

# ISAT 2015


KARPACZ, POLAND, 20-22 September 2015

## CONFERENCE SCHEDULE AND PROGRAM

### SUNDAY – 20 SEPTEMBER 2015

14:00 – 16:00	<b>Registration</b>		
16:00 – 17:00	<b>Opening of the Conference &amp; Welcome party (coffee, tea, snack, etc.) Room A</b>		
17:00 – 19:00	<b>PART I</b>	<b>Chairs: Z. Banaszak, Z. Wilimowska, A. Katkow</b>	
	<b>Room A</b>	<b>Room B</b>	<b>Room C</b>
	<b>Session S1</b> <i>Systems Analysis and Modeling I</i>	<b>Session S2</b> <i>Finance, Logistics &amp; Market</i>	<b>Session S3</b> <i>Web Systems</i>
17:00 – 17:20	S.Shafiq, C.Sanin, E.Szczerbicki, C.Toro DECISIONAL DNA BASED CONCEPTUAL FRAMEWORK FOR SMART MANUFACTURING.	J.Wyrobek, Z.Stańczyk, M.Zachara GLOBAL FINANCIAL CRISIS AND THE DECOUPLING HYPOTHESIS	K.Zatwarnicki, M.Płatek, A.Zatwarnicka A CLUSTER-BASED QUALITY AWARE WEB SYSTEM
17:20 – 17:40	D.Kuchta FUZZY TRAVELLING SALESMAN PROBLEM WITH NETWORKS AS NODES	A.Kiżyk RISK MANAGEMENT ON DIFFERENT TYPES OF STOCK EXCHANGE MARKETS	D.Rykowski, M.Plechawska-Wójcik COMPARISON OF RELATIONAL, DOCUMENT AND GRAPH DATABASES IN THE CONTEXT OF THE WEB APPLICATION DEVELOPMENT
17:40 – 18:00	J.Szczypta, K.Łapa ASPECTS OF STRUCTURE SELECTION AND PARAMETERS TUNING OF CONTROL SYSTEMS USING HYBRID GENETIC-FRUITFLY ALGORITHM	S.Tomczak, Z.Wilimowska TESTING THE PROBABILITY DISTRIBUTION OF FINANCIAL RATIOS	M.Zachara, D.Pałka COMPARISON OF TEXT-SIMILARITY METRICS FOR THE PURPOSE OF IDENTIFYING IDENTICAL WEB PAGES DURING AUTOMATED WEB APPLICATION TESTING
18:00 – 18:20	K.Łapa, K.Cpałka ASPECTS OF STRUCTURE AND PARAMETERS SELECTION OF CONTROL SYSTEMS USING HYBRID GENETIC-FIREWORK ALGORITHM	A.Górski, S.Tomczak, Z.Wilimowska THE SELECTION OF VARIABLES IN THE MODELS FOR FINANCIAL CONDITION OF THE FIRM	J.Chmielewski, M.Lasak KEY REQUIREMENTS AND NEW ARCHITECTURE FOR CONTEXT-AWARE WEB-BASED DEVICE-INDEPENDENT MULTI-DEVICE APPLICATIONS
18:20 – 18:40	Ł.Bartczuk GENE EXPRESSION PROGRAMMING IN CORRECTION MODELLING OF NONLINEAR DYNAMIC OBJECTS	M.Florczak-Strama, A.Parkitna PROJECT APPRAISAL IN THE TRANSPORT SECTOR	W.Słodziak, Z.Nowak PERFORMANCE ANALYSIS OF WEB SYSTEMS BASED ON XMLHTTPREQUEST, SERVER-SENT EVENTS AND WEBSOCKET
18:40 – 19:00	K.Warwas, K.Augustynek AN APPLICATION OF NEURAL NETWORKS TO CONTROL STABILITY OF ARTICULATED VEHICLE IN REAL TIME	B.Gawel, B.Rębiasz, I.Skalna DATA MINING METHODS FOR LONG-TERM FORECASTING OF MARKET DEMAND FOR INDUSTRIAL GOODS	L.Borzemski, A.Kamińska-Chuchmała DISTRIBUTED WEB SERVER'S DATA PERFORMANCE PROCESSING WITH APPLICATION OF SPATIAL ECONOMETRICS MODELS
19:00 – 20:00	<b>Dinner</b>		

### MONDAY – 21 SEPTEMBER 2015

7:00 – 8:30	<b>Breakfast</b>			
8:00 – 11:00	<b>Registration</b>			
8:00 – 10:40	<b>PART II</b>	<b>Chairs: M. Drozdowa, K. Cpałka, P. Świątek, P. Nielsen</b>		
	<b>Room A</b>	<b>Room B</b>	<b>Room C</b>	<b>Room D</b>
	<b>Session M1</b> <i>Systems Analysis and Modeling II</i>	<b>Session M2</b> <i>Artificial Intelligence Methods I</i>	<b>Session M3</b> <i>Computer Networks &amp; Distributed Computing</i>	<b>Special Session</b> <i>Advances in methods for managing complex planning environments</i>
8:00 – 8:20	M.Waris, C.Sanin, E.Szczerbicki SMART INNOVATION MANAGEMENT IN PRODUCT LIFE CYCLE	R.Łukomski USING GENETIC ALGORITHM FOR OPTIMAL DISPATCHING OF REACTIVE POWER IN POWER SYSTEMS	P.Kwaśnicka, P.Stelmach, K.Juszczyszyn, G.Kołaczek DICTIONARY AS A SERVICE – A SOFTWARE TOOL FOR VOCABULARY DEVELOPMENT AND MAINTENANCE	
8:20 – 8:40	M.Smoliński CONFLICTLESS TASK SCHEDULING CONCEPT	A.Mieszkowicz-Rolka, L.Rolka A NOVEL APPROACH TO FUZZY ROUGH SET-BASED ANALYSIS OF INFORMATION SYSTEMS	B.Swięcicki A NOVEL APPROACH TO AUTOMATING OPERATING SYSTEM CONFIGURATION MANAGEMENT	
8:40 – 9:00	G.Filcek, D.Gąsior, M.Hojda, J.Józefczyk JOINT TRAIN RESCHEDULING AND TRACK CLOSURES PLANNING: MODEL AND SOLUTION	R.Simiński, A.Nowak-Brzezińska GOAL-DRIVEN INFERENCE FOR WEB KNOWLEDGE BASED SYSTEM	S.Kaczmarek, M.Sac VERIFICATION OF THE ANALYTICAL TRAFFIC MODEL OF A MULTIDOMAIN IMS/NGN USING THE SIMULATION MODEL	
9:00 – 9:20	A.Kozik, R.Koziarski COMPUTER AIDED SCHEDULING AND ROUTING OF VEHICLE-CARRIER FLEET - A CASE STUDY	L.Chomątek GENETIC DIVERSITY IN THE MULTIOBJECTIVE OPTIMISATION OF PATHS IN GRAPHS	D.Gąsior GAME-THEORETICAL APPROACH TO CAPACITY ALLOCATION IN SELF-MANAGED VIRTUAL	
9:20 – 9:40	J.Grobelyny, R.Michalski A CONCEPT OF A FLEXIBLE APPROACH TO THE FACILITIES LAYOUT PROBLEMS IN LOGISTICS SYSTEMS	M.Zalasiński NEW ALGORITHM FOR ON-LINE SIGNATURE VERIFICATION USING CHARACTERISTIC GLOBAL FEATURES	M.Głąbowski, M.Stasiak A STUDY ON THE EFFECTIVENESS OF THRESHOLD AND TRAFFIC OVERFLOW MECHANISMS IN MULTI-SERVICE SWITCHING NETWORKS WITH REAL-TIME AND NON-REAL-TIME TRAFFIC	
9:40 – 10:00	M.Drozdowa, M.Kardos, Z.Kurillova, B.Bucko TRANSFORMATION IN MODEL DRIVEN ARCHITECTURE	K.Cpałka, M.Zalasiński NEW ALGORITHM FOR ON-LINE SIGNATURE VERIFICATION USING CHARACTERISTIC HYBRID PARTITIONS	M.Grajzer, M.Głąbowski NEIGHBOR DISCOVERY++ - A LOW-OVERHEAD ADDRESS AUTO-CONFIGURATION TO ENABLE ROBUST INTERNET OF THINGS ARCHITECTURES	
				R.Wójcik, G.Bocewicz, Z.Banaszak TOWARDS CYCLIC SCHEDULING OF GRID-LIKE STRUCTURE NETWORKS
				Y.Khosiawan, I.Nielsen, N.Anh Dung Do, B.Yahya CONCEPT OF INDOOR 3D-ROUTE UAV SCHEDULING SYSTEM
				I.Nielsen, N.Anh Dung Do, P.Nielsen, Y.Khosiawan MATERIAL SUPPLY SCHEDULING FOR A MOBILE ROBOT WITH SUPPLY QUANTITY CONSIDERATION – A GA-BASED APPROACH

	Session M1 (cont.)	Session M2 (cont.)	Session M3 (cont.)	Special Session (cont.)
10:00 – 10:20	J.Grobelny, R.Michalski EXPERIMENTAL EXAMINATION OF FACILITIES LAYOUT PROBLEMS IN LOGISTICS SYSTEMS INCLUDING OBJECTS WITH DIVERSE SIZES AND SHAPES	K.Łapa, K.Cpałka NONLINEAR PATTERN CLASSIFICATION USING FUZZY SYSTEM AND HYBRID GENETIC-IMPERIALIST ALGORITHM	M.Sarnovsky, N.Carnoka DISTRIBUTED ALGORITHM FOR TEXT DOCUMENTS CLUSTERING BASED ON K-MEANS APPROACH	J.Wikarek AN INTEGRATED DECLARATIVE APPROACH TO DECISION SUPPORT FOR SCHEDULING GROUPS OF JOBS
10:20 – 10:40	T.Dimitrova-Grekow, M.Jarczewski EXTENDED RECOGNITION EFFECTIVENESS OF A SONAR SYSTEM	Y.Karnavas, I.Chasiotis A SIMPLE KNOWLEDGE BASE SOFTWARE ARCHITECTURE FOR INDUSTRIAL ELECTRICAL MACHINE DESIGN: APPLICATION TO ELECTRIC VEHICLE'S IN-WHEEL MOTOR	Z.Murzabekov, M.Milosz, K.Tussupova MODELING AND OPTIMIZATION OF THE PRODUCTION CLUSTER	P.Nielsen, Z.Michna, N.Do Anh Dung, B.Sorensen LEAD TIMES AND ORDER SIZES – A NOT SO SIMPLE RELATIONSHIP
10:40 – 11:00	<b>Coffee Break (Room A)</b>			
11:00 – 12:00	<b>Keynote Speech: <i>SOME INSIGHTS FROM BIG DATA RESEARCH PROJECTS</i> by Prof. Peter Nielsen Room A</b>			
12:00 – 13:00	<b>Lunch</b>			
13:30 – 19:00	<b>Outdoor Event</b>			
20:00 – ...	<b>Conference Party (Room A)</b>			

**TUESDAY – 22 SEPTEMBER 2015**

7:00 – 8:30	<b>Breakfast</b>			
8:00 – 9:00	<b>Registration</b>			
8:00 – 9:40	<b>Chairs: K. Zatzarnicki, Y. Kambayashi, J. Werewka</b>			

	Room A Session T1 <i>High Performance and Cloud Computing</i>	Room B Session T2 <i>Artificial Intelligence Methods II</i>	Room C Session T3 <i>Knowledge Discovery and Data Mining</i>	
8:00 – 8:20	P.Czarnul PARALLELIZATION OF DIVIDE-AND-CONQUER APPLICATIONS ON INTEL XEON PHI WITH AN OPENMP BASED FRAMEWORK	S.Stemplewski, M.Polewski COMPUTER-AIDED DIAGNOSIS SYSTEM WITH BACKPROPAGATION ARTIFICIAL NEURAL NETWORK – IMPROVING HUMAN READERS PERFORMANCE	M.Chmielewski, P.Stapor MEDICAL DATA UNIFICATION USING ONTOLOGY-BASED SEMANTIC MODEL STRUCTURAL ANALYSIS	
8:20 – 8:40	A.Katkow ACCELERATED ADDITIVE ALGORITHM WITH LOSSY DATA COMPRESSION	H.Nguyen A NEW KNOWLEDGE MEASURE OF INFORMATION CARRIED BY INTUITIONISTIC FUZZY SETS AND APPLICATION IN DATA CLASSIFICATION PROBLEM	B.Yahya, Y.Khosiawan, W.Choi, N.Anh Dung Do RT-PLG: REAL TIME PROCESS LOG GENERATOR	
8:40 – 9:00	S.Tengler, D.Sehnal METHOD OF SOLVING THE VOLUME BETWEEN TRIANGULATED MESH SURFACES	K.Grudziński THE PM-M PROTOTYPE SELECTION SYSTEM	K.Tworek, K.Walecka-Jankowska, J.Martan INFORMATION TECHNOLOGY AS AN INDIRECT FACTOR SUPPORTING KNOWLEDGE MANAGEMENT IN ORGANIZATION - MEDIATING ROLE OF ORGANIZATIONAL STRUCTURE	
9:00 – 9:20	M.Rusek, G.Dwornicki, A.Orłowski SWARM OF MOBILE VIRTUALIZATION CONTAINERS	G.Bartisiutue, K.Ratkevicius, G.Paskauskaite HYBRID RECOGNITION TECHNOLOGY FOR ISOLATED VOICE COMMANDS	J.Kałkowska, A.Kozlov DECISION MAKING PROCESS FOR THE KNOWLEDGE-BASED ENTERPRISE: FUZZY SETS THEORY APPLICATION TO THE STRATEGIC MANAGEMENT	
9:20 – 9:40	P.Dorożyński, A.Brzeski, J.Cychnerski, T.Dziubich TOWARDS HEALTHCARE CLOUD COMPUTING	D.Pérez, M.Aleman, M.Molasy THE METHODOLOGY OF MODELLING THE DECISION-MAKING PROCESS FOR PLANNING THE LOGISTICS SUPPLY CHAIN	B.Maccarthy, R.Pasley DECISIONS AS UNITS OF ORGANIZATIONAL KNOWLEDGE TO MANAGE COMPLEXITY	
9:40 – 10:00	<b>Coffee Break (Room A)</b>			
10:00 – 11:40	<b>Chairs: T. Dimitrova-Grekow, R. Pasley, I. Józwiak</b>			

	Room A Session T4 <i>Multi-Agent &amp; IoT Systems</i>	Room B Session T5 <i>Knowledge Based Management</i>	Room C Session T6 <i>Mobile &amp; SOA Systems</i>	
10:00 – 10:20	Y.Kambayashi, T.Nishiyama, T.Matsuzawa, M.Takimoto AN IMPLEMENTATION OF AN AD HOC MOBILE MULTI-AGENT SYSTEM FOR A SAFETY INFORMATION	M.Turek, J.Werewka MULTI-PROJECT SCRUM METHODOLOGY FOR PROJECTS USING SOFTWARE PRODUCT LINES	M.Fraś, K.Waśko A METHOD OF WI-FI BASED GEOGRAPHICAL LOCALIZATION OF MOBILE DEVICE IN BUILDINGS	
10:20 – 10:40	W.Lorkiewicz, R.Katarzyniak CROSS-POPULATION SEMIOSIS IN MULTI-AGENT SYSTEMS	G.Kołaczek, P.Świątek, J.Świątek, K.Brzostowski, A.Grzech, A.Sławek TEST SCENARIOS AND VALIDATION RESULTS OF THE PROCESSES OPTIMIZATION	M.Szczepanik, I.Józwiak SECURITY LOCK SYSTEM FOR MOBILE DEVICES BASED ON FINGERPRINT RECOGNITION ALGORITHM	
10:40 – 11:00	G.Debita, P.Schauer, M.Jużwiak, J.Szumega, A.Palka, E.Barczyński ANALYSIS AND CHARACTERICTIC OF AUTOMATIC RECONFIGURATION MECHANISMS IN IOT DEVICES NETWORK	J.Werewka, M.Turek COMPUTER SCIENCE PHD PROGRAM EVALUATION BASED ON DOMAIN AND NON-DOMAIN CHARACTERISTICS	G.Kołaczek, P.Świątek, K.Juszczyszyn, A.Grzech, A.Sławek THE METHODOLOGY FOR SOFTWARE DEVELOPMENT TO SUPPORT DECISION MAKING PROCESSES	
11:00 – 11:20	J.Bieniasz, K.Skowron, M.Trzepiński, M.Rawski, P.Sapiecha, P.Tomaszewicz HARDWARE IMPLEMENTATION OF RAINBOW TABLES GENERATION FOR HASH FUNCTION CRYPTANALYSIS	K.Brzostowski MODELING BUSINESS RULES FOR TRANSPORTATION SYSTEMS	Ł.Falas, K.Juszczyszyn DYNAMIC RESOURCE MANAGEMENT MIDDLEWARE FOR MODERN SERVICE ORIENTED SYSTEMS	
11:20 – 11:40	L.Helali, Z.Brahmi SELF-ORGANIZING AGENTS FOR DYNAMIC NETWORK- AND QOS-AWARE SERVICE COMPOSITION IN CLOUD COMPUTING	M.Kurzawski, K.Ossowska, C.Orłowski THE METHOD OF IT WORK EFFORT ESTIMATING BASED ON THE FUNCTION POINT ANALYSIS		
11:40 – 12:15	<b>Break</b>			
12:15 – 12:45	<b>Closing Session Room A</b>			
13:00 – 14:00	<b>Lunch</b>			