



ICCCI 2018
 UWE Frenchay Campus, Q Block
 5-7 September 2018
Conference Program at a Glance

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Day 1. Wednesday, 5 September 2018			
09:00 – 10:00	Registration Location: UWE Frenchay Campus, Q Block, room 2Q48		
10:00 – 10:30	Opening Session Chair: Dr. Elias Pimenidis, UK Location: Lecture Theatre, room 2Q49		
10:30 – 11:30	Keynote Lecture 1 Speaker: Prof. Anthony Pipe, UK Topic: Safe and Useful Human-Robot Interaction: from Connected Autonomous Vehicles to Care Robotics Chair: Prof. Ngoc Thanh Nguyen, Poland Location: Lecture Theatre, room 2Q49		
11:30 – 11:40	Group Photo Session Location: Lecture Theatre, room 2Q49		
11:40 – 12:00	Coffee break Location: Room 2Q50/51		
12:00 – 13:00	Keynote Lecture 2 Speaker: Prof. Tadeusz Szuba, Poland Topic: The Invisible Hand as a Collective Intelligence Algorithm for Robotic Applications Chair: Prof. Zaheer Khan, UK Location: Lecture Theatre, room 2Q49		
13:00 – 14:00	Lunch Location: Room 2Q50/51		
Parallel Sessions 1			
14:00 – 15:20	Lecture Theatre 2Q49 KNO-1 Knowledge Engineering and Semantic Web-1 Chair: Dr. Philippe Lemoisson, France	Meeting Room 2Q42 SOC-1 Social Networks and Recommender Systems-1 Chair: Dr. Camelia Delcea, Romania	Meeting Room 2Q46 DEC-1 Decision Support & Control Systems-1 Chair: Dr. Mehmet Emin Aydin, UK
15:20 – 15:50	Coffee break Location: Room 2Q50/51		
Parallel Sessions 2			
15:50 – 17:10	Lecture Theatre 2Q49 KNO-2 Knowledge Engineering and Semantic Web-1 Chair: Prof. Dariusz Król, Poland	Meeting Room 2Q42 MIN-1 Data Mining Methods and Applications-1 Chair: Prof. Muhammad Atif Tahir, Pakistan	Meeting Room 2Q46 DEC-2 Decision Support & Control Systems-2 Chair: Prof. Hoai An Le Thi, France

Parallel Sessions 3			
	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
17:10 – 18:30	MAS-1 Agents and Multi-Agent Systems-1 Chair: Prof. Doina Logofatu, Germany	MIN-2 Data Mining Methods and Applications-2 Chair: Prof. Yi Lu Murphey, USA	CSDMO-1 Cooperative Strategies for Decision Making and Optimization-1 Chair: Prof. Dariusz Barbuscha, Poland
19:00 – 20:00	Bus transfer to Welcome reception Coaches leave from UWE Frenchay Campus		
20:00 – 22:00	Location: The Glassboat Brasserie http://www.glassboat.co.uk/		

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Day 2. Thursday, 6 September 2018			
Parallel Sessions 4			
	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
09:10 – 10:30	DEC-3 Decision Support & Control Systems-3 Chair: Prof. Serestina Viriri, South Africa	REC-1 Recommendation Methods and Recommender Systems-1 Chair: Dr. Marek Krótkiewicz, Poland	CSDMO-2 Cooperative Strategies for Decision Making and Optimization-2 Chair: Prof. Ireneusz Czarnowski, Poland
10:30 – 11:30	Keynote Lecture 3 Speaker: Prof. Jan Treur, The Netherlands Topic: The Ins and Outs of Network-Oriented Modeling: from Biological Networks and Mental Networks to Social Networks and Beyond Chair: Prof. Jacek Mercik, Poland Location: Lecture Theatre, room 2Q49		
11:30 – 12:00	Coffee break Location: Room 2Q50/51		
12:00 – 13:00	Keynote Lecture 4 Speaker: Prof. Andrew Adamatzky, UK Topic: Advances in unconventional computing Chair: Prof. Dosam Hwang, South Korea Location: Lecture Theatre, room 2Q49		
13:00 – 14:00	Lunch Location: Room 2Q50/51		

Parallel Sessions 5			
14:00 – 15:40	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
	TXT Text Processing and Information Retrieval Chair: Prof. Ualsher Tukeyev, Kazakhstan	IoT Sensor Networks and Internet of Things Chair: Dr. Vladimir Sobeslav, Czech Republic	VIS Computer Vision Techniques Chair: Prof. Kazimierz Choroś, Poland
15:40 – 16:10	Coffee break Location: Room 2Q50/51		
Parallel Sessions 6			
16:10 – 17:10	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
	MAS-2 Agents and Multi-Agent Systems-2 Chair: Dr. Stewart Green, UK	SOC-2 Social Network Analysis-2 Chair: Dr. George R. S. Weir, UK	DEC-4 Decision Support & Control Systems-4 Chair: Dr. Amine Chohra, France
Parallel Sessions 7			
17:10 – 18:30	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
	CDS-1 Complex Decision Systems - 1 Chairs: Dr. Agnieszka Nowak-Brzezińska, Dr. Małgorzata Przybyła-Kasperek, Poland	ISSC-1 Intelligent Sustainable Smart Cities-1 Chair: Dr. Libuse Svobodova, Czech Republic	MLRWD-1 Machine Learning in Real-World Data-1 Chairs: Dr. Jan Kozak, Dr. Przemysław Juszczuk, Poland
19:00 – 20:00	Bus transfer to Banquet Dinner Coaches leave from UWE Frenchay Campus		
20:00 – 22:30	Banquet Dinner Location: The Bristol Hotel https://www.doylecollection.com/hotels/the-bristol-hotel?utm_source=google&utm_campaign=bristol&utm_medium=local		



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Conference Program at a Glance

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Day 3. Friday, 7 September 2018			
Parallel Sessions 8			
09:00 – 10:00	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
	CDS-2 Complex Decision Systems-2 Chairs: Dr. Agnieszka Nowak-Brzezińska, Dr. Małgorzata Przybyła-Kasperek, Poland	REC-2 Recommendation Methods and Recommender Systems-2 Chair: Dr. Kamran Soomro, UK	MLRWD-2 Machine Learning in Real-World Data-2 Chairs: Dr. Jan Kozak, Dr. Przemysław Juszczuk, Poland
Parallel Sessions 9			
10:00 – 11:00	Lecture Theatre 2Q49	Meeting Room 2Q42	Meeting Room 2Q46
		SOC-3 Social Network Analysis-3 Chair: Dr. Marcin Maleszka, Poland	ISSC-2 Intelligent Sustainable Smart Cities-2 Chair: Dr. Libuse Svobodova, Czech Republic
11:00 – 11:30	Coffee break Location: Room 2Q50/51		
11:30 – 12:00	Closing Session Best Paper, Best Student Paper, Best Special Session Awards Chair: Prof. Ngoc Thanh Nguyen, Poland Location: Lecture Theatre, room 2Q49		
12:00 – 13:00	Lunch Location: Room 2Q50/51		
14:00 – 15:00	Bus transfer to the boarding point on the Silver Salmon boat Coaches leave from UWE Frenchay Campus		
15:00 – 17:00	Boat Trip to Bristol Harbour (by the Silver Salmon boat) https://avonrivercruises.com/		



ICCCI 2018, Bristol, UK
5-7 September 2018
Parallel Thematic Sessions

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Day 1. Wednesday, 5 September 2018

Parallel Sessions 1 (14:00 – 15:20)

<p>14:00 – 15:20</p> <p>Wednesday, 5 Sep 2018</p>	<p>KNO-1: Knowledge Engineering and Semantic Web-1 Chair: Dr. Philippe Lemoisson, France Location: Lecture Theatre, room 2Q49</p>
	<p>Intelligent Collectives: Impact of Diversity on Susceptibility to Consensus and Collective Performance <i>Van Du Nguyen, Hai Bang Truong, Mercedes G. Merayo and Ngoc-Thanh Nguyen</i></p> <p>The Increasing Bias of Non-uniform Collectives <i>Marcin Maleszka</i></p> <p>EVENTSKG: A Knowledge Graph Representation for Top-Prestigious Computer Science Events Metadata <i>Said Fathalla and Christoph Lange</i></p> <p>Assessing the Performance of a New Semantic Similarity Measure Designed for Schema Matching for Mediation Systems <i>Aola Yousfi, Moulay Hafid Elyazidi and Ahmed Zellou</i></p>

<p>14:00 – 15:20</p> <p>Wednesday, 5 Sep 2018</p>	<p>SOC-1: Social Network Analysis-1 Chair: Dr. Camelia Delcea, Romania Location: Meeting Room 2Q42</p>
	<p>Physical Activity Contagion and Homophily in an Adaptive Social Network Model <i>Marit van Dijk and Jan Treur</i></p> <p>On the Emergence of Segregation in Society: Network-Oriented Analysis of the Effect of Evolving Friendships <i>Christianne Kappert, Rosalyn Rus and Jan Treur</i></p> <p>Popularity and Geospatial Spread of Trends on Twitter: A Middle Eastern Case Study <i>Nabeel Albishry, Tom Crick, Tesleem Fagade and Theo Tryfonas</i></p> <p>Categorizing Air Quality Information Flow on Twitter Using Deep Learning Tools <i>Brigitte Juanals and Jean-Luc Minel</i></p>

14:00 – 15:20 Wednesday, 5 Sep 2018	DEC-1: Decision Support & Control Systems-1 Chair: Dr. Mehmet Emin Aydin, UK Location: Meeting Room 2Q46
	Large-Scale Evolutionary Optimization Using Multi-Layer Strategies Differential Evolution <i>Tarik Eltaeib and Ausif Mahmood</i>
	Predictive Memetic Algorithm (PMA) for Combinatorial Optimization in Dynamic Environments <i>Stephen Akandwanaho and Serestina Viriri</i>
	OPC UA Communication Traffic Control for Analogue Values in Automation Device Embedded OPC UA Servers <i>Olav Sande and Marcin Fojcik</i>
	Application of Decision Trees for Quality Management Support <i>Rafal Cupek, Adam Ziebinski and Marek Drewniak</i>

Day 1. Wednesday, 5 September 2018	
Parallel Sessions 2 (15:50 – 17:10)	
15:50 – 17:10 Wednesday, 5 Sep 2018	KNO-2: Knowledge Engineering and Semantic Web-2 Chair: Prof. Dariusz Król, Poland Location: Lecture Theatre, room 2Q49
	ViewpointS: Towards a Collective Brain <i>Philippe Lemoisson and Stefano A. Cerri</i>
	The Impact of Data Dispersion on the Accuracy of the Data Warehouse Federation's Response <i>Rafał Kern</i>
	Representation of Autoimmune Diseases with RDFS <i>Martina Husáková</i>

15:50 – 17:10 Wednesday, 5 Sep 2018	MIN-1: Data Mining Methods and Applications-1 Chair: Prof. Muhammad Atif Tahir, Pakistan Location: Meeting Room 2Q42
	SVM Parameter Optimization Using Swarm Intelligence for Learning from Big Data <i>Yongquan Xie, Yi Murphey and Dev Kochhar</i>
	A New Computational Method for Solving Fully Fuzzy Nonlinear Systems <i>Raheleh Jafari, Sina Razvarz and Alexander Gegov</i>
	Facial Expression Recognition: A Survey on Local Binary and Local Directional Patterns <i>Kennedy Chengeta and Serestina Viriri</i>

	<p>Purity and Out of Bag Confidence Metrics for Random Forest Weighting <i>Mandlenkosi Victor Gwetu, Serestina Viriri and Jules-Raymond Tapamo</i></p>
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<p>15:50 – 17:10 Wednesday, 5 Sep 2018</p>	<p>DEC-2: Decision Support & Control Systems-2 Chair: Prof. Hoai An Le Thi, France Location: Meeting Room 2Q46</p>
	<p>Design of Recursive Digital Filters with Penalized Spline Method <i>Elena Kochegurova, Ivan Khozhaev and Tatyana Ezangina</i></p> <p>Diversifying Search in Bee Algorithms for Numerical Optimisation <i>Muharrem Dugenci and Mehmet Emin Aydin</i></p> <p>Solving the Quadratic Assignment Problem (QAP) through a Fine-Grained Parallel Genetic Algorithm Implemented on GPUs <i>Roberto Poveda and Jonatan Gomez</i></p> <p>Heuristic Algorithm for a Personalised Student Timetable <i>Dalibor Cimr and Josef Hynek</i></p>

<p align="center">Day 1. Wednesday, 5 September 2018</p>	
<p align="center">Parallel Sessions 3 (17:10 – 18:30)</p>	
<p>17:10 – 18:30 Wednesday, 5 Sep 2018</p>	<p>MAS-1: Agents and Multi-Agent Systems-1 Chair: Prof. Doina Logofatu, Germany Location: Lecture Theatre, room 2Q49</p>
	<p>An Agent-based Collective Model to Simulate Peer Pressure Effect on Energy Consumption <i>Fatima Abdallah, Shadi Basurra and Mohamed Medhat Gaber</i></p> <p>Agent-based Decision-Information System Supporting Effective Resource Management of Companies <i>Dorota Wilk-Kołodziejczyk, Jarosław Koźlak, Bartłomiej Śnieżyński, Stanisława Kluska-Nawarecka, Krzysztof Jaśkowiec and Małgorzata Żabińska</i></p> <p>Evolutionary Multi-Agent System in Planning of Marine Trajectories <i>Maciej Gawęł, Tomasz Jakubek, Aleksander Byrski, Marek Kisiel-Dorohinicki, Kamil Piętak and Daniel Hernandez</i></p> <p>Agents Interaction and Queueing System Model of Real Time Control of Students Service Center Load Balancing <i>Malika Abdrakhmanova, Galimkair Mutanov, Zhanl Mamykova and Ualsher Tukeyev</i></p>

<p>17:10 – 18:30</p> <p>Wednesday, 5 Sep 2018</p>	<p>MIN-2: Data Mining Methods and Applications-2 Chair: Prof. Yi Lu Murphey, USA Location: Meeting Room 2Q42</p>
	<p>An Approach to Property Valuation Based on Market Segmentation with Crisp and Fuzzy Clustering <i>Adrian Malinowski, Mateusz Piwowarczyk, Zbigniew Telec, Bogdan Trawiński, Olgierd Kempa and Tadeusz Lasota</i></p> <p>Predicting Solar Intensity Using Cluster Analysis <i>Waseem Ahmad, Sahil Sahil and Aftab Mughal</i></p> <p>Energy-based Centroid Identification and Cluster Propagation with Noise Detection <i>Alexander Krassovitskiy and Rustam Mussabayev</i></p> <p>A CNN Model with Data Imbalance Handling for Course-Level Student Prediction Based on Forum Texts <i>Phuc Nguyen and Chau Vo</i></p>
<p>17:10 – 18:30</p> <p>Wednesday, 5 Sep 2018</p>	<p>CSDMO-1: Cooperative Strategies for Decision Making and Optimization-1 Chair: Prof. Dariusz Barbuta, Poland Location: Meeting Room 2Q46</p>
	<p>Hitchcock Birds Inspired Algorithm <i>Reinaldo G.Morais, Luiza M. Mourelle and Nadia Nedjah</i></p> <p>Cluster-based Instance Selection for the Imbalanced Data Classification <i>Ireneusz Czarnowski and Piotr Jędrzejowicz</i></p> <p>Building Collaboration in Multi-Agent Systems Using Reinforcement Learning <i>Mehmet Emin Aydin and Ryan Fellows</i></p> <p>Evaluation of Multigraph Elements Using the Shapley Value <i>Jacek Mercik, Stefan Forlicz, David Ramsey and Izabella Stach</i></p>



Day 2. Thursday, 6 September 2018

Parallel Sessions 4 (9:10 – 10:30)

9:10 – 10:30	DEC-3: Decision Support & Control Systems-3 Chair: Prof. Serestina Viriri, South Africa Location: Lecture Theatre, room 2Q49
Thursday, 6 Sep 2018	<p>Single Machine Weighted Tardiness Problem: an Algorithm and Experimentation System <i>Kacper Petryński, Robert Szost, Iwona Poźniak-Koszałka, Leszek Koszałka and Andrzej Kasprzak</i></p> <p>Modeling Players under Uncertainty in the Turtle Race Game <i>Michał Przybylski and Dariusz Król</i></p> <p>Chess Problem: CSA Algorithm Based on Simulated Annealing and Experimentation System <i>Jakub Klikowski, Lukasz Karnicki, Martyna Poślednik, Leszek Koszałka, Iwona Poźniak-Koszałka and Andrzej Kasprzak</i></p> <p>A New Distance Function for Consensus Determination in Decision Support Systems <i>Marcin Hernes, Jadwiga Sobieska-Karpińska, Adrianna Kozierekiewicz and Marcin Pietranik</i></p>

9:10 – 10:30	REC-1: Recommendation Methods and Recommender Systems-1 Chair: Dr. Marek Krótkiewicz, Poland Location: Meeting Room 2Q42
Thursday, 6 Sep 2018	<p>Proposal of a Recommendation System for Complex Topic Learning based on a Sustainable Design Approach <i>Xanat V Meza and Toshimasa Yamanaka</i></p> <p>A Group Recommender System for Selecting Experts to Review a Specific Problem <i>Dinh Tuyen Hoang, Ngoc-Thanh Nguyen and Dosam Hwang</i></p> <p>A Generic Framework for Collaborative Filtering Based on Social Collective Recommendation <i>Leschek Homann, Bernadetta Maleszka, Denis Mayr Lima Martins and Gottfried Vossen</i></p> <p>A Neural Learning-Based Clustering Model for Collaborative Filtering <i>Grzegorz P. Mika and Grzegorz Dziczkowski</i></p>

9:10 – 10:30	CSDMO-2: Cooperative Strategies for Decision Making and Optimization-2 Chair: Prof. Ireneusz Czarnowski, Poland Location: Meeting Room 2Q46
Thursday, 6 Sep 2018	
	<p>Solving DVRPTW by a Multi-Agent System with Vertical and Horizontal Cooperation <i>Dariusz Barbucha</i></p> <p>A-Team Solving Distributed Resource-Constrained Multi-Project Scheduling Problem <i>Piotr Jędrzejowicz and Ewa Ratajczak-Ropel</i></p> <p>Group Affect in Complex Decision-Making: Theory and Formalisms from Psychology and Computer Science <i>Amine Chohra, Kurosh Madani and Chantal Natalie van der Wal</i></p> <p>Parallel GEP Ensemble for Classifying Big Datasets <i>Joanna Jędrzejowicz, Piotr Jędrzejowicz and Izabela Wierzbowska</i></p>

Day 2. Thursday, 6 September 2018	
Parallel Sessions 5 (14:00 – 15:40)	
14:00 – 15:40	TXT: Text Processing and Information Retrieval Chair: Prof. Ualsher Tukeyev, Kazakhstan Location: Lecture Theatre, room 2Q49
Thursday, 6 Sep 2018	
	<p>Handling Concept Drift and Feature Evolution in Textual Data Stream Using the Artificial Immune System <i>Amal Abid, Salma Jamoussi and Abdelmajid Ben Hamadou</i></p> <p>A Tweet Summarization Method Based on Maximal Association Rules <i>Huyen Trang Phan, Ngoc Thanh Nguyen and Dosam Hwang</i></p> <p>DBpedia and YAGO Based System for Answering Questions in Natural Language <i>Tomasz Boiński, Julian Szymański, Bartłomiej Dudek, Paweł Zalewski, Maria Czarnecka and Szymon Dompke</i></p> <p>A New Text Semi-Supervised Multi-Label Learning Model Based on Using the Label-Feature Relations <i>Quang-Thuy Ha, Thi-Ngan Pham, Van-Quang Nguyen, Minh-Chau Nguyen, Thanh-Huyen Pham and Tri Thanh Nguyen</i></p> <p>Bidirectional LSTM for Author Gender Identification <i>Bassem Bsir and Mounir Zrigui</i></p>

14:00 – 15:40 Thursday, 6 Sep 2018	IoT: Sensor Networks and Internet of Things Chair: Dr. Vladimir Sobeslav, Czech Republic Location: Meeting Room 2Q42
	<p>A DC Programming Approach for Worst-Case Secrecy Rate Maximization Problem <i>Phuong Anh Nguyen and Hoai An Le Thi</i></p> <p>System for Detailed Monitoring of Dog's Vital Functions <i>David Sec, Jan Matyska, Blanka Klimova, Richard Cimler, Jitka Kühnová and Filip Studnicka</i></p> <p>Driver Supervisor System With Telegram Bot Platform <i>Emir Husni and Faisal Hasibuan</i></p> <p>Multi-Agent Base Evacuation Support System Using MANET <i>Shohei Taga, Tomofumi Matsuzawa, Munehiro Takimoto and Yasushi Kambayashi</i></p> <p>Analysis of Software Routing Solution Based on Mini PC Platform for IoT <i>Vladimir Sobeslav and Josef Horalek</i></p>

14:00 – 15:40 Thursday, 6 Sep 2018	VIS: Computer Vision Techniques Chair: Prof. Kazimierz Choroś, Poland Location: Meeting Room 2Q46
	<p>Novel Nature-Inspired Selection Strategies for Digital Image Evolution of Artwork <i>Thuan Gia Lam, Kristiyan Balabanov, Doina Logofatu and Costin Badica</i></p> <p>Ensemble of Texture and Deep Learning Features for Finding Abnormalities in the Gastro-Intestinal Tract <i>Shees Nadeem, Muhammad Atif Tahir, Syed Sadiq Ali Naqvi and Muhammad Zaid</i></p> <p>Fuzzy Segmentation Driven by Modified ABC Algorithm using Cartilage Features Completed by Spatial Aggregation: Modeling of Early Cartilage Loss <i>Jan Kubicek, Iveta Bryjova, Marek Penhaker, David Oczka, Martin Augustynek and Martin Cerny</i></p> <p>GBM Volume Prediction Using Case-Based Reasoning <i>Ana Mendonça, Joana Pereira, Rita Reis, Victor Alves, Filipa Ferraz, João Neves, Jorge Ribeiro, Henrique Vicente and José Neves</i></p> <p>Video Genre Classification Based on Length Analysis of Temporally Aggregated Video Shots <i>Kazimierz Choroś</i></p>

Day 1. Wednesday, 5 September 2018	
Parallel Sessions 6 (16:10 – 17:10)	
16:10 – 17:10 Thursday, 6 Sep 2018	MAS-2: Agents and Multi-Agent Systems-2 Chair: Dr. Stewart Green, UK Location: Lecture Theatre, room 2Q49
	<p>Agents' Knowledge Conflicts' Resolving in Cognitive Integrated Management Information System – Case of Budgeting Module <i>Marcin Hernes, Anna Chojnacka-Komorowska, Adrianna Kozierkiewicz and Marcin Pietranik</i></p> <p>Airplane Boarding Strategies using Agent-Based Modeling and Grey Analysis <i>Camelia Delcea, Liviu-Adrian Cotfas and Ramona Paun</i></p> <p>Agent-based Optimization of the Emergency Exits and Desks Placement in Classrooms <i>Camelia Delcea, Liviu-Adrian Cotfas and Ramona-Mihaela Paun</i></p>
16:10 – 17:10 Thursday, 6 Sep 2018	SOC-2: Social Network Analysis -2 Chair: Dr. George R. S. Weir, UK Location: Meeting Room 2Q42
	<p>A Computational Network Model for the Effects of Certain Types of Dementia on Social Functioning <i>Charlotte Commu, Jan Treur, Annemiek Dols and Yolande Pijnenburg</i></p> <p>Computational Analysis of Bullying Behavior in the Social Media Era <i>Fakhra Jabeen and Jan Treur</i></p> <p>A Semi-Automated Security Advisory System to Resist Cyber-attack in Social Networks <i>Samar Albladi and George R. S. Weir</i></p>
16:10 – 17:10 Thursday, 6 Sep 2018	DEC-4: Decision Support & Control Systems-4 Chair: Dr. Amine Chohra, France Location: Meeting Room 2Q46
	<p>An Adaptive Temporal-Causal Network Model for Decision Making Under Acute Stress <i>Jan Treur and S. Sahand Mohammadi Ziabari</i></p> <p>A Flexible Evolutionary Algorithm for Task Allocation in Multi-Robot Team <i>Muhammad Usman Arif and Sajjad Haider</i></p> <p>Proposition of a BDI-based Distributed Partitioning Approach for a Multirobot System <i>Nourchene Ben Slimane and Moncef Tagina</i></p>

Day 2. Thursday, 6 September 2018

Parallel Sessions 7 (17:10 – 18:30)

17:10 – 18:30 Thursday, 6 Sep 2018	CDS-1: Complex Decision Systems -1 Chairs: Dr. Agnieszka Nowak-Brzezińska, Dr. Małgorzata Przybyła-Kasperek, Poland Location: Lecture Theatre, room 2Q49
	Solving the Uncapacitated Traveling Purchaser Problem with the MAX-MIN Ant System <i>Rafał Skinderowicz</i>
	Comparison of Dispersed Decision Systems with Pawlak Model and with Negotiation Stage in Terms of Five Selected Fusion Methods <i>Małgorzata Przybyła-Kasperek</i>
	Optimized Algorithm for Node Address Assigning in Large Scale Smart Automation Environment <i>David Sec, Dalibor Cimr, Jan Stepan, Richard Cimler and Jitka Kuhnova</i>
	System for an Evaluation of an Air-strike Threat Level Using Fuzzy Methods <i>Dalibor Cimr, Hana Tomášková, Richard Cimler, Jitka Kühnová and Vlastimil Šlouf</i>

17:10 – 18:30 Thursday, 6 Sep 2018	ISSC-1: Intelligent Sustainable Smart Cities-1 Chair: Dr. Libuse Svobodova, Czech Republic Location: Meeting Room 2Q42
	ANN and GMDH Algorithms in QSAR Analyses of Reactivation Potency for Acetylcholinesterase Inhibited by VX Warfare Agent <i>Rafael Dolezal, Jiri Krenek, Veronika Racakova, Natalie Karaskova, Nadezhda V. Maltsevskaya, Michaela Melikova, Karel Kolar, Jan Trejbal and Kamil Kuca</i>
	Multiregional Segmentation Modeling in Medical Ultrasonography: Extraction, Modeling and Quantification of Skin layers and Hypertrophic Scars <i>Iveta Bryjova, Jan Kubicek, Kristyna Molnarova, Lukas Peter, Marek Penhaker and Kamil Kuca</i>
	Computer User Verification based on Typing Habits and Finger-Knuckle Analysis <i>Hossein Safaverdi, Tomasz Wesolowski, Rafal Doroz, Krzysztof Wróbel and Piotr Porwik</i>
	Fusion methods in a dispersed decision system - a comparison on medical data <i>Małgorzata Przybyła-Kasperek, Agnieszka Nowak - Brzezińska and Roman Simiński</i>

<p>17:10 – 18:30</p> <p>Thursday, 6 Sep 2018</p>	<p>MLRWD-1: Machine Learning in Real-World Data-1 Chairs: Dr. Jan Kozak, Dr. Przemysław Juszczak, Poland Location: Meeting Room 2Q46</p>
	<p>Investigating Patterns in the Financial Data with Enhanced Symbolic Description <i>Krzysztof Kania, Przemysław Juszczak and Jan Kozak</i></p> <p>The Mechanism to Predict Folders in Automatic Classification Email Messages to Folders in the Mailboxes <i>Barbara Probierz</i></p> <p>Evaluation of Tree Based Machine Learning Classifiers for Malware Detection on Android <i>Md. Shohel Rana, Sheikh Shah Mohammad Motiur Rahman and Andrew H. Sung</i></p>



ICCCI 2018, Bristol, UK
5-7 September 2018
Parallel Thematic Sessions

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Day 3. Friday, 7 September 2018	
Parallel Sessions 8 (09:00 – 10:00)	
09:00 – 10:00 Friday, 7 Sep 2018	CDS-2: Complex Decision Systems -2 Chairs: Dr. Agnieszka Nowak-Brzezińska, Dr. Małgorzata Przybyła-Kasperek, Poland Location: Lecture Theatre, room 2Q49
	Experimental Implementation of Web-based Knowledge Base Verification Module <i>Roman Simiński, Agnieszka Nowak-Brzezińska and Michał Simiński</i> Methods of Rule Clusters' Representation in Domain Knowledge Bases <i>Agnieszka Nowak-Brzezińska</i> Different Methods for Cluster's Representation and Their Impact on the Effectiveness of Searching Through Such a Structure <i>Agnieszka Nowak-Brzezińska and Tomasz Xięski</i>
09:00 – 10:00 Friday, 7 Sep 2018	REC-2: Recommendation Methods and Recommender Systems-2 Chair: Dr. Kamran Soomro, UK Location: Meeting Room 2Q42
	A Hybrid Feature Combination Method that Improves Recommendations <i>Gharbi Alshammari, Stelios Kapetanakis, Abdullah Alshammari, Nikolaos Polatidis and Miltos Petridis</i> Influence Power Factor for User Interface Recommendation System <i>Marek Krótkiewicz, Krystian Wojtkiewicz and Denis Martins</i> A Recommender System based on Fuzzy Reasoning and Information Systems <i>Martin Tabakov</i>
09:00 – 10:00 Friday, 7 Sep 2018	MLRWD-2: Machine Learning in Real-World Data-2 Chairs: Dr. Jan Kozak, Dr. Przemysław Juszczuk, Poland Location: Meeting Room 2Q46
	Review on General Techniques and Packages for Data Imputation in R on a Real World Dataset <i>Fitore Muharemi, Doina Logofătu and Florin Leon</i>

	<p>On XLE Index Constituents' Social Media Based Sentiment Informing the Index Trend and Volatility Prediction <i>Frederic Marechal, Daniel Stamate, Raphael Olaniyan and Jiri Marek</i></p> <p>Ant Colony Optimization Algorithms in the Problem of Predicting the Efficiency of the Bank Telemarketing Campaign <i>Jan Kozak and Przemysław Juszczak</i></p>
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Day 3. Friday, 7 September 2018
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Parallel Sessions 9 (10:00 – 11:00)

<p>10:00 – 11:00 Friday, 7 Sep 2018</p>	<p>SOC-3: Social Network Analysis-3 Chair: Dr. Marcin Maleszka, Poland Location: Meeting Room 2Q42</p>
	<p>The Role of Mapping Curve in Swarm-Like Opinion Formation <i>Tomasz Gwizdała</i></p> <p>Homophily Independent Cascade Diffusion Model Based on Textual Information <i>Thi Kim Thoa Ho, Quang Vu Bui and Marc Bui</i></p> <p>e-School: Design and Implementation of Web based Teaching Institution for Enhancing E-Learning Experiences <i>Md. Shohel Rana, Touhid Bhuiyan and A. K. M. Zaidi Satter</i></p>

<p>10:00 – 11:00 Friday, 7 Sep 2018</p>	<p>ISSC-2: Intelligent Sustainable Smart Cities-2 Chair: Dr. Libuse Svobodova, Czech Republic Location: Meeting Room 2Q46</p>
	<p>Automation System Architecture for Smart Hotel <i>Jan Stepan, Richard Cimler and Ondrej Krejcar</i></p> <p>Project Management Model with Designed Data Flow Diagram: The Case of ICT Hybrid Learning of Elderly People in the Czech Republic <i>Libuse Svobodova and Miloslava Cerna</i></p> <p>Use of Smart Technologies for Hybrid Learning as a Way to Educate People Became Full Smart Cities Residents <i>Libuse Svobodova and Martina Hedvicakova</i></p>