

Program at a Glance of IEEE WCCI 2014

Sunday, July 6th, 2014																	
Tutorials, Institute of Automation, Chinese Academy of Sciences (95 Zhong Guan Cun East Rd, Beijing 100190, Tel: 82544761)																	
Registration, BICC																	
Welcome reception, Hall #1, BICC																	
Monday, July 7th, 2014																	
Congress opening ceremony, Hall #1, BICC																	
Plenary lecture 1: <i>Some Recent Work in Computational Intelligence for Software Engineering</i> , Xin Yao , Hall #1, BICC, Chair: Derong Liu																	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
Plenary lecture 2: <i>Toward Cognitive Integration of Prosthetic Devices</i> , Jose C. Principe , Hall #1, BICC, Chair: Jennie Si																	
Plenary lecture 3: <i>Type-2 Fuzzy Sets and Systems: Some Questions and Answers</i> , Jerry M. Mendel , Hall #1, BICC, Chair: Dimitar Filev																	
Lunch, BICC																	
Time/Room	308	305A	305B	305C	305D	305E	303		201A	201B	201C	201D	203A	203B	203C	203D	Posters Areas
13:30-15:30	Special Session: MoN1-1 Neuromorphic Science & Technology for Augmented Human Performance in Cybersecurity	Special Session: MoN1-2 Artificial Neural Networks and Learning Techniques towards Intelligent Transport Systems	Special Session: MoN1-3 Computational Intelligence for Cognitive Fault Diagnosis	MoN1-4 Deep Learning	MoN1-5 Ensemble and Meta Learning	MoN1-6 Time Series Analysis I	MoN1-7 Approximate Dynamic Programming and Reinforcement Learning		Special Session: MoF1-1 Fuzzy Decision-Making: Consensus and Missing Preferences I	Special Session: MoF1-2 Lattice Computing	MoF1-3 Fuzzy Control & Intelligent Systems I	MoF1-4 Fuzzy Logic and Fuzzy Set Theory I	Special Session: MoE1-1 Computational Intelligence and Games	Special Session: MoE1-2 Memetic Computing	Special Session: MoE1-3 Evolutionary Computer Vision	Special Session: MoE1-4 Theoretical Foundations of Bio-inspired Computation	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
16:00-18:00	Special Session: MoN2-1 Concept Drift, Domain Adaptation & Learning in Dynamic Environments I	Special Session: MoN2-2 Applications of Computational Intelligence in Ecological Informatics and Environmental Modelling	Special Session: MoN2-3 Mind, Brain, Development and Cognitive Algorithms	MoN2-4 Real World Applications I	MoN2-5 Feedforward Neural Networks I	MoN2-6 Time Series Analysis II	MoN2-7 Hybrid Learning Methods		Special Session: MoF2-1 Fuzzy Decision-Making: Consensus and Missing Preferences II	Special Session: MoF2-2 Fuzzy Systems on Renewable Energy	MoF2-3 Evolving & Adaptive Fuzzy Systems	MoF2-4 Fuzzy Logic and Fuzzy Set Theory II	Special Session: MoE2-1 Evolutionary Multi-Objective Optimization and Decision Making	Special Session: MoE2-2 Differential Evolution: Past, Present and Future	Special Session: MoE2-3 Evolutionary Computation in Combinatorial Optimization	Special Session: MoE2-4 Artificial Bee Colony Algorithms and their Applications	15:30-18:00 Poster session I ICJNN (level 3) FUZZ-IEEE (level 2) IEEE CEC (level 2)
Tuesday, July 8th, 2014																	
Plenary panel 1: <i>CI-related Research Funding</i> , Hall #2, BICC, Chair: Marios Polycarpou																	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
10:00-11:00	IJCNN Invited lecture 1: <i>Learning through Deterministic Assignment of Hidden Parameters</i> , Zongben Xu , Hall #2A, BICC, Chair: Marios Polycarpou						FUZZ-IEEE Invited lecture 1: <i>Recent Advances in Fuzzy Modeling and Control: When Nonlinearities Met Fuzzy Logic</i> , Kazuo Tanaka , Hall #2B, BICC, Chair: Fuchun Sun				IEEE CEC Invited lecture 1: <i>Evolutionary Multi-Objective Optimization (EMO): Two Eventful Decades and Beyond</i> , Kalyan Deb , Hall #2C, BICC, Chair: Hisao Ishibuchi						
11:00-12:00	IJCNN Invited lecture 2: <i>Innovations and Open Problems in Supervised, Unsupervised and Reinforcement Learning</i> , Don Wunsch II , Hall #2A, BICC, Chair: Haibo He						FUZZ-IEEE Invited lecture 2: <i>Linguistic Dynamic Systems for Computational Societies: A Clouds-based Neuro-Fuzzy Approach</i> , Fei-Yue Wang , Hall #2B, BICC, Chair: Plamen Angelov				IEEE CEC Invited lecture 2: <i>How Innovative New Games Can Reinvigorate the Field of Computational Intelligence</i> , Ken Stanley , Hall #2C, BICC, Chair: Ying Tan						
Lunch, BICC																	
Time/Room	308	305A	305B	305C	305D	305E	303		201A	201B	201C	201D	203A	203B	203C	203D	Posters Areas
13:30-15:30	Special Session: TuN1-1 International Workshop on Computational Energy Management in Smart Grids I	Special Session: TuN1-2 Intelligent Vehicle Systems	Special Session: TuN1-3 Biologically Inspired Computational Vision	TuN1-4 Real World Applications II	TuN1-5 Feedforward Neural Networks II	TuN1-6 Supervised Learning I	Special Session: TuF1-5 Advances to Type-2 Fuzzy Logic Control		Special Session: TuE1-1 Computing with Words in Decision Making	Special Session: TuF1-2 Time Series: Advanced Methods of Analysis and Forecast	Special Session: TuF1-3 Fuzzy Computer Vision and Biometrics	TuF1-4 Approximate Reasoning and Theory	Special Session: TuE1-1 Evolutionary Computation for Planning and Scheduling	Special Session: TuE1-2 Swarm Intelligence for Real-World Engineering Optimization	Special Session: TuE1-3 Complex Networks and Evolutionary Computation	Special Session: TuE1-4 Evolutionary Algorithms with Statistical and Machine Learning Techniques	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
16:00-18:00	Special Session: TuN2-1 International Workshop on Computational Energy Management in Smart Grids II	Special Session: TuN2-2 Neural Networks Applied to Vision and Robotics I	Special Session: TuN2-3 Autonomous Learning	TuN2-4 Machine Learning: Complexity and Optimization	TuN2-5 Feature Extraction and Intelligent Systems	TuN2-6 Supervised Learning II	Industrial Session: TuF1-5 CI on Big Data and Social Networks		Special Session: TuE2-1 Computing with Words and Fuzzy Natural Language Processing	Special Session: TuF2-2 Applications of Type-2 Fuzzy Systems	Special Session: TuF2-3 Computational Intelligence for Human-centred Applications	TuF2-4 Fuzzy Control and Intelligent Systems II	Special Session: TuE2-1 Nature-Inspired Constrained Optimization	Special Session: TuE2-2 Computational Intelligence in Bioinformatics	Special Session: TuE2-3 Single Objective Numerical Optimization I	Special Session: TuE2-4 Data Mining and Machine Learning Meet Evolutionary Computation	15:30-18:00 Poster session II ICJNN (level 3) FUZZ-IEEE (level 2) IEEE CEC (level 2)
Student reception (all students are invited), Banquet Hall, 2nd floor, Continental Grand Hotel																	
Wednesday, July 9th, 2014																	
Plenary panel 2: <i>Is "Publish or Perish" Causing "Death" of Science?</i> Hall #2, BICC, Chair: Nik Pal																	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
Plenary lecture 4: <i>Deep Learning and the Representation of Natural Data</i> , Yann LeCun , Hall #2, BICC, Chair: Cesare Alippi																	
Plenary lecture 5: <i>A Historical Perspective on Computational Intelligence in N-player Games</i> , George H. Burgin , Hall #2, BICC, Chair: Carlos Coelho Coelho																	
Lunch, BICC																	
Time/Room	308	305A	305B	305C	305D	305E	303	311A	201A	201B	201C	201D	203A	203B	203C	203D	Posters Areas
13:30-15:30	Special Session: WeN1-1 International Workshop on Computational Energy Management in Smart Grids III	Special Session: WeN1-2 International Workshop on Advances in Learning from/with Multiple Learners	Special Session: WeN1-3 Machine Learning for Computer Vision I	WeN1-4 Intelligent Systems and Applications	WeN1-5 Unsupervised Learning and Clustering I	WeN1-6 Supervised and Semi-Supervised Learning	Industrial Session: WeN1-7 CI on Smart Grid and Energy Efficiency	WeE1-1 Intel Special Session on Big Data Analytics	Special Session: WeF1-1 Human Symbiotic Systems I	Special Session: WeF1-2 Methods and Applications of Fuzzy Cognitive Maps	WeF1-3 Real World Applications	WeF1-4 Fuzzy Pattern Recognition & Image Processing	WeE1-1 Multi-Objective Evolutionary Algorithms I	WeE1-2 Evolutionary Games and Multi-Agent Systems	Special Session: WeE1-3 Hybrid Evolutionary Computational Methods for Complex Optimization Problems	Special Session: WeE1-4 Large Scale Global Optimization	
Coffee break: 2nd floor and 3rd floor, exhibit areas																	
16:00-18:00	Special Session: WeN2-1 Plenary and Discussion Session of International Workshops	Special Session: WeN2-2 Learning and Optimization in Multi-certain Dynamic and Uncertain Environments	Special Session: WeN2-3 Machine Learning for Computer Vision II	WeN2-4 Spiking Neural Networks I	WeN2-5 Unsupervised Learning and Clustering II	WeN2-6 Dynamics of Neural Systems	Industrial Session: WeN2-7 CI on Control Systems	Special Session: WeC2-1 CIS and WCCI Competition Session	Special Session: WeF2-1 Human Symbiotic Systems II	Special Session: WeF2-2 Modalities of Fuzzy Signatures in Knowledge Representation	WeF2-3 Hybrid Fuzzy Systems	WeF2-4 Fuzzy Decision Making and Decision Support Systems I	Special Session: WeE2-1 Evolutionary Computation in Dynamic and Uncertain Environments	Special Session: WeE2-2 Intelligent Design for Reliable Cloud Computing	Special Session: WeE2-3 Single Objective Numerical Optimization II	WeE2-4 Learning Classifier Systems	15:30-18:00 Poster session III ICJNN (level 3) FUZZ-IEEE (level 2) IEEE CEC (level 2)
Banquet (Entertainment & Award Ceremony), Hall #1, BICC																	

Thursday, July 10th, 2014																	
08:30-09:30	Panel 3 (IJCNN) , <i>Brain Research</i> , Hall #2A, BICC, Chair: Jose Principe						Panel 4 (FUZZ-IEEE) , <i>Big Data and Machine Learning</i> , Hall #2B, BICC, Chair: Jerry Mendel					Panel 5 (IEEE CEC) , <i>Evolutionary Multi-Criterion Optimization</i> , Hall #2C, BICC, Chair: Kalyan Deb					
09:30-10:00	Coffee break: 2nd floor and 3rd floor, exhibit areas																
10:00-11:00	IJCNN Invited lecture 3: <i>Intelligent Feedback Control for Operation of Complex Industrial Processes</i> , Tianyou Chai , Hall #2A, BICC, Chair: Gary Yen						FUZZ-IEEE Invited lecture 3: <i>Fuzzy Dynamic Programming: A Step Towards Cognitive Dynamic Programming?</i> Janusz Kacprzyk , Hall #2B, BICC, Chair: Faa-Jeng Lin					IEEE CEC Invited lecture 3: <i>Jason Lohn</i> , Hall #2C, BICC, Chair: Carlos Coello Coello					
11:00-12:00	IJCNN Invited lecture 4: <i>The EU Human Brain Project – A Systematic Path from Data to Synthesis</i> , Karlheinz Meier , Hall #2A, BICC, Chair: Akira Hirose						FUZZ-IEEE Invited lecture 4: <i>Fuzzy Real-time Leakage Supervisory System for Fluid Transportation Pipeline Networks: New Methods and Applications</i> , Huaguang Zhang , Hall #2B, BICC, Chair: Chin-Teng Lin					IEEE CEC Invited lecture 4: <i>Computation, the Missing Ingredient in Classical Economics</i> , Edward Tsang , Hall #2C, BICC, Chair: Andries P. Engelbrecht					
12:00-13:30	Lunch, BICC																
Time/Room	308	305A	305B	305C	305D	305E	303		201A	201B	201C	201D	203A	203B	203C	203D	Posters Areas
13:30-15:30	Special Session: ThN1-1 Architectures and Theories of the Brain	Special Session: ThN1-2 Hybrid Neural Intelligent Systems	Special Session: ThN1-3 Ensemble Systems and Machine Learning	ThN1-4 Reinforcement and Hybrid Learning	ThN1-5 Models of Perception, Cognition and Coordination	ThN1-6 Recurrent Neural Networks	Industrial Session: ThE1-5 Computational Intelligence on Predictive Maintenance and Optimization		Special Session: ThF1-1 Hand Skill Recognition and Transfer	Special Session: ThF1-2 Hybridisations, Extensions, and High-Order Fuzzy Sets	ThF1-3 Fuzzy Clustering	ThF1-4 Fuzzy Systems Modelling and Identification	ThE1-1 Ant Colony Optimization	ThE1-2 Opposition-Based Learning and Differential Evolution	ThE1-3 Genetic Programming	ThE1-4 Heuristics, Metaheuristics and Hyper-heuristics I	
15:30-16:00	Coffee break: 2nd floor and 3rd floor, exhibit areas																
16:00-18:00	Special Session: ThN2-1 Applications of Neural Networks for Financial Modeling and Forecasting	Special Session: ThN2-2 Incremental Machine Learning: Methods and Applications	Special Session: ThN2-3 Neurodynamic Optimization	ThN2-4 Spiking Neural Networks II	ThN2-5 Signal and Image Processing	ThN2-6 Neural Modeling and Control	ThE2-5 Real-World Applications I		Special Session: ThF2-1 Computational Intelligence for Cognitive Robotics	Special Session: ThF2-2 Aggregation Operators	Special Session: ThF2-3 Paradigms of Fuzzy Systems for Medical Benefits	Special Session: ThF2-4 Advances to Self-tuning and Adaptive Fuzzy Control Systems	ThE2-1 Multi-Objective Evolutionary Algorithms II	ThE2-2 Cultural Algorithms and Knowledge Extraction in Evolutionary Algorithms	Special Session: ThE2-3 Single Objective Numerical Optimization III	ThE2-4 Music, Art, Creativity, Games and Multi-Agent Systems	15:30-18:00 Poster session IV UCNN (level 3) FUZZ-IEEE (level 2) IEEE CEC (level 2)
Friday, July 11th, 2014																	
Time/Room	308	305A	305B	305C	305D	305E	303		201A	201B	201C	201D	203A	203B	203C	203D	
08:10-10:10	Special Session: FrN1-1 Concept Drift, Domain Adaptation & Learning in Dynamic Environments II	Special Session: FrN1-2 Neural Networks Applied to Vision and Robotics II	Special Session: FrN1-3 Complex-Valued Neural Networks	FrN1-4 Visual Systems	FrN1-5 Data Analysis and Pattern Recognition	FrN1-6 Hybrid Architectures and Learning	FrE1-5 Multimodal Optimization and Population Initialization		Special Session: FrF1-1 Handling Uncertainties in Big Data by Fuzzy Systems	Special Session: FrF1-2 Evolutionary Fuzzy Systems	FrF1-3 Fuzzy Control and Intelligent Systems III	FrF1-4 Fuzzy Data Mining and Forecasting	FrE1-1 Differential Evolution	FrE1-2 Process Mining and Data Mining	FrE1-3 Estimation of Distribution Algorithms and Machine Learning	FrE1-4 Evolutionary Computation Theory and Parameter Optimization	
10:10-10:30	Coffee break: 2nd floor and 3rd floor, exhibit areas																
10:30-12:30	Special Session: FrN2-1 Computational Intelligence Algorithms for Digital Audio Applications	Special Session: FrN2-2 Intelligent Computing for Complex & Big Data Analysis in Health and Biomedical Informatics	Special Session: FrN2-3 Data-Driven Adaptive Dynamic Programming	FrN2-4 Data Mining and Knowledge Discovery	FrN2-5 Large Scale, Associative and Self-Organizing Networks	FrN2-6 Self-Organizing Maps	FrE2-5 Robotics and Engineering Applications		Special Session: FrF2-1 Recent Advances in Fuzzy-Model-Based Control Design and Analysis I	Special Session: FrF2-2 Software for Soft Computing I	Special Session: FrF2-3 Fuzzy Interpolation	FrF2-4 Fuzzy Decision Making and Decision Support Systems II	FrE2-1 Multi-Objective Evolutionary Algorithms III	FrE2-2 Numerical Optimization	FrE2-3 Coevolution and Collective Behavior	FrE2-4 Biometrics, Bioinformatics and Biomedical Applications	
12:30-13:30	Lunch, BICC																
13:30-15:30	Special Session: FrN3-1 Intelligent Adaptive Fault Tolerant Control and Optimization	Special Session: FrN3-2 Cognitive Computing and Neuro-Cognitive Robots	FrN3-3 Unsupervised Learning and Clustering	FrN3-4 Cognition, Bio-Inspired and Biomorphic Systems	FrN3-5 Machine Learning and Applications I	FrN3-6 Brain-Machine Interfaces	FrE3-5 Real-World Applications II		Special Session: FrF3-1 Recent Advances in Fuzzy-Model-Based Control Design and Analysis II	Special Session: FrF3-2 Software for Soft Computing II	Special Session: FrF3-3 Theory of Type-2 Fuzzy Systems	Special Session: FrF3-4 Brain and Physiological Computation for Affective Computing	FrE3-1 Large-Scale Problems and Real-World Applications	FrE3-2 Evolvable Hardware and Genetic Programming	FrE3-3 Swarm Intelligence	FrE3-4 Heuristics, Metaheuristics and Hyper-Heuristics II	
15:30-16:00	Coffee break: 2nd floor and 3rd floor, exhibit areas																
16:00-18:00	Special Session: FrN4-1 Computational Intelligence in Cyber Security	Special Session: FrN4-2 Computational Intelligence in Brain Computer Interface	FrN4-3 Support Vector Machines and Kernel Methods	FrN4-4 Feature Extraction and Classification Systems	FrN4-5 Machine Learning and Applications II	FrN4-6 Neuromorphic Hardware	FrE4-5 Real-World Applications III		Special Session: FrF4-1 Recent Advances in Fuzzy-Model-Based Control Design and Analysis III	Special Session: FrF4-2 New Frontiers in Clustering and its Applications -Fusion of Clustering and Other Methodologies	FrF4-3 Fuzzy Logic & Fuzzy Set Theory II	FrF4-4 Fuzzy Models	FrE4-1 Constraint-Handling and Preference-Handling	FrE4-2 Particle Swarm Optimization	Special Session: FrE4-3 Dynamic Multi-Objective Optimization	Special Session: FrE4-4 Fireworks Algorithms for Optimization	