Sunday, July 19th 2020

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Tutorials	Panels	Workshops		
11:30AM	Fundamentals of Fuzzy Networks			Selection Exploration and Exploitation	Visualising the search process of EC algorithms	Evolutionary Machine Learning	Evolutionary Many-Objective Optimization		Adversarial Machine Learning: On The Deeper Secrets of Deep Learning	Brain-Inspired Spiking Neural Network Architectures for Deep, Incremental Learning and Knowledge Evolution	Advances in Deep Reinforcement Learning							Instance Space Analysis for Rigorous and Insightful Algorithm Testing		Adversarial Machine Learning And Security (AMLAS)	Sentic Computing	Bridging the gap between Computational Intelligence and Neuroscience in Brain-Computer Interfaces: towards the definition of a standard description of systems and data
1:30PM	Break			Break					Break									Break		Break	Break	Break
2:00PM	Paving the way from Interpretable Fuzzy Systems to Explainable AI Systems			Pareto Optimization for Subset Selection: Theories and Practical Algorithms	Benchmarking and Analyzing Iterative Optimization Heuristics with IOHprofiler	Differential Evolution	Evolutionary computation for games: learning, planning, and designing		Deep Learning for Graphs	Randomization Based Deep and Shallow Learning Methods for Classification and Forecasting	Deep Stochastic Learning and Understanding							Multi-modality Helps in Solving Biomedical Problems: Theory and Applications		Ethics and Social Implications of Computational Intelligence	Sentic Computing	Bridging the gap between Computational Intelligence and Neuroscience in Brain-Computer Interfaces: towards the definition of a standard description of systems and data
																						Artificial Intelligence for Mental Disorders
4:00PM	Break			Break					Break									Break		Break	Break	Break
4:30PM	Fuzzy Systems for Neuroscience and Neuro-engineering Applications			Dynamic Parameter Choices in Evolutionary Computation	Evolutionary Computation for Dynamic Multi-objective Optimization Problems	Evolutionary Algorithms and Hyper-Heuristics	Large-Scale Global Optimization		From brains to deep neural networks	Evolution of Neural Networks	Experience Replay for Deep Reinforcement Learning							Evolutionary Bilevel Optimization		IEEE Erepreneurship panel	Design, Implementation, and Applications of Spiking Neural Networks and Neuromorphic Systens	Advances in Learning from/ with Multiple Learners (ALML)
6:30PM	Break			Break					Break											Break	Break	Break
7:00PM	Patch Learning: A New Method of Machine Learning, Implemented by Means of Fuzzy Sets			Self-Organizing Migrating Algorithm - Recent Advances and Progress in Swarm Intelligence Algorithms	Recent Advances in Particle Swarm Optimization Analysis and Understanding	Nature-Inspired Techniques for Combinatorial Problems	Large-Scale Global Optimization - PART 2		Machine learning for data streams in Python with scikit-multi flow	Deep randomized neural networks								How to combine human and computational intelligence?		The Evolutionary Computation for Healthcare (TECH) 2020	Design, Implementation, and Applications of Spiking Neural Networks and Neuromorphic Systems	Advances in Learning from/ with Multiple Learners (ALML)
9:00PM	End of day			End of day					End of day											End of day		

Monday, July 20th 2020

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Room 1	Panels	Workshops
11:00AM	Opening Ceremony (General Chairs, CIS President, Rt. Hon First Minister of Scotland, Lord Provost of Glasgow)																			
11:30AM	Plenary WCCI lecture I Streaming Data Analysis: Old Clothes Fit New Ideas Badly - Jim Bezdek																			
12:30PM	Break			Break					Break											
12:45 PM	From the extensions of Choquet and Sugeno integrals and their applications to classification, image processing and the computational brain problems to d-Choquet integrals. - Humberto Bustince			Hod Lipson					Augmented AI: correctors of errors and social networks of AI - Alexander N Gorban											
1:45PM	Break			Break					Break											
2:00PM																		Student/YP Session	Explainability and Interpretability When Using Fuzzy Sets and Systems: Opportunities and Challenges	
3:30PM	F-MM1: Linguistic Summarization and Description of Data-I	F-MM2: Human-in-the-Loop Interactions in Fuzzy Reasoning and Machine Learning	F-MM3: Software for Soft Computing-I	C-S11: Special Session on Data-Driven Evolutionary Optimization of Computationally Expensive Problems (I)	C-S01: Special Session on Evolutionary Computation in Healthcare	C-S02: Special Session on Games	C-S17: Special Session on Associated with CEC 2020 Numerical Optimization Competitions (I)	C-P1: CEC Poster Session 1	I-R1: Feedforward neural networks	I-SS1: Randomization-Based Deep and Shallow Learning Algorithms	I-SS22: Learning Representations for Structured Data	I-SS59A: Artificial Intelligence and Advanced Machine Learning for Biomedical Signal Processing	I-SBP: Student Best Paper Award	I-R2: Supervised learning 1	I-R3: Neurodynamics	I-P1: Feedforward neural networks	I-P2: Applications of deep networks	Student/YP Session	Explainability and Interpretability When Using Fuzzy Sets and Systems: Opportunities and Challenges	
5:30PM	Break			Break					Break											
5:45PM	F-MA1: Linguistic Summarization and Description of Data-II	F-MA2: Advances on eXplainable Artificial Intelligence-I	F-MA3: Software for Soft Computing-II	C-S03: Special Session on Evolutionary Deep Learning and Applications	C-S04-2: Special Session on Evolutionary Scheduling and Combinatorial Optimization (II)	C-S12: Special Session on Evolutionary Computation for Feature Selection, Extraction and Dimensionality Reduction	C-S17-2: Special Session on Associated with CEC 2020 Numerical Optimization Competitions (II)	C-P2: CEC Poster Session 2	I-R4: Deep neural networks	I-SS2: Data Driven Approach for Bio-medical and Healthcare	I-SS35: Deep and Generative Adversarial Learning	I-SS59B: Artificial Intelligence and Advanced Machine Learning for Biomedical Signal Processing	I-BP : Regular Best Paper Award	I-R5: Supervised learning 2	I-R6: Cognitive Neuroscience and Neurocognition	I-P3: Recurrent Neural Networks and SOM	I-P4: Applications of deep networks, big data			
7:45PM	Break			Break					Break											
8:00PM	F-ME1: Special Session on Fuzzy and Rough Hybridisation	F-ME2: Advances on eXplainable Artificial Intelligence-II	F-ME3: AGGREGATION STRUCTURES: NEW TRENDS AND APPLICATIONS	C-S04: Special Session on Evolutionary Scheduling and Combinatorial Optimization (I)	C-S07: Special Session on Optimization, Learning, and Decision-Making in Bioinformatics and Bioengineering (OLDMBB)	C-S22: Special Session on Memetic Computing (I)	C-S22-2: Special Session on Memetic Computing (II)	C-P3: CEC Poster Session 3	I-R7: Deep neural networks	I-SS3: Current Trend of Machine Learning in Computer Vision	I-SS32: Healthcare Analytics: Improving Healthcare outcomes using Big Data Analytics	I-SS60: Learning from Difficult Data Streams	I-SS36-7: Deep Learning for Wildlife Bioacoustics, Ecology and Crop Science	I-R8: Supervised learning 3	I-R9: Visual System	I-P5: Different Neural Networks – fuzzy, large scale, RBF	I-P6: Bioinformatics and Biomedical engineering			
10:00PM	End of day			End of day					End of day									End of day		

Tuesday, July 21st 2020

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Room 1	Panels	Workshops
10:00AM	Virtual Tour, Coffee Break & Networking																			
11:30AM	20 Years of Designing Multi-Objective Evolutionary Algorithms: Lessons Learned and Challenges Lying Ahead - Carlos Coello Coello																			
12:30PM	Break			Break								Break								
1:00 PM	Brain-Computer Interfaces for the Diagnosis and Rehabilitation of Perceptual, Learning and Motor Disorders: A Type-2 Fuzzy Logic Approach - Amit Kona			Some Challenges of Interactive Evolutionary Multiobjective Optimization Methods - Kaisa Miettinen					Deep CNN Neocognitron for Artificial Vision - Kunihiko Fukushima											
2:00PM	Break			Break								Break								
2:30PM	F-MM1: Linguistic Summarization and Description of Data-I	F-TM2: Fuzzy Interpolation	F-TM3: Recent Advances in Fuzzy Control System Design and Analysis-I	C-S11-2: Special Session on Data-Driven Evolutionary Optimization of Computationally Expensive Problems (II)	C-S16: Special Session on Transfer Learning in Evolutionary Computation	C-S41: Special Session on Differential Evolution: Past, Present and Future		C-P4: CEC Poster Session 4	I-R10: Deep neural networks	I-SS4A: Feature Extraction and Learning on Image and Text Data	I-SS50: Machine Learning and Deep Learning Approaches to for Ambient Assisted Living	I-SS13: Computational Intelligence for Applied Time Series Forecasting	I-SS39: Challenges in Reservoir Computing	I-R11: Supervised learning 4	I-R12: Attention	I-P7: Spiking Neural Networks	I-P8: Data analysis and pattern recognition	Chapter Forum	Issues of Cutting Edge AI and Advanced Computational Intelligence Research	Secure Learning
4:00PM																				
4:30PM	Break			Break								Break								
4:45PM	F-TA1: Handling Uncertainties in Big Data By Fuzzy Systems-I	F-TA2: Computational Intelligence methods for Natural Language Processing	F-TA3: Recent Advances in Fuzzy Control System Design and Analysis-II	C-S25: Special Session on Evolutionary Computation in Dynamic and Uncertain Environments (ECiDUE)	C-S33: Special Session on Fitness Landscape Analysis in Practice	C-R1: Evolutionary Multi- and Many-objective Optimization		C-P5: CEC Poster Session 5	I-R13: Deep neural networks	I-SS4B: Feature Extraction and Learning on Image and Text Data	I-SS42: Artificial Neural Networks for Healthcare and Bio-signals Analysis	I-SS12: Cybersecurity in Complex Environments	I-SS49: Validation, Explanation and Correction of Artificial Intelligence Systems	I-R14: Unsupervised learning and clustering 1	I-R15: Learning, Memory, Spatial Cognition	I-P9: Deep neural networks	I-P10: Speech recognition, speech production, robotics, neurocontrol, optimization			
6:00PM																				
6:45PM	Break			Break								Break								
7:00PM	F-TE1: Handling Uncertainties in Big Data By Fuzzy Systems-II	F-TE2: Recent trends in many-valued logic and fuzziness	F-TE3: Interval and Fuzzy-valued Functions and their Applications	C-S32: Special Session on Real-World and Industry Applications of Evolutionary Computation	C-R3: Evolutionary Neural Architecture Search	C-R4: Genetic Programming (I)		C-P6: CEC Poster Session 6	I-R16: Deep neural networks	I-SS6: Bayesian Neural Networks: The Interplay between Bayes' Theorem and Neural Networks	I-SS38: Adversarial Machine Learning and Cyber Security	I-SS15A: Deep Learning and Computational Intelligence for Medical Image Analysis	I-SC7: CI in Transactive Energy Management and Smart Energy Network (CITESEN 2020)	I-R17: Unsupervised learning and clustering 2	I-R18: Semantic Cognition and Symbolic Processing	I-P11: Deep neural networks	I-P12: Signal processing, image processing, and multi-media			
9:00PM	End of day			End of day								End of day							End of day	

Wednesday, July 22nd 2020

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Tutorials	Panels	Workshops
10:30AM	Virtual Tour, Coffee Break & Networking																			
12:00AM	Design of General Type-2 Fuzzy Systems: Theory and Applications - Patricia Melin			Evolutionary Optimization - A Bird's Eye View - Ruhul Sarker					From designs for autonomous adaptive agents to clinical disorders: Linking cortically-mediated learning to Alzheimer's disease, autism, amnesia, and sleep - Steve Grossberg											
1:00PM	Break			Break					Break											
1:15PM	Towards Deep Learning 2.0 - Yoshua Bengio																			
2:15PM	Break			Break					Break											
2:30PM	Awards Ceremony																			
3:30PM	F-WM1: Type-2 Fuzzy Logic Systems	F-WM2: Distributed/ Multiagent Control of Fuzzy and Intelligent Systems	F-WM3: Fuzziness and New Frontiers of AI Research	C-R2: Evolutionary Large-Scale Optimization	C-R6: Evolution and Learning	C-R10: Nature Inspired Optimization		C-P7: CEC Poster Session 7	I-R19: Deep neural networks	I-SS7: Machine Learning Applications in Cyber Security	I-SS40: Complex-valued and Quaternionic Neural Networks: Theory and Applications	I-SS15B: Deep Learning and Computational Intelligence for Medical Image Analysis	I-SC8: CI for Bioinformatics and Computational Biology	I-R20: Reinforcement learning and adaptive dynamic programming 1	I-R21: Motor Control	I-P13: Deep neural networks	I-P14: Temporal data analysis, prediction and forecasting; time series analysis, computer networks		Landscape of Publications in Computational Intelligence	
5:30PM	Break			Break					Break											
5:45PM	F-WA1: Human Symbiotic Systems	F-WA2: Fuzzy Logic for Security and Forensics	F-WA3: Advanced Fuzzy Robotic Systems	C-R5: Genetic Programming (II)	C-R8: Metaheuristics and Hyperheuristics	C-R11: Swarm Optimization		C-P8: CEC Poster Session 8	I-R22: Deep neural networks	I-SS9A: Deep Neural Audio Processing	I-SS45: Neural Architecture Search and its Applications	I-SS19: Concept Drift, Domain Adaptation & Learning in Dynamic Environments	I-SC10: Sensors, Robotics and Artificial Intelligence: From Theory to Applications	I-R23: Reinforcement learning and adaptive dynamic programming 2	I-R24: Applications of deep networks	I-P15: Supervised Learning	I-P16: Data mining and knowledge discovery			
7:45PM	Break			Break					Break											
8:00PM	F-WE1: Intuitionistic Fuzzy Sets in Emerging Domains	F-WE2: Fuzzy and Uncertain Intelligent Knowledge Engineering Systems	F-WE3: Fuzzy systems for robotics	C-R7: Real-World Applications (I)	C-R9: Transfer Learning and Transfer Optimization	C-R12: Multi-Objective Optimization and Applications (I)		C-P9: CEC Poster Session 9	I-R25: Deep neural networks	I-SS9B: Deep Neural Audio Processing	I-SS41: Neural Architecture Search and Deep Reinforcement Learning for Autonomous Driving	I-SS20: Artificial Intelligence and SEcurity (AISE)	I-SS4-28: AI Technologies in IoT, CI & Software Engineering	I-R26: Semi-supervised learning	I-R27: Data analysis and pattern recognition	I-P17: Supervised Learning	I-P18: Power system and financial engineering applications			
10:00PM	End of day			End of day					End of day										End of day	

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Room 1	Panels	Workshops
10:00AM	Virtual Tour, Coffee Break & Networking																			
11:30AM	Evolutionary Transfer Optimization - Kay Chen Tan																			
12:30PM	Break			Break									Break							
1:00 PM	Transformation-based Fuzzy Rule Interpolation and its Applications - Qiang Shen			Cooperation – Experience – Creativity towards a new role of Optimization and AI in Engineering - Bernard Sendhoff					Michael Bronstein											
2:00PM	Break			Break									Break							
3:30PM	F-THM1: Fuzzy Systems for Brain Sciences	F-THM2: SenseAgents: Soft Approaches in Multi-sensing Cooperative Environments	F-THM3: Fuzzy Engineering Applications-I	C-R13: Multi-Objective Optimization and Applications (II)	C-R16: Real-World Applications (III)	C-R19: Discrete and Combinatorial Optimization (I)		C-P10: CEC Poster Session 10	I-R10: Deep neural networks	I-SS10: Recurrent Neural Information Processing: Models and Applications	I-SS46: Intelligent Vehicle and Transportation Systems	I-SS13A: Biologically Inspired Cognitive Robotics	I-SS15: Intelligent Control: Methods and Applications	I-R29: Deep learning I	I-COMP: IJCNN Competitions	I-P19: Unsupervised learning and clustering (including PCA and ICA)	I-P20: Multi-agent systems, social computing, industrial, expert systems	Women in CI Session	Funding Opportunities in Biologically Inspired AI and Computational Intelligence Research	
5:30PM	Break			Break									Break							
5:45PM	F-THA1: Fuzzy System for Renewable Energy and Control	F-THA2: Fuzzy logic and fuzzy set theory-I	F-THA3: Fuzzy Engineering Applications-II	C-R14: Multi-Objective Optimization and Applications (III)	C-R17: Real-World Applications (IV)	C-R20: Discrete and Combinatorial Optimization (II)		C-P11: CEC Poster Session 11	I-R30: Modular Networks	I-SS27: Embedded AI for Real-Time Systems	I-SS51: Neurocomputing and Cognition	I-SC13B: Biologically Inspired Cognitive Robotics	I-SS33B: Computationally Intelligent Methods in Neural Data Processing	I-R31: Deep learning II	I-R32: Applications of deep networks	I-P21: Reinforcement learning and adaptive dynamic programming	I-P22: Clinical applications			
7:45PM	Break			Break									Break							
8:00PM	F-THE1: Fuzzy Clustering	F-THE2: Fuzzy logic and fuzzy set theory-II	F-THE3: Fuzzy Engineering Applications-III	C-R15: Real-World Applications (II)	C-R18: Real-World Applications (V)	C-R21: Evolutionary Computation in Software Testing		C-P12: CEC Poster Session 12	I-R33: Recurrent neural networks	I-SS25A: Machine Learning and Deep Learning Methods applied to Vision and Robotics	I-SS47: Mind, Brain, and Cognitive Algorithms	I-SS16: Neural Network-based Uncertainty Quantification	I-SS34: Deep Learning for Brain-like Computing and Pattern Recognition	I-R34: Deep learning III	I-R35: Signal processing, image processing, and multi-media	I-P23: Semi-supervised learning, Online Learning, Probabilistic Methods	I-P24: Other applications			
10:00PM	End of day			End of day					End of day										End of day	

Friday, July 24th 2020

Time	FUZZ Room 1	FUZZ Room 2	FUZZ Poster Room	CEC Room 1	CEC Room 2	CEC Room 3	CEC Room 4	CEC Poster Room	IJCNN Room 1	IJCNN Room 2	IJCNN Room 3	IJCNN Room 4	IJCNN Room 5	IJCNN Room 6	IJCNN Room 7	IJCNN Poster Room 1	IJCNN Poster Room 2	WCCI Tutorials	Panels	Workshops
10:00AM	Virtual Tour, Coffee Break & Networking																			
11:30AM	Machine Learning in the wild - Barbara Hammer																			
12:30PM	Break			Break					Break											
1:00PM	Fuzzy Patten Recognition in Data Analysis - Sansanee Auephanwiriyakul			Evolutionary Multi-Objective Optimization and Decision-Making in Timely Critical Scenarios - Sanaz Mostaghim					Deep Learning, Neural Networks and Kernel Machines: new Synergies - Johan A.K. Suykens											
2:00PM	Closing Ceremony																			
2:30PM	Break			Break					Break											
2:45PM	F-FM1: Fuzzy Decision Making	F-COMP: FUZZ-IEEE Competitions	F-FM3: Fuzzy Time Series and Optimisation	C-R22: Real-World Applications (VI)	C-R25: Multi-Objective Optimization and Applications (IV)	C-S08: Special Session on Computational Intelligence in Aerospace Science and Engineering (CiASE)	C-COMP: CEC Competitions	C-P13: CEC Poster Session 13	I-R36: Reservoir networks and SOM	I-SS18A: Explainable Computational/Artificial Intelligence	I-SS55: Extreme Learning Machines (ELM)	I-SS26: Neuromorphic Sensing, Processing and Applications	I-R37: Applications in multi-agent systems and social computing	I-R38: On-line learning and mixed topics	I-R39: Temporal data analysis, prediction, and forecasting; time series analysis	I-P25: Deep Learning	I-P26: Neurocognitive, visual and auditory systems			
4:45PM	Break			Break					Break											
5:00PM	F-FA1: Fuzzy Hybrid Systems	F-FA2: Fuzzy Theory-I	F-FA3: Fuzzy Applications-I	C-R23: Differential Evolution	C-R26: Evolutionary Game and Multi-Agent Systems	C-R28: Applications		C-P14: CEC Poster Session 14	From brains to deep neural networks	I-SS18B: Explainable Computational/Artificial Intelligence	I-SS52: Methods and Applications of Deep Reinforcement Learning to Autonomous Systems	I-SS30: Robustness and Trustworthiness in Deep Learning	I-R41: Manufacturing and industrial applications	I-R42: Mixture models	I-R43: Data mining and knowledge discovery	I-P27: Deep Learning	I-P28: Attention, Memory, Spatial Cognition, computational neuroscience, neurodynamics			
7:00PM	Break			Break					Break											
7:15PM	F-FE1: Fuzzy Theory-II	F-FE2: Fuzzy Systems	F-FE3: Fuzzy Logic Applications-II	C-R24: Genetic Programming (IV)	C-R27: Hybrid Algorithms	C-R30: Genetic Algorithms and Genetic Programming		C-P15: CEC Poster Session 15	Machine learning for data streams in Python with scikit-multi flow	I-SS25B: Machine Learning and Deep Learning Methods applied to Vision and Robotics	I-SS54: Online Intelligence and Trust Computation in Large-Scale Dynamic Networks	I-SS33A: Computationally Intelligent Methods in Neural Data Processing	I-R45: Expert systems	I-R46: Clinical and Other applications	I-R47: Power system applications	I-P29: Mixture models, ensemble learning	I-P30: Semantic Cognition, emotion, coordination and behavior			
9:15PM	End of day			End of day					End of day										End of day	