel Edge Detection for LED Probes
#1556	Improved ADMM based TV minimized Image Deblurring Without Boundary Artifacts
#1708	Rotation-Invariance Can Further Improve State-of-the-Art Blind Deconvolution Techniques
#1072	Phase Congruency Based Edge Saliency Detection and Rate Control for Perceptual Image and Video Coding
#1912	Discriminant Dictionary Learning with Sparse Embedding on Face Recognition

Pattern Recognition and Image Processing (III)

Paper ID	Paper Title
#2372	A hybrid simplified swarm optimization for neural network training to forecast stock price
#2332	Extended Salient Fisher Vector Encoding for Person Re-identification
#1777	An Adaptation Module with Growing and Adjustment RBFNN using a Long-Term Memory
#1218	Automatic selection of relevant features using Rough Set Theory for real-time situation recognition based on fuzzy SOM-based CBR
#1155	Super Resolution Image Reconstruction and Imaging Device

Pattern Recognition and Image Processing (IV)

Paper ID	Paper Title
#1146	Road Curve Fitting by Multi-resolution Analysis
#1272	Local One-dimensional Embedding Interpolation for Hyperspectral Image Classification
#1682	Improving Unbalanced Downsampling via Maximum Spanning Trees for Graph Signals
#2040	Face Reconstruction from Skull Based on Least Squares Canonical Dependency Analysis
#2301	An Efficient CUDA-based Approximate Two-Dimensional Dynamic Programming Algorithm for Advanced Computer Vision Applications

Pattern Recognition and Image Processing (V)

Paper ID	Paper Title
#1003	Describing Body-Pose Feature - Poselet - Activity Relationship Using Pachinko Allocation Model
#2306	Image Guided Fuzzy Clustering for Image Segmentation
#1846	American Sign Language Recognition System by Using Surface EMG Signal
#2355	Fuzzy Indexed Color descriptor for Image Retrieval
#1399	A Fast Multi-scale Decomposition based Tone Mapping Algorithm for High Dynamic Range Images

Medical Imaging Analytics and Systems Solutions (I)

Paper ID	Paper Title
#1037	A FEATURE-PRESERVING MESH DENOISING FILTER FOR 3-D PRINTERS
#1175	Comparison of Several Speckle Reduction Techniques for 3D Ultrasound Images
#1654	A Versitile Edge Preserving Image Enhancement Approach For Medical Images Using Guided Filter
#1745	Implement of follicle monitoring system based on 3D ultrasound images
#1960	Automatic Segmentation of the Left Atrium from MR Images Via Semantic Information

Medical Imaging Analytics and Systems Solutions (II)

Paper ID	Paper Title
#1988	An interactive Image retrieval method
#2404	A Quantitative Histogram-based Approach to Predict Treatment Outcome for Soft Tissue Sarcoma Using Pre- and Post-treatment MRIs
#2034	An EM-based estimation for a two-level traitor tracing scheme
#2259	Using Frame Semantics in Authorship Attribution
#1243	Deep Wavelet Network for Image Classification

Intelligent Computing and Innovative Applications (I)

Paper ID	Paper Title
#1100	An Adaptive Sliding Self-organizing Fuzzy Controller for Switched Reluctance Motor Drive Systems

Paper ID	Paper Title
#1164	Applications of Wireless Sensor Network for Monitoring System Based on IOT
#1180	Assessment of Effect of Music Tempo on Heart Rate Recovery using Wearable Device
#1181	Multiple Biometric Authentication for Personal Identity using Wearable Device
#1187	Predictive Direct Torque Control with Discrete Multiple Vector Voltages and Fuzzy Hysteresis

Intelligent Computing and Innovative Applications (II)

Paper ID	Paper Title
#1498	Design of a Novel Exoskeleton Walking Assistance System
#2006	Robust Type-2 T-S Fuzzy Multiple Feedback-Loop H-infinity Controller Design for Uncertain Singular Time-Delay Systems
#2076	Availability Models for Synchronization Server Infrastructure
#1241	Academic Research Topics Variation and Prediction Based on FARO and Neural Network
#1057	Intelligent Investigation Mechanism based on Fuzzy Markup Language for Social Media Application

Big Data Analytics

Paper ID	Paper Title
#1008	Empirical Data Analysis A New Tool for Data Analytics
#1303	Autonomous Data-driven Clustering for Live Data Stream
#1503	Social Network Analysis: Evolving Twitter Mining
#1510	Sequential classifiers for network intrusion detection based on data selection process
#2478	Forecasting Time Series by an Ensemble of Artificial Neural Networks

Behavior Modeling for Intelligent Human-Agent Interactions (I)

Paper ID	Paper Title
#1513	Effects of Agent Transparency on Human-Autonomy Teaming Effectiveness
#1529	Modeling Behavior of Computer Generated Forces with Machine Learning Techniques, the NATO task group approach
#1603	Learning Objective Agent Behavior using a Data-driven Modeling Approach
#1896	Evolved Creative Intelligence for Computer Generated Forces
#1901	The Future of Autonomous Air Combat Behavior

Behavior Modeling for Intelligent Human-Agent Interactions (II)

Paper ID	Paper Title
#2500	Assessing Behaviour of Cognitive Agents in a Flight Simulator with Fighter Pilots
#1087	A Hybrid Modeling Approach for Incorporating Behavioral Issues into Workforce Planning
#1716	The Effect of Display Type on Operator Prediction of Future Swarm States
#1880	Vertex-Neighboring Multilevel Force-Directed Graph Drawing
#1929	Immuno-Inspired Behaviour Adaptation in Multi-Robot Systems

Robotics, Human Machine Interface, and Haptics (I)

Paper ID	Paper Title
#1139	MPC-based Motion Cueing Algorithm with Short Prediction Horizon using Exponential Weighting
#1165	High Speed Vision-based 3D Reconstruction of Continuum Robots
#1215	Skin Lesion Segmentation using Gray Level Co-occurance Matrix
#1224	Semantic Body Parts Segmentation for Quadrupedal Animals
#1236	Haptics-2 - A system for bilateral control experiments from space to ground via geosynchronous satellites

Robotics, Human Machine Interface, and Haptics (II)

Paper ID	Paper Title
#1290	Towards an analytic haptic model for force rendering of soft-tissue dissection
#1425	An Adaptable System for RGB-D based Human Body Detection and Pose Estimation: Incorporating Attached Props
#1544	A Particle Swarm Optimization-based Washout Filter for Improving Simulator Motion Fidelity
#1558	Ergonomic Effects of using Lift Augmentation Devices in Mining Activities
#1641	Nested Marsupial Robotic System for Search and Sampling in Increasingly Constrained Environments

Robotics, Human Machine Interface, and Haptics (III)

Paper ID	Paper Title
#1659	Impulsive resistance force generated using pulsive damping brake of DC motor
#1863	Tissue and Force Modelling on Multi-layered Needle Puncture for Percutaneous Surgery Training
#1882	Effect of Acceleration and Velocity on Perceptual Force Dead-Band Analysis
#1945	Driver Behaviour Analysis Using Topological Features
#1952	Body Joints Regression Using Deep Convolutional Neural Networks

Robotics, Human Machine Interface, and Haptics (IV)

Paper ID	Paper Title
#2023	An Empirical Nonlinear Viscoelastic Model of Reflective Force by a Layer of Soft Tissue
#2190	A Symbolic Motion Planning Approach for the Reach-avoid Problem
#1321	Attentional Multimodal Interface for Multidrone Search in the Alps
#2386	MyoHMI: A Low-Cost and Flexible Platform for Developing Real-Time Human Machine Interface for Myoelectric Controlled Applications
#1322	Degree of Automation in Command and Control Decision Support Systems

Modern Technology on Medicine, Health Care and Human Assist (I)

Paper ID	Paper Title
#1050	Auto-Assisting Figure Presentation System for Inclusion Education
#1093	Low Vision Aid through Laser Retina Imaging --- Toward Building Eyesight-aid ---
#1094	Touch Tracking Analysis for Graphics Image Acquisition by the Visually Impaired --- Toward Understanding Graphical Image Creation by Touch-Sensing ---
#1182	Consideration of the Experience of a Blind User Using a Tactile Graphics Editor Available for Blind People
#1246	Pupil Diameter Measurement in Visible-light Environment Using Separability Filter

Modern Technology on Medicine, Health Care and Human Assist (II)

Paper ID	Paper Title
#1341	Gait Analysis of Normal Subjects by Using Force Sensor and Six Inertial Sensor with Wireless Module
#1419	Identification of Ovarian Follicle with Ovum from Ultrasonic Images
#1493	Cerebral aneurysm occurrence prediction by morphometric analysis of the Willis ring
#1507	Application of Self-Organizing Maps to Data Classification and Data Prediction for Female Subjects with Unhealthy-Level Visceral Fat
#1657	A fundamental study on the effect of vibration stimulation for motion modification in perception-assist

Modern Technology on Medicine, Health Care and Human Assist (III)

Paper ID	Paper Title
#2258	Needs and impressions of communication robotics by seniors with slight physical and cognitive disabilities: Evaluation by system usability scale (SUS)
#2299	A Wave Detection Method for Air-Coupled Ultrasound System on Human Abdominal Region
#2320	Band Generation Process for classification of cerebrospinal fluid in Magnetic Resonance Images
#2400	Visuospatial working memory game and measured memory performances at various ages
#1438	EPOC aware Energy Expenditure Estimation with Machine Learning

Knowledge-based and Intelligent Control Solutions for Medical Cyber-Physical Systems (I)

Paper ID	Paper Title
#1623	A Haptic Guidance System for Computer-Assisted Surgical Training Using Virtual Fixtures
#2158	Reaction force and surface deformation estimation based on heuristic tissue models
#2160	Polytopic Model Based Interaction Control for Soft Tissue Manipulation
#1068	Cross-Coupling Control of a Powered Wheelchair Driven by Rim Motors
#2442	Dynamic Constraint-based Rendering of Contacts in Haptics

Knowledge-based and Intelligent Control Solutions for Medical Cyber-Physical Systems (II)

Paper ID	Paper Title
#2452	Position Control of Robotic Catheters inside the Vasculature based on a Predictive Minimum Energy Model
#2348	Using Human Intellectual Tasks as Guidelines to Systematically Model Medical Cyber-Physical Systems
#2481	Robust Lung Segmentation Combining Adaptive Concave Hulls with Active Contours
#1208	Information Supervisory Control of Human Behavior - Concept and Experiments Toward Realization -
#1539	Improving malignancy prediction through feature selection informed by nodule size ranges in NLST

Proactive Healthcare Systems (I)

Paper ID	Paper Title
#1101	Translating the Viewing Position in Single Equirectangular Panoramic Images
#1121	Early Detection of Driver Drowsiness by WPT and FLFNN Models
#1191	Mining Time-Dependent Influential Users in Facebook Fans Group
#1430	A Novel Stabilization Condition for T-S Polynomial Fuzzy System with Time-delay: A Sum-of-Squares Approach
#1452	Visual Tracking of Adaptive Particle Filter with Color Camera and Thermal Camera

Proactive Healthcare Systems (II)

Paper ID	Paper Title
#1665	Simple and Practical Skin Detection with Static RGB-Color Lookup Tables: A Visualization-based Study
#1906	Dynamic Time Warping for IMU Based Activity Detection
#2492	Efficient DVFS based Energy Saving Scheme for Video Processing Applications of Mobile Healthcare Systems
#1233	Cardiovascular Risk Prediction based on Retinal Vessel Analysis using Machine Learning
#1692	Characterizing Human Perception of Emergent Swarm Behaviors

Collaborative Technologies and Applications (I)

Paper ID	Paper Title
#1459	E-MRO Service Policy with Bilateral Requirements using Variable Fuzzy Recognition and Multi-objective Programming
#1796	Service architecture and evaluation model of distributed 3D printing based on cloud manufacturing

Paper ID	Paper Title
#1857	A Fine-Grained Permission Control Mechanism for External Storage of Android
#1858	An Advanced Collaborative Environment for Software Development
#1905	A Two-Phase Strategy with Micro Genetic Algorithm for Scheduling Multiple AGVs

Collaborative Technologies and Applications (II)

Paper ID	Paper Title
#1961	A Flexible Architecture for Selection and Visualization of Information in Emergency Situations
#2091	Understanding the Resource Positioning Methods that Support Mobile Collaboration
#2183	A Client-Side Directory Prefetching Mechanism for GlusterFS
#2267	Open Product Design and Production in IoT-enabled Manufacturing Cloud
#2427	A Fault Prediction Method Based on Modified Genetic Algorithm Optimized BP Neural Network

Collaborative Technologies and Applications (III)

Paper ID	Paper Title
#2474	Exploring asymmetric collaboration in social news curation
#1939	Collective Motion of Self-Propelled Particles without Collision and Fragmentation
#1610	Temporal and Agent Abstractions in Multiagent Reinforcement Learning
#1490	A Systems-theoretic Approach to Early Concept Development
#2298	Torque Reflecting Coordination Control Interface for Bilateral Shared Autonomous System Over Open Communication Network

Networked Systems and Networked Control (I)

Paper ID	Paper Title
#1048	pth moment exponential stability for impulsive stochastic delayed neural networks
#1089	An H-infinity approach to Fault detection for Multirate Sampled-data Systems with Frequency Specifications
#1140	Cloud-Aided Moving Horizon State Estimation of A Full-Car Semi-Active Suspension System
#1282	Fault-tolerant consensus for a group of double-integrator agents communicating over directed topology
#1345	Periodic Model Predictive Control of Multi-Hop Control Networks

Networked Systems and Networked Control (II)

Paper ID	Paper Title
#1698	Asynchronous H_{∞} Stabilization of Switched Systems with Overlapped Time-Varying Detection Delays
#2431	Stability and Stabilization of Polynomial Fuzzy Time-delay Systems under Imperfect Premise Matching
#2432	Stability Analysis and Stabilization for T-S Fuzzy Time-delay Systems with Mismatched Premise Membership Functions
#1946	Self-Organizing Map for Data Collection Planning in Persistent Monitoring with Spatial Correlations
#1197	FINITE-TIME TOPOLOGY IDENTIFICATION AND FUNCTION PROJECTIVE SYNCHRONIZATION OF COHEN-GROSSBERG NEURAL NETWORKS WITH TIME DELAYS AND STOCHASTIC DISTURBANCE

Tensor Product Applications

Paper ID	Paper Title
#1970	Non-simplex Enclosing Polytope Generation Concept for Tensor Product Transformation based Controller Design
#2303	Minimum LTI Exact Representation of Multi-Parameter-Dependent Systems
#2304	Simplification on a Kinetic Model Network Related to Hydrogen Peroxide Metabolism in Human Erythrocytes
#2310	Kronecker Product Approximation with Multiple Factor Matrices via the Tensor Product Algorithm

Model-based Healthcare (I)

Paper ID	Paper Title
#1147	Design and Implementation of a Patient-specified Cognitive Engine for Robotic Needle Insertion
#1373	Feature Analysis on Heart Failure Classes and Associated Medications
#1495	Glucose control with incomplete information
#1756	Modelling for control of hypnosis - a patient friendly approach
#1978	Convex Polytopic Modeling of Diabetes Mellitus: A Tensor Product based approach

Model-based Healthcare (II)

Paper ID	Paper Title
#2169	Modelling xenograft tumor growth under antiangiogenic inhibition with mixed-effects models
#2349	Haptic feedback tuning in colonoscopy simulation
#1418	Air-Writing Characters Modelling and Recognition on Modified CHMM
#1971	A New Metaheuristic for the Home Health Care Problem: Caregivers Tours and Conflict Visits
#1049	Model construction and authentication algorithm of virtual keystroke dynamics for smart phone users

Intelligent Internet of Things

Paper ID	Paper Title
#1423	Enabling User-centered Interactions in the Internet of Things
#1719	Data and Control Points: A Programming Model for Resource-constrained IoT Cloud Edge Devices
#1764	TM-IdleTimeout: Improving Efficiency of TCAM in SDN by Dynamically Adjusting Flow Entry Lifecycle
#2223	OAISIS: an Ontological-based Approach for Interlinking CrowdSensing Information Systems
#2237	QryGraph: A Graphical Tool for Big Data Analytics

Advanced Methods and Applications for Increasing Control Systems Reliability, Safety and Security

Paper ID	Paper Title
#1075	Formal Reasoning on Authentication in Security Protocols
#2456	Sidelobe Level Reduction in Linear Array Pattern Synthesis Using Taylor-MUSIC Algorithm for Reliable IEEE 802.11 MIMO Applications
#1280	Interval Type-2 Intuitionistic Fuzzy Logic System for Non-linear System Prediction
#1941	Fuzzy Reduced Order Observer-Controller Design for Biomechanical Sit-to-Stand Movement
#1168	Simple Kernel Search for Large Capacitated Facility Location Problems

Recent advances in intelligent image and video analysis

Paper ID	Paper Title
#1441	The Analysis of Measurement Capabilities Onboard Collinear Digital Stereo Vision Systems
#2144	Historic Handwritten Manuscript Binarisation using Whale Optimisation
#2375	Classifying HEp-2 Cells in Immunofluorescence Images Using Multiple Kernel Learning
#2362	Stable aerial image registration for people detection from a low-altitude aerial vehicle
#1818	Eyes Detection in Unrestrained Settings using Efficient Match Kernels and SVM Classification

Intelligent Vehicle Systems and Control (I)

Paper ID	Paper Title
#1124	Driver Behavior Characterization using Multiple Dynamic Models
#1328	Driver Parameter Estimation Using Joint E-/UKF and Dual E-/UKF Under Nonlinear State Inequality Constraints
#1434	Intelligent Electronic Steering Program Based on Road Departure Mitigation Control
#1520	A New Hybrid Sensorimotor Driver Model with Model Predictive Control
#1758	Localization Tools for Benchmarking ADAS Control Systems

Intelligent Vehicle Systems and Control (II)

Paper ID	Paper Title
#1844	Human Control of Systems with Fractional Order Dynamics
#1771	An Adaptive Control System for Wheeled Mobile Robot by Using Vector Model
#1096	Drivable Space Expansion from the Ground Base for Complex Structured Roads
#1460	Obstacle Avoidance of Autonomous Vehicles with CQP-based Model Predictive Control
#1797	Using the Viable System Model to control a system of distributed DC/DC converters

Intelligent Vehicle Systems and Control (III)

Paper ID	Paper Title
#1553	Multi-spectral Visual Odometry for Unmanned Air Vehicles
#1957	Feature Abstraction for Driver Behaviour Detection with Stacked Sparse Auto-encoders
#1074	Tracking Control of Unmanned Ground Vehicles Using State Estimation and Robotic Formalism
Demo Paper# 1548	Eye-based Driver State Monitor of Distraction, Drowsiness, and Cognitive Load for Transitions of Control in Automated Driving
Demo Paper# 1835	ShadowRine: Accessible Game for Blind Users, and Accessible Action RPG for Visually Impaired Gamers

Complexity and Complex Systems in Computational Cybernetics (I)

Paper ID	Paper Title
#1014	A Fast Connected Component Algorithm Based on Hub Contraction
#1213	Decentralized Connective Stabilization of Complexity Large-Scale Systems with Expanding Construction via Observers
#1376	Flexible Window Control Method Based on Data: A New Technique of AQM
#1420	Tackling Complexity and Missing Information in Adaptive Control by Fixed Point Transformation-Based Approach
#1542	Cooperative Dancing with an Industrial Manipulator: Computational Cybernetics Complexities

Complexity and Complex Systems in Computational Cybernetics (II)

Paper ID	Paper Title
#1612	Overcoming Control Complexity of Constrained Three-ling Manipulator Using Sliding-mode Control
#1666	Complexity of Constrined Switching for Switched Nonlinear Systems with Average Dwell Time; Novel Characterization
#1898	Synergy of Switched-Fuzzy and Fuzzy-Neural Nonlinear Systems Enhances Complexity and Potential
#1318	A Sensor Fault Detection and Isolation Strategy by using A Dendritic Cell Algorithm
#1870	Tolerance to Complexity: Measuring Capacity of Development Teams to Handle Source Code Complexity

Decision Support Systems based on Multicriteria Methods

Paper ID	Paper Title
#1287	Multicriteria Decision Model for Prioritization of Alternatives on Water Scarcity Situations

Paper ID	Paper Title
#1288	Analysis of the decision-makers??weights on preventive maintenance in a water supply system
#1569	A multicriteria approach for selection of agile methodologies in software development projects
#1748	Model for Contractor Performance Evaluation in Construction Industry
#1854	Classification of vulnerable areas using Dominance-based Rough Set Approach

Workshop

Workshop on Women in Engineering (I)

Paper ID	Paper Title
#1128	Coupled fractional spiking neurons
#1688	Accessible Indoor Navigation based on Linked Data in Hospitals
#1712	Fault Tolerant Distributed Control System with Robust Fractional Order Controllers
#1718	From viscoelastic models to lung function devices
#1743	A Natural Ventilation Control in Buildings Based on Co-Simulation Architecture and Particle Swarm Optimization

Workshop on Women in Engineering (II)

Paper ID	Paper Title
#1836	Multiparametric Model Predictive Control Strategies of the Hypnotic Component in Intravenous Anesthesia
#1936	An Analysis of a New Continuous-to-Discrete Time Operator for the Approximation of Fractional Order Systems
#2141	Comparison of protocol based cancer therapies and discrete controller based treatments in the case of endostatin administration

Big Data based Technological Innovations on Intelligent Health Service in the Clouds (I)

Paper ID	Paper Title
#1076	Improving queries and representing heterogeneous information in fuzzy ontologies using multi-granular fuzzy linguistic modelling methods
#1142	Automated Characterization of Arrhythmias Using Nonlinear Features from Tachycardia ECG Beats
#1144	Automated Diagnosis of Coronary Artery Disease using Nonlinear Features Extracted from ECG Signals
#1378	Proactive Healthcare and an Early Warning Mechanism for Coronary Artery Disease Patients using Internet-of-Thing Devices
#1450	Collaboration Patterns of Researchers Using Social Network Analysis Approach

Big Data based Technological Innovations on Intelligent Health Service in the Clouds (II)

Paper ID	Paper Title
#1965	Interval Type-2 Fuzzy DSS for Unbiased Medical Diagnosis
#1979	A hybrid reasoning system for mobile and intelligent health services
#2101	Cloud-based Health Monitoring System Based on Commercial Off-the-Shelf Hardware

Junior

Junior Cybernetics

Paper ID	Paper Title
#1046	Parallel machine scheduling with predefined parts of jobs and family setup times
#1384	Embedding Optimized Trajectory and Motor Controller Into the Szabad(ka)-II Hexapod Robot
#1538	Comparison Identificatipon of Statistical and Fuzzy Models of Time Series

Junior-Cybernetics in Applied Sciencies (I)

Paper ID	Paper Title
#1720	Automated Brain Tumor Segmentation using Kernel Dictionary Learning and Superpixel-level Features
#1742	Mixed MFC-VRFT Approach for a Multivariable Aerodynamic System Position Control
#1775	In vitro glucose concentration estimation by means of fractional order impedance models
#1982	Investigation of the TP-based modeling possibility of a nonlinear ICU diabetes model
#1990	Infectious Hospital Agents: an individual-based simulation framework

Junior-Cybernetics in Applied Sciencies (II)

Paper ID	Paper Title
#2115	Speed control strategy of geophysical measurement platform for archaeological prospection: a conceptual study
#2206	Augmented Lifecycle Space for traceability and consistency enhancement
#1574	Novel Methods for Image-Guided ToF Depth Upsampling
#1591	Fuzzy and Deep Learning Approaches for User Modeling in Interactive Design of Watershed Plans
#2092	Interactive Q-Learning for Social Robots that Learn from the Wizard: A Pilot Study

Junior Systems Science & Engineering (I)

Paper ID	Paper Title
#1250	Fast Lane Boundary Recognition by a Parallel Image Processor
#1257	Joint estimation of states and parameters of vehicle model using cubature kalman filter
#1474	New model for a variant of Pick up and Delivery Problem
#1519	Controlled Parking for Self-Driving Cars

Junior Systems Science & Engineering (II)

Paper ID	Paper Title
#1637	Novel Palmprint Biometric System Combining Several Fractal Methods for Texture Information Extraction
#1907	User-Level Large Scale Load Forecasting Based on GPU
#1969	Second-order and implicit methods in numerical integration improve tracking performance of the closed-loop inverse kinematics algorithm
#1525	Kalman filter based cooperative landmark localization in indoor environment for mobile robots

Junior Systems Science & Engineering (III)

Paper ID	Paper Title
#2423	Robot Position control in pipes using Q Learning
#2458	Electrodes Arrangement on Brain-Computer Interface for the ALS's Posture
#2028	Invariance Principle for Transportation Network
#2410	One Poison is Antidote Against Another Poison

Junior Human-Machine Systems (I)

Paper ID	Paper Title
#1171	An Open Source Audio Effect Unit
#1227	Analysis Method for the ERD in Mu-rhythm detection in Motor Imagery Brain-Computer Interface
#1281	Interfacing with a speller using EOG glasses
#1613	Comparison of Algorithms for Detecting Hand Movement from EEG signals
#1964	Evaluation of Driver Steering Performance with Haptic Guidance under Passive Fatigued Situation

Junior Human-Machine Systems (II)

Paper ID	Paper Title
#2017	Gaze Pattern Analysis in Multi-Display Systems for Teleoperated Disaster Response Robots
#2155	Optimal Feedback Control Framework Suggests that Changes in The Preferred Direction During BMI Experiments may Occur Even with no Adaptation
#2275	A Smart HMI for Assisting with Drive Safety Using Emotion Prediction Based on EEG Data
#2428	Recognition of Infant's Emotions and Needs from Speech Signals

Decision Support Systems (I)

Paper ID	Paper Title
#1323	Optimizing the Segmentation Granularity for RTB Advertising Markets with a Two-stage Resale Model
#1388	Microblog User Community Discovery Using Generalized SimRank Edge Weighting Method
#1223	Spatio-temporal Route Mining and Visualization for Busy Waterways
#1296	Study on the Impact of the NS in the Performance of Meta-Heuristics in the TSP
#2225	A multi-agent approach for building a fuzzy decision support system to assist the SEO process

Decision Support Systems (II)

Paper ID	Paper Title
#1884	Optimal Allocation of Ad Inventory in Real-Time Bidding Advertising Markets
#2157	A mixed integer linear programming approach to schedule the operating theatre
#1273	Modeling an Opportunistic ETL Agent Based System Using YAWL
#1937	Column Generation Heuristics to Airline Crew Scheduling Problem for Fair Working Time
#1248	An Integrated Decision Support System for Emergency Evacuation Management

Enterprise Information Systems

Paper ID	Paper Title
#2043	Find the Most Suspicious Tax Evasion Groups from a Taxpayer Interest Interacted Network
#1132	A Systematic Approach to Design of a Text Categorizer
#2436	Psychological Ownership: A Human Factor to Consider for the Success of Technology Enterpreneurial Activites
#2497	Patent Portfolio Analysis of E-payment Services Using Technical Ontology Roadmaps
#2502	Follow-up Methods for Autonomic Repairing Process

Infrastructure Systems and Services

Paper ID	Paper Title
#1437	Programming Sensor Networks with Nomadic NFC Transponders
#2446	A Socio-Technical Perspective to Flexible Design of Energy Infrastructure Systems
#2449	Performance Evaluation of a Lightweight Virtualization Solution for HPC I/O Scenarios
#1063	Factors impacting accurate Cole-impedance extractions from magnitude-only measurements
#2178	Towards a Holonic-Control Inspired Local Market Approach used in Intelligent Energy Systems

Intelligent Transportation Systems

Paper ID	Paper Title
#2352	Identification of Anomalies in Lane Change Behavior Using One-Class SVM
#1149	A Technique for the Optimal Management of Containers' Drayage at Intermodal Terminals
#1886	System optimal route choice strategy based on ant colony system
#2109	Reliable and Low-cost Cyclist Collision Warning System for Safer Commute on Urban Roads
#1483	Demand Responsive Mobility as a Service

Robotic Systems (I)

Paper ID	Paper Title
#1382	Hierarchical Planning for Error Recovery in Automated Industrial Robotic Systems
#2334	Context-aware switching between localisation methods for robust robot navigation: a self-supervised learning approach
#1103	Combining Re-Allocating and Re-Scheduling for Dynamic Multi-Robot Task Allocation
#1352	Topology-Aware RRT* for Parallel Optimal Sampling in Topologies
#1546	A Hybrid Probabilistic and Point Set Registration Approach for Fusion of 3D Occupancy Grid Maps

Robotic Systems (II)

Paper ID	Paper Title
#1432	WiFi RSS Fingerprint Database Construction for Mobile Robot Indoor Positioning System
#2251	Handling State Uncertainty in Distributed Information Leader Selection for Robotic Swarms
#2149	A Biologically Inspired Multimodal Whisker Follicle
#1624	Robotic Attention Manager using Fuzzy Controller with Fractal Analysis
#1031	Parameter design for two-dimensional truss binary manipulators based on the Kolmogorov-Smirnov statistic and maximum empty circles

System Modeling and Control (I)

Paper ID	Paper Title
#2324	Specific Validation Analysis of Stochastic ICING Model Based Estimation of Insulin Sensitivity Profile Using Clinical Data
#2042	Calculating the Response Time of Action Flow in Stochastic Process Algebra Models
#2490	A New Approach to Non-Fragile Output Feedback Controller Design for Uncertain Takagi-Sugeno Fuzzy Systems
#1114	Managing a Holistic Supply Chain Network for Proactive Resilience
#1235	Strictly Formalized Situation-Operator-Modeling technique for fall-back layer modeling for autonomous or semi-autonomous systems requiring software-based fail-safe behavior

System Modeling and Control (II)

Paper ID	Paper Title
#1609	Detailed octocopter modeling and PD control
#1206	An Adaptive Unscented Kalman Filtering Approach using Selective Scaling
#1497	Tube-based robust MPC for pump scheduling in water distribution systems
#1761	Population-Independent Subsidy and Lump-Sum Tax Based Control of Multipopulation Replicator Dynamics
#1326	An Iterative Method for Analysis of Joint Visit Model at Dean East Clinic

Intelligent Power and Energy Systems (I)

Paper ID	Paper Title
#2447	Multi-step-ahead prediction techniques for Lithium-ion batteries condition prognosis
#1025	Small-Signal Analysis of a Kilo-Watt-Grade Power Converter
#1842	An Analog Ensemble-based Similarity Search Technique for Solar Power Forecasting
#2338	Nonlinear Phenomena of Varying Reference Current Boost DC-DC Converting Solar Cell System with Incremental Conductance Method for MPPT
#1073	An average consensus approach for the optimal allocation of a shared renewable energy source

Intelligent Power and Energy Systems (II)

Paper ID	Paper Title
#1621	Dynamic analysis of Thermoviscoelasticity in Multi-Physical systems: A Bond Graph Approach
#1647	Anomaly Detection in Smart Grid Data: An Experience Report
#2011	Single-machine batch scheduling under time-of-use tariffs: new mixed-integer programming approaches
#1784	Applications of Support Vector Machines to Standby Power Reduction
#1038	Measuring the Effectiveness of Zonal Heating Control for Energy Saving

Model-Based Systems Engineering

Paper ID	Paper Title
#1461	Simulating SysML Transportation Models
#2143	Management Of Technologies for Electric Vehicle Efficiency Towards Optimizing Range
#2409	Detecting and Diagnosing Open Faults in NoC Channels on Activation of Diagonal Nodes
#2407	A Topology-Agnostic Test Model for Link Shorts in on-Chip Networks
#1334	Predicting Crime with Routine Activity Patterns Inferred from Social Media

Human Factors

Paper ID	Paper Title
#1508	Unmanned Aerial Vehicle Control Interface Design and Cognitive Workload: A Constrained Review and Research Framework
#1091	Effect of Physical Workload on Navigation Task Performance by High-Fit Young Males
#1848	Influence of Cultural Factors in Dynamic Trust in Automation
#2293	Dictionary-Based Sentiment Classification Method Considering Subject-Predicate Relation
#1701	Study on Communication Channel Property of Deliberation Support System for Citizen Participation: Comparison between FTF Type and Social Media Type Discussions

Human Performance Modeling

Paper ID	Paper Title
#2484	Texture Evaluation System of Paste Food by Using Elastic Imitation Tongue
#1347	Computation of the Vestibulo-Ocular Reflex for eye closure based on the 6DOF-SVC model
#1820	Exact Maximum Entropy Inverse Optimal Control for Modeling Human Attention Scheduling and Control
#1177	Human Skill Capture: A Hidden Markov Model of Force and Torque Data in Peg-in-a-Hole Assembly Process
#1088	Combining 3D Joints Moving Trend and Geometry Property for Human Action Recognition

Human-Machine Cooperation and Systems

Paper ID	Paper Title
#1522	Passive Switched System Analysis of Semi-Autonomous Systems
#1537	Towards human-robot interaction: a framing effect experiment
#1588	Online motion synthesis with minimal intervention control and formal safety guarantees
#1355	Overcoming Drawback of Feature Instantaneous Bandwidth Using EMD for Epileptic Seizure Classification by RMS frequency
#1052	Determining mission evolution through UAV telemetry by using decision trees

Human-Computer Interaction

Paper ID	Paper Title
#1972	PAVES: Partnering with Autonomous Vehicles, Environments, and Systems
#1883	A study of Displaying 3D Electronic Text Using Augmented Reality via Leap Motion
#1735	ColorCodeAR: Large identifiable ColorCode-based augmented reality system
#2024	Arabic Sign Language Recognition System based on Wavelet Networks

#2289 Extended LTLvis Motion Planning Interface

Human-Machine Cooperation and Systems and Intelligent Internet Systems

Paper ID	Paper Title
#2377	A Wearable ECG Apperatus for Ubiquitous Health Care
#1873	Recommendation of Research Papers in DBpia: A Hybrid Approach Exploiting Content and Collaborative Data
#1145	Obstacle Avoidance for Passive Robot Walking Helper Based on Receding Horizon Control
#1541	Contact Distinction in Human-Robot Cooperation with Admittance Control
#1307	A control architecture for hybrid underwater intervention systems

Evolutionary Computation

Paper ID	Paper Title
#1383	Semantic Segmentation using Three-Dimensional Cellular Evolutionary Networks
#1888	Improved NSGA-III using neighborhood information and scalarization
#1390	Hierarchical feature construction for image classification using genetic programming
#1802	A genetic algorithm application for automatic layout design of modular residential homes
#1943	Analysis for basic dynamics and performances of piecewise particle swarm optimizers

Neural Networks and Applications

Paper ID	Paper Title
#1353	Self-Organizing Map-based Solution for the Orienteering Problem with Neighborhoods
#2032	A Novel Progressive Multi-label Classifier for Class-incremental Data
#1199	PID and Neural Net Controller Performance Comparsion in UAV Pitch Attitude Control
#1336	Solving Fuzzy Differential Equation with Bernstein Neural Networks
#1584	Incremental Learning of Neural Network Classifiers Using Reinforcement Learning

Optimization

Paper ID	Paper Title
#2429	A Population-Based Simulated Annealing Algorithm
#2343	Evolutionary Algorithm Using Progressive Kriging Model and Dynamic Reliable Region for Expensive Optimization Problems
#1357	Multi-Objective Embarrassingly Parallel Search with Upper Bound Constraints
#1160	A novel algorithm for scheduling intrees on two parallel machines with unavailabilities
#1266	Novel Single-objective Optimization Problem and Firefly Algorithm-based Optimization Method

Machine Vision and Evolutionary Computation

Paper ID	Paper Title
#1169	Multiple Human Skeleton Recognition in RGB and Depth Images with Graph Theory, Anatomic Refinement of Point Clouds and Machine Learning
#1868	Adaptive Video Shot Detection Improved by Fusion of Dissimilarity Measures
#2235	Reference Point Specification in MOEA/D for Multi-Objective and Many-Objective Problems
#1911	An MOEA/D Combining with Tabu Search for a Double Row Layout Problem with Center Islands
#1267	Functional Specialization Based Search Strategy for Multi-objective Optimization

BMI Papers-Neuroscience Based Design: Fundamentals and Applications

Paper ID	Paper Title
#1256	Evaluation of a Neurofeedback-based Cognitive Telerehabilitation System for Neurological Patients
#1499	Brain-Computer Interface adaptation for an end user to compete in the Cybathlon
#1722	Using Support Vector Regression to Estimate Valence Level from EEG
#1894	Assessing Haptic Video Interaction with Neurocognitive Tools
#2112	Lets play Tic-Tac-Toe: A Brain-Computer Interface case study in cerebral palsy

BMI Papers-Health and Non-Invasive Wearable BMI

Paper ID	Paper Title
#2254	Cellular Wireless Energy Harvesting for EEG Applications on Smart Contact Lens
#2280	The Visual System as a Proxy for Evaluation of Brain Function
#2393	Auto-Powered Intraocular Lenses for Multi-Modal Brain Computer Interfacing
#2136	Wearable Brain Imager/BMI Technology for Structural, Vascular and Functional Extraction
#2013	Real-Time Step Detection Using the Integrated Sensors of a Head-Mounted Display

BMI Papers-Adaptive and self-calibrating BMI systems for independent use

Paper ID	Paper Title
#1123	Restricted Boltzmann Machines in Sensory Motor Rhythm Brain-Computer Interfacing: A Study on Inter-Subject Transfer and Co-Adaptation
#1196	Spectral Meta-Leaner for Regression (SMLR) Model Aggregation: Towards Calibrationless BCI
#1646	Multi-Task Logistic Regression in Brain-Computer Interfaces
#2269	Unsupervised Adaptive Transfer Learning for Steady-State Visual Evoked Potential Brain-Computer Interfaces
#2278	Closed-loop regulation of user state during a boundary avoidance task

BMI Papers-Real World Applications of Brain Computer Interface Systems I

Paper ID	Paper Title
#1007	Brain-machine Interfacing-based Teleoperation Control of A Wheeled Mobile Robot
#1448	Voice Familiarity Detection using EEG-based Brain-Computer Interface
#1811	A Novel Supervised Locality Sensitive Factor Analysis to Classify Voluntary Hand Movement in Multi-Direction Using EEG Source Space
#1839	Brain-Computer Interfacing for Multimedia Quality Assessment
#1947	EEG based Stress Level Identification

BMI Papers-BMI for neurodriving

Paper ID	Paper Title
#1221	Dynamic Potential-Model-Based Feature for Lane Change Prediction
#1417	Classification of Movement-related Cortical Potentials for Multi-Command Control based on Brain-Machine Interface
#1496	A Hand Gesture based Driver-Vehicle Interface to Control Lateral and Longitudinal Motions of an Autonomous Vehicle
#1667	Towards an EEG-based Intelligent Wheelchair Driving System with Vibro-tactile Stimuli

BMI Papers-BMI for motor/cognitive rehabilitation and assistance I

Paper ID	Paper Title
#1070	Evaluating decoding performance of upper limb imagined trajectories during center-out reaching tasks
#1198	The adjustment of muscle synergy recruitment by controlling muscle co-contraction during the reaching movement
#1444	Analyzing electrode configurations to detect intention of pedaling initiation through EEG signals
#1589	EMOHEX: An Eye Tracker based Mobility and Hand Exoskeleton Device for Assisting Disabled People

BMI Papers-Sensor systems for BMI and prosthetics

Paper ID	Paper Title
#1528	Variable admittance control in pHRI by measuring muscle co-activation with EMG
#1782	A Basic Study on Temporal Parameter Estimation of Wheelchair Propulsion based on Measurement of Upper Limb Movements Using Inertial Sensors
#1658	Patient Simulator Using Wearable Robot to Estimate the Burden of Knee-Osteoarthritis Patients during Sitting-down and Standing-up Motions
#2116	Control of Artificial Human Finger using Wearable Device and Adaptive Network-Based Fuzzy Inference System

BMI Papers-Real World Applications of Brain Computer Ingerface Systems II

Paper ID	Paper Title
#1962	An Investigation of Annotation Smoothing for EEG-based Continuous Music-emotion Recognition
#1963	Individual Alpha Peak Frequency Based Features for Subject Dependent EEG workload classification
#2008	Biometric Identification of Persons Using Sample Entropy Features of EEG During Rest state
#2255	Predicting decision accuracy and certainty in complex brain-machine interactions
#2281	A Robust Interval Type-2 based BCI System

BMI Papers-BMI for motor/cognitive rehabilitation and assistance II

Paper ID	Paper Title
#1643	SSVEP Based BMI for a Meal Assistance Robot
#1841	Comparison of Hand and Forearm Muscle Pairs in Controlling a Novel Myoelectric Interface
#1850	The Temporal Limits of Agency for Reaching Movements in Augmented Virtuality
#2286	Classification of Gait from EEG Using Inverse Brain Mapping
#2415	Imagined 3D Hand Movement Trajectory Decoding from Sensorimotor EEG Rhythms

BMI Papers-Recent Advances in BMI Speller

Paper ID	Paper Title
#1415	Analysis of Steady State Visual Evoked Potential based on Viewing Distance Changes for Brain-Machine Interface Speller
#1523	A High Speed-Accuracy Speller System based on Brain-Eye Integrated Signals
#1793	How to identify the user specific stimulation frequencies for SSVEP-based BCI
#2187	Notes on the Assessment of BCI-Driven Spellers
#2493	A comparison of face speller approaches for P300 BCIs

BMI Papers-Reaql World Applications of Brain Computer Interface Systems III

Paper ID	Paper Title
#2485	EEG based Biometric Recognition Using Subject-Specific Alpha Peak Frequency and Delta Band Power
#2494	EEG hyperscanning study of inter-brain synchrony during cooperative and competitive interaction
#2151	Spatial Filter Feature Extraction Methods for P300 BCI Speller: A Comparison
#1194	A Simple Action of Right Index Finger Induces Rubber Hand Illusion to Static Left Hand
#2097	A Novel Multimodal Gaze-Controlled Hindi Virtual Keyboard for Disabled Users

BMI Papers-Machine learning methods for brain-computer interfacing I

Paper ID	Paper Title
#1192	Agreement Rate Initialized Maximum Likelihood Estimator for Ensemble Classifier Aggregation and Its Application in Brain-Computer Interface
#1193	Offline EEG-Based Driver Drowsiness Estimation Using Enhanced Batch-Mode Active Learning (EBMAL) for Regression
#1359	Classification of 17 Voluntary Movements Using Principal Component Analysis for Myoelectric Prosthetic Hand
#1590	Novel Parameter Tuned Methodology for Under-damped Stochastic Resonance Applied to EEG Signal Enhancement
#1179	Spatial filters yield stable features for error-related potentials across conditions

BMI Papers-Multi-modal Brain Computer Interface and Physiological Computing

Paper ID	Paper Title
#1620	Improved target recognition response using collaborative brain computer interfaces
#2038	Inactive-State Recognition from EEG Signals and its Application in Cognitive Load Computation
#2239	Entropy-based EEG Time Interval Selection for Improving Motor Imagery Classification
#2486	Optical EEG (OEEG): A Novel System Towards Portable Real-Time Brain-Computer Interfacing
#1086	A Study on the Impact of Neurofeedback in EEG Based Attention-driven Game

BMI Papers-Brain and human-machine interaction

Paper ID	Paper Title
#1190	Online Eye State Prediction from EEG Data Using Deep architectures
#1549	Frequency Detection for SSVEP-Based BCI using Deep Canonical Correlation Analysis
#2231	Exocortical Cognition: Heads in the Cloud
#2363	Mass Action in Brains and Computers – A Tribute to Walter J. Freeman

BMI Papers-Performance metrics and human factors for BMI training and operation

Paper ID	Paper Title
#1225	Supervision of time-frequency features selection in EEG signals by a human expert for brain–computer interfacing based on motor imagery
#1394	Mastery confidence influences P300 based Brain-Computer Interface (BCI) Performance
#1918	A Task-Independent Workload Classifier for Neuroadaptive Technology: Preliminary Data
#2083	Pilot Study

BMI Papers-Machine learning methods for brain-computer inferfacing II

Paper ID	Paper Title
#1649	PNN for EEG-based Emotion Recognition
#1928	A Separability Marker Based on High-Dimensional Statistics for Classification Confidence Assessment
#2114	Alternative CSP approaches for multimodal distributed BCI data
#2361	A Hybrid ICA - Wavelet Transform for Automated Artefact Removal in EEG-based Emotion Recognition
#2381	Superposition model for steady state visually evoked potentials

BMI Papers-Neurostimulation and BMI

Paper ID	Paper Title
#1339	Comparison of Reaction Times in Response to Electrical and Visual Stimulation Using a High-speed Camera
#1650	A Hybrid BCI-Controlled FES System for Hand-Wrist Motor Function
#1840	A Study on the Effect of Electrical Stimulation During Motor Imagery Learning in Brain-Computer Interfacing
#1866	Demonstration of a stable chronic electrocorticography-based brain-computer interface using a deep brain stimulator
#1938	Multichannel Cuff Electrodes for Peripheral Nerve Stimulation and Recording