CSP 2015 Program

Monday, Sept. 28, 2015

8:30-9:10	**Registration**	
9:10-9:30	**CSP 2015 Opening** Aula	
9:30-10:30	**Plenary talk 1 (Chair: *Lech Polkowski*)** Aula ***Professor Andrzej Skowron*** ***Rough Sets in Interactive Granular Computing***	
10:30-10:50	**Coffee break**	
10:50-12:30	**Rough and Granular Comp. I** 126 **Chair: *Andrzej Skowron***	**Data Mining and Appl. I** 127 **Chair: *Mikhail Moshkov***
	Betweenness, Łukasiewicz rough inclusions, Euclidean representations in information systems, hyper-granules, conflict resolution, *Lech Polkowski*	An Approach to Ambiguity Resolution for Ontology Population, *Natalia Garanina and Elena Sidorova*
	Core for Large Datasets: Rough Sets on FPGA, *Maciej Kopczyński, Tomasz Grześ, and Jarosław Stepaniuk*	Dynamic Programming Approach for Construction of Association Rule Systems, *Fawaz Alsolami, Talha Amin, Igor Chikalov, Mikhail Moshkov, and Beata Zielosko*
	Exploration of knowledge bases inspired by Rough Set Theory, *Agnieszka Nowak - Brzezińska and Alicja Wakulicz-Deja*	Comparison of Heuristics for Optimization of Association Rules, *Fawaz Alsolami, Talha Amin, Mikhail Moshkov, and Beata Zielosko*
	Lattice theory for rough sets - an experiment in Mizar, *Adam Grabowski*	The method for describing changes in the perception of stenosis in blood vessels caused by an additional drug,

		Sylwia Buregwa-Czuma, Jan G. Bazan, Lech Zaręba, Stanisława Bazan-Socha, Przemysław W. Pardel, Barbara Sokołowska, and Lukasz Dydo
	Information systems and soft sets, *Marek Pałasiński and Zofia Machnicka*	Application of genetic algorithms and high-performance computing to the Traffic Signal Setting problem, *Paweł Góra and Przemysław Pardel*
12:30-14:00	**Lunch**	
14:00-15:40	**Logic and Probability in Theory of Computing I** 126 **Chair: *Bożena Woźna-Szcześniak***	**Data Mining and Appl. II** 127 **Chair: *Gabriela Lindeman-von Trzebiatowski***
	Gained and excluded classified actions by dynamic security policies, *Damas Gruska*	Knowledge Pit - A Data Challenge Platform, *Andrzej Janusz, Dominik Ślęzak, Sebastian Stawicki, and Mariusz Rosiak*
	Monitoring with Data Parametrized Extended Life Sequence Charts, *Ming Chai and Holger Schlingloff*	Toward Synchronization of EEG and Eye-tracking Data Using an Expert System, *Bolesław Jaskuła, Krzysztof Pancerz and Jarosław Szkoła*
	Specifying Functional Programs with Intuitionistic First Order Logic, *Marcin Benke*	Data Integration through Clustering and Finding Statistical Relations - Validation of Approach, *Marek Jaszuk, Teresa Mroczek and Barbara Fryc*
	Designing reliable communication for heterogeneous computer systems, *Mirosław Hajder, Janusz Kolbusz, and Roman Korostenskyi*	Instance-Level Constraints in Density-Based Clustering, *Piotr Lasek*
	ExpTime Tableaux with Global	Estimation and feature selection

	Caching for Graded Propositional Dynamic Logic, *Linh Anh Nguyen*	by application of knowledge mined from decision rules models, *Wiesław Paja and Krzysztof Pancerz*
19:00-22:00	**Gala dinner**	

Tuesday, Sept. 29, 2015

9:00-10:00	**Plenary talk 2 (Chair: *Ludwik Czaja*)** **Aula** ***Professor Louchka Popova – Zeugmann*** ***Time and Concurrency - Three Approaches for Intertwining Time and Petri Nets***	
10:00-11:00	**Concurrency I** **126** **Chair: *Louchka Popova-Zeugmann***	**Rough and Granular Comp. II** **127** **Chair: *Jan Bazan***
	Remarks on Memory Consistency Description, *Ludwik Czaja*	Evaluation of Decision Table Decomposition Using Dynamic Programming Classifiers, *Michał Mańkowski, Tadeusz Łuba, and Cezary Jankowski*
	Considering Concurrency in Early Spacecraft Design Studies, *Jafar Akhundov, Peter Tröger, and Matthias Werner*	Rough sets inspired forward inference algorithm, *Roman Simiński and Alicja Wakulicz-Deja*
	Complexity Studies for Safe and Fan-Bounded Elementary Hornets, *Michael Köhler-Bußmeier and Frank Heitmann*	Reduct calculation and discretization of numeric attributes in sparse decision systems, *Wojciech Świeboda and Hung Son Nguyen*
11:00-11:20	**Coffee break**	
11:20-12:20	**Logic and Probability in Theory of Computing II** **126** **Chair: *Holger Schlingloff***	**Fuzzy Computing I** **127** **Chair: *Piotr Wasilewski***

	An efficient equivalence-checking algorithm for a model of programs with commutative and absorptive statements, *Vladislav Podymov*	Dialogue in Hierarchical Learning of a Concept using Prototypes and Counterexamples, *Soma Dutta and Piotr Wasilewski*
	The Minimization Method of Boolean Functions in Polynomial Set-theoretical Format, *Bohdan Rytsar*	Fuzzy Systems of Logical Inference and Their Applications, *Oleksandr Provotar*
	SMT-based searching for k-quasi-optimal runs in weighted timed automata, *Bożena Woźna-Szcześniak, Agnieszka Zbrzeźny, and Andrzej Zbrzeźny*	Optimization of Backward Fuzzy Reasoning Based on Rule Knowledge, *Zbigniew Suraj, Piotr Grochowalski, and Sibasis Bandyopadhyay*
12:20-14:00	**Lunch**	
14:00	**Guided tour**	

Wednesday, Sept. 30, 2015

9:00-10:00	**Plenary talk 3 (Chair: *Jarosław Stepaniuk*)** **Aula** ***Professor Mikhail Moshkov*** ***Dynamic Programming Approach for Study of Decision Trees***	
10:00-11:00	**Unconventional Computing Models I** **126** **Chair: *Damas Gruska***	**Data Mining and Appl. III** **127** **Chair: *Natalia Garanina***
	Petri Net Models of Simple Rule-Based Systems for Programming Physarum Machines, *Andrew Schumann and Krzysztof Pancerz*	The handling of missing values in medical domains with respect to pattern mining algorithms, *Danilo Schmidt, Matthias Niemann, and Gabriela Lindemann – von Trzebiatowski*
	Specialized Predictor for Reaction Systems with Context	Global Optimization of Exact Association Rules Relative to

	Properties, *Roberto Barbuti, Roberta Gori, Francesca Levi, and Paolo Milazzo*	Length, *Beata Zielosko*
	Outliers Elimination for Error Correction Algorithm Improvement, *Janusz Kolbusz and Paweł Różycki*	An approach for resolving conflicts in automatic medical objects classification, *Przemysław W. Pardel, Jan G. Bazan, Jacek Zarychta, and Stanisława Bazan-Socha*
11:00-11:20	**Coffee break**	
11:20-12:20	**Concurrency II** 126 **Chair: *Matthias Werner***	**Data Mining and Appl. IV** 127 **Chair: *Beata Zielosko***
	Controlling Petri Net Behavior Using Time Constraints, *Irina Lomazova and Louchka Popova-Zeugmann*	Selected methods of combining classifiers, when predictions are stored in probability vectors, in a dispersed decision-making system, *Małgorzata Przybyła-Kasperek*
	On Decidability of Persistence Notions, *Kamila Barylska and Łukasz Mikulski*	Detecting hazardous events from sequential data with multilayer architectures, *Karol Kurach and Krzysztof Pawłowski*
	Space-Time Viewpoints for Concurrent Processes Represented by Relational Structures, *Irina Virbitskaite, Elena Bozhenkova, and Evgeny Erofeev*	Exploiters-Based Knowledge Extraction in Object-Oriented Knowledge Representation, *Dmytro Terletskyi*
12:20-14:00	**Lunch**	
14:00-15:00	**Unconventional Computing Models II** 126 **Chair: *Roberta Gori***	**Fuzzy Computing II** 127 **Chair: *Oleksandr Provotar***
	Sequential P Systems with Active Membranes Working on Sets, *Michal Kovac and Damas Gruska*	From free will debate to embodiment of fuzzy logic into washing machines: On fuzzy and

		rough sets approaches to vagueness modeling, *Piotr Wasilewski*
	Hybrid Planning by Combining SMT and Simulated Annealing, *Jarosław Skaruz, Artur Niewiadomski, and Wojciech Penczek*	Inverted Fuzzy Implications in Backward Reasoning Without Yager Implication, *Zbigniew Suraj and Agnieszka Lasek*
	Enhanced Error Correction Algorithm for RBF Neural Networks, *Paweł Różycki and Janusz Kolbusz*	
15:15	**Closing**	**Aula**