RSFDGRC-2011 + PReMI-2011 + Workshops + Invited Sessions

June 25 (morning)

9.00-10.20 CDUD Workshop 1 (Chair: Jonas Poelmans) (Γ-209)

- Automatic Entity Detection Based on News Cluster Structure (Aleksey Alekseev and Natalia Loukachevitch)
- Application of Conceptual Structures in Requirements Modeling (Michael Bogatyrev and Vadim Nuriahmetov)
- Abstracting concepts from text documents by using an ontology (Ekaterina Cherniak, Olga Chugunova, Julia Askarova, Susana Nascimento and Boris Mirkin)
- Extraction and Use of Opinion Words for Three-Way Review Classification Task (Ilia Chetviorkin and Natalia Loukachevitch)

9.00-10.20 SCAKD Workshop 1 (Chair: Sushmita Mitra) (Γ-405)

- A New Method of DDB Logical Structure Synthesis Using Distributed Tabu Search (Eduard Babkin and Margarita Karpunina)
- Service Centers Finding by Fuzzy Antibases of Fuzzy Graph (Leonid Bershtein, Alexander Bozhenyuk and Igor Rosenberg)
- Forecasting the U.S. stock market via Levenberg-Marquardt and Herman Haken artificial neural networks using ICA&PCA pre-processing techniques (Sergey Golovachev)
- Estimating Probability of Failure of a Complex System Based on Partial Information about Subsystems and Components, with Potential Applications to Aircraft Maintenance (Christelle Jacob, Didier Dubois, Janette Cardoso, Martine Ceberio and Vladik Kreinovich)

9.00-10.20 RSFDGrC Tutorial 1 (Chair: Chris Cornelis) (Γ-313)

- Fuzzy-rough data mining, part A (Richard Jensen)

10.20-10.40 Coffee Break (Γ-317)

10.40-12.00 CDUD Workshop 2 (Chair: Jonas Poelmans) (Γ-209)

- Constructing Galois Lattice in Good Classification Tests Mining (Xenia Naidenova)
- The Third Personal Pronoun Anaphora Resolution in Texts from Narrow Subject Domains with Grammatical Errors and Mistypings (Daniel Skatov and Sergey Liverko)
- Concept Lattice Implementation in Semantic Structuring of Adjectives (Serge Potemkin)
- Exploring Semantic Orientation of Adverbs (Serge Potemkin and Galina Kedrova)

10.40-12.00 SCAKD Workshop 2 (Chair: Sushmita Mitra) (Γ-405)

- Stepwise Feature Selection Using Multiple Kernel Learning (Vilen Jumutc)
- Empirical reconstruction of fuzzy model of experiment in the Euclidean metric (Tatiana Kopit)
- SVM Based Offline Handwritten Gurmukhi Character Recognition (Munish Kumar, M. K. Jindal and R. K. Sharma)
- Obtaining of a Minimal Polygonal Representation of a Curve by Means of a Fuzzy Clustering (Alexander Lepskiy)

10.40-12.00 RSFDGrC Tutorial 1 (Chair: Chris Cornelis) (Γ-313)

- Fuzzy-rough data mining, part B (Richard Jensen)

12.00-13.00 Lunch

June 25 (afternoon)

13.00-15.00 CDUD Workshop 3 + RSFDGrC Short Papers (Chair: Jonas Poelmans) (Γ-209)
- Concept Relation Discovery and Innovation Enabling Technology (CORDIET) (Jonas Poelmans, Paul Elzinga, Alexey Neznanov, Stijn Viaene, Sergei Kuznetsov, Dmitry Ignatov and Guido Dedene)
- Temporal Concept Analysis Explained by Examples (Karl Erich Wolff)
- Recommender System Based on Algorithm of Bicluster Analysis RecBi (Dmitry Ignatov, Jonas Poelmans and Vasily Zaharchuk)
- Developing Additive Spectral Approach to Fuzzy Clustering (Boris Mirkin and Susana Nascimento)
- Some Analyses of Pawlak Collaboration Graph (Zbigniew Suraj, Piotr Grochowalski and Łukasz Lew)
- Online Learning Algorithm for Ensemble of Decision Rules (Igor Chikalov, Mikhail Moshkov and Beata Zielosko)

13.00-15.00 SCAKD Workshop 3 (Chair: Sushmita Mitra) (Γ-405)
- KDDClus: A Simple Method for Multi-Density Clustering (Sushmita Mitra and Jay Nandy)
- Intelligent Data Mining for Turbo-Generator Predictive Maintenance: An Approach in Real-World (Alexandre Pellicel, Goncalo Cassio, Marco Aurelio Lopes, Luiz Eduardo Borges Da Silva, Erik Bonaldi, Levy Ely Lacerda De Oliveira, Jonas Borges Da Silva, Germano Lambert-Torres and Pierre Rodrigues)
- Fuzzy Predicting Models in "Structure - Property" Problem (Eugeny Prokhorov, Ludmila Ponomareva, Eugeny Permyakov and Mikhail Kumskov)
- Handwritten Script Identification from a Bi-Script Document at Line Level using Gabor Filters (Ganapatsingh Rajput and Anita H. B.)
- Image Recognition Using Kullback-Leibler Information Discrimination / Image Recognition with a Large Database Using Method of Directed Enumeration Alternatives Modification (Andrey Savchenko)
- Beyond Analytical Modeling, Gathering Data to Predict Real Agents' Strategic Interaction (Rustam Tagiew)
- Construction of Enzyme Network of Arabidopsis thaliana using graph theory (Kasthuribai Viswanathan and Nita Parekh)

13.00-15.00 RSFDGrC Tutorial 2 (Chair: Chris Cornelis) (Γ-313)
- The use of Rough Set methods in KDD (Marcin Szczuka)

15.00-15.20 Coffee Break (Γ-317)

15.20-16.40 RSFDGrC Opening and Keynote Talk (Chair: Boris Mirkin) (Γ-313)
- Construction and Analysis of Web-Based Computer Science Information Networks (Jiawei Han)

16.40-17.00 Technical break

17.00-20.00 Reception and RSFDGrC Short Papers (Γ-408)
- Disjunctive Set-valued Ordered Information Systems Based on Variable Precision Dominance Relation (Qingshan Yang, Guoyin Wang and Qinghua Zhang)
- An interval-valued fuzzy soft set approach for normal parameter reduction (Xiuqin Ma and Norrozila Sulaiman)
- Fuzzy Optimal Solution of Fuzzy Transportation Problems with Transshipments (Amit Kumar, Amarpreet Kaur and Manjot Kaur)
- Fuzzy Optimal Solution of Fully Fuzzy Project Crashing Problems with New Representation of LR Flat Fuzzy Numbers (Amit Kumar, Parmpreet Kaur and Jagdeep Kaur)
- Covering Rough Set Model Based on Multi-granulations (Caihui Liu and Duoqian Miao)
- Fuzzy linear programming - Foreign Exchange Market (Biljana Petreska, Tatjana Kolemisevska-Gugulovska and Georgi Dimirovski)
- A Descriptive Language Based on Granular Computing - Granular Logic (Qing Liu and Lan Liu)

June 26 (morning)

9.00-9.40 RSFDGrC Invited Talk 1 (Chair: Sergei O. Kuznetsov) (Γ-313)

- Towards Faster Estimation of Statistics and ODEs Under Interval, P-Box, and Fuzzy Uncertainty: From Interval Computations to Rough Set-Related Computations (Vladik Kreinovich)

9.40-10.00 Coffee Break (Γ-317)

10.00-10.40 RSFDGrC Invited Talk 2 (Chair: Dominik Ślęzak) (Γ-313)

- Rough Set Based Uncertain Knowledge Expressing and Processing (Guoyin Wang)

10.40-11.00 Coffee Break (Γ-313)

11.00-12.20 RSFDGrC Session 1: Rough Sets and Approximations (Chair: Mikhail Moshkov) (Γ-401)

- Dual Rough Approximations in Information Tables with Missing Values (Michinori Nakata and Hiroshi Sakai)
- General Tool-Based Approximation Framework Based on Partial Approximation of Sets (Zoltán Csajbók and Tamás Mihálydeák)
- An Improved Variable Precision Model of Dominance-Based Rough Set Approach (Weibin Deng, Guoyin Wang and Feng Hu)
- Rough numbers and rough regression (Marcin Michalak)

11.00-12.20 Search and Analytics: Methodologies and Technologies 1 (Chair: Dominik Ślęzak) (Γ-313)

- Introduction to Industry and Expert Sessions (Sergei O. Kuznetsov)

11.00-12.20 PReMI Tutorial 1 (Chair: Chris Cornelis) (Γ-405)

- Statistical analysis of experiments in data mining and computational intelligence, part A (Salvador Garcia)

12.20-13.20 Lunch

June 26 (afternoon)

13.20-14.40 RSFDGrC Session 2: Compound Values (Chair: Alexey N. Averkin) (Γ-401)
- A Prototype System for Rule Generation in Lipski's Incomplete Information Databases (Hiroshi Sakai, Michinori Nakata and Dominik Ślęzak)
- How to Reconstruct the System's Dynamics by Differentiating Interval-Valued and Set-Valued Functions (Karen Villaverde and Olga Kosheleva)
- Symbolic Galois Lattices with Pattern Structures (Prakhar Agarwal, Mehdi Kaytoue, Sergei O. Kuznetsov, Amedeo Napoli and Géraldine Polaillon)
- On Designing of Flexible Neuro-Fuzzy Systems for Nonlinear Modelling (Krzysztof Cpałka, Olga Rebrova, Robert Nowicki and Leszek Rutkowski)

13.20-14.40 Search and Analytics: Methodologies and Technologies 2 (Chair: Dominik Ślęzak) (Γ-313)

- Semantic Search over Large Repository of Scientific Articles: An Overview of SONCA (Marcin Szczuka)

13.20-14.40 PReMI Tutorial 1 (Chair: Chris Cornelis) (Γ-405)
- Statistical analysis of experiments in data mining and computational intelligence, part B (Salvador Garcia)

14.40-15.00 Coffee Break (Γ-317)

15.00-16.20 RSFDGrC Session 3: Rules and Trees (Chair: Hiroshi Sakai) (Γ-401)
- Data-driven Adaptive Selection of Rules Quality Measures for Improving the Rules Induction Algorithm (Marek Sikora and Łukasz Wróbel) (presented by Marcin Michalak)
- Relationships between Depth and Number of Misclassifications for Decision Trees (Igor Chikalov, Shahid Hussain and Mikhail Moshkov)
- Dynamic Successive Feed-forward Neural Network for Learning Fuzzy Decision Tree (Manu Pratap Singh and Mukul Jain)
- An Improvement for Fast-Flux Service Networks Detection Based on Data Mining Techniques (Ziniu Chen, Jian Wang, Yujian Zhou and Chunping Li)

15.00-16.20 Search and Analytics: Methodologies and Technologies 3 (Chair: Marcin Szczuka) (Γ-313)
- Formal Concept Analysis for Knowledge Discovery in Structured and Unstructured Data (Sergei O. Kuznetsov)
- New Features of Infobright's RDBMS: Rough SQL and Seamless Handling of Unstructured Attributes in Machine-generated Data Sets (Dominik Ślęzak, Infobright)

15.00-16.20 PReMI Tutorial 2 (Chair: Chris Cornelis) (Γ-405)
- Time series analysis, part A (Roberto Baragona)

16.20-16.40 Coffee Break (Γ-317)

16.40-18.00 IRSS Meeting (Chair: Dominik Ślęzak) (Γ-401)

16.40-18.00 Machine Intelligence and Soft Computing: Expert Foresight 1 (Chair: Sergei O. Kuznetsov) (Γ-313)

- Reliability Analysis for Aerospace Applications: Reducing Over-Conservative Expert Estimates in the Presence of Limited Data (Vladik Kreinovich)
- Data Analysis Projects for Business: Challenges, Approaches and Cases (Daniel Kanevskiy, Forecsys)

16.40-18.00 PReMI Tutorial 2 (Chair: Chris Cornelis) (Γ-405)
- Time series analysis, part B (Roberto Baragona)

June 27 (morning)

9.00-9.40 RSFDGrC Invited Talk 3 (Chair: Sergei O. Kuznetsov) (Γ-313)
- What is a fuzzy concept lattice? (Radim Belohlavek)

9.40-10.00 Coffee Break (Γ-317)

10.00-10.40 RSFDGrC Best Paper Awards & RSFDGrC Invited Talk 4 (Chair: Dominik Ślęzak) (Γ-313)
- Rough set based ensemble classifier (C. A. Murthy)

10.40-11.00 Coffee Break (Γ-317)

11.00-12.40 RSFDGrC Session 4: Clusters and Concepts + Coverings and Granules (Chair: Amedeo Napoli) (Γ-401)
- Multiargument Relationships in Fuzzy Databases with Attributes Represented by Inter-valued Possibility Distributions (Krzysztof Myszkorowski)
- From Triconcepts to Triclusters (Dmitry I. Ignatov, Ruslan A. Magizov, Sergei O. Kuznetsov and Leonid E. Zhukov)
- Learning Inverted Dirichlet Mixtures for Positive Data Clustering (Taoufik Bdiri and Nizar Bouguila)
- Covering numbers in covering-based rough sets (Shiping Wang, William Zhu and Fan Min)
- On Coverings of Rough Transformation Semigroups (S. P. Tiwari and Shambhu Sharan)

11.00-12.40 RSFDGrC Session 5: Fuzzy Set Models (Chair: Karl Erich Wolff) (Γ-405)
- Optimization and Adaptation of Dynamic Models of Fuzzy Relational Cognitive Maps (Grzegorz Słoń and Alexander Yastrebov)
- Estimation of parameters of the empirically reconstructed fuzzy model of measurements (Tatiana Kopit and Alexey Chulichkov)
- Fuzzy Rough Set Analysis of Preference-ordered Possibilistic Information Systems (Tuan-Fang Fan, Churn-Jung Liau and Duen-Ren Liu)
- Creating Fuzzy Concepts: the One-Sided Threshold, Fuzzy Closure and Factor Analysis Methods (Valerie Cross and Meenashki Kandasamy)
- Conceptual Representation of Fuzzy Structures (Karl Erich Wolff)

11.00-12.40 PReMI Tutorial 3 (Chair: Chris Cornelis) (Γ-313)
- Problems of ontology development for a broad domain (Natalia Loukachevitch)

12.40-13.40 Lunch

June 27 (afternoon)

13.40-14.40 RSFDGrC Session 6: Feature Selection and Reduction (Chair: Michinori Nakata) (Г-401)

- Incorporating Game Theory in Feature Selection for Text Categorization (Nouman Azam and JingTao Yao) (presented by Marcin Szczuka)
- Studies on an Effective Algorithm to Reduce the Decision Matrix (Takurou Nishimura, Yuichi Kato and Tetsuro Saeki)
- Accumulated cost based test-cost-sensitive attribute reduction (Huaping He and Fan Min)

13.40-14.40 RSFDGrC Session 7: Interactions and Visualisation (Chair: Zbigniew Suraj) (Г-405)

- Comparators for Compound Object Identification (Łukasz Sosnowski and Dominik Ślęzak)
- Measuring Implicit Attitudes in Human-Computer Interactions (Andrey Kiselev, Niyaz Abdikeev and Toyoaki Nishida)
- Visualization of Semantic Network Fragments Using Multistripe Layout (Alexey Lakhno and Andrey Chepovskiy)

13.40-14.40 PReMI Tutorial 4 (Chair: Chris Cornelis) (Г-313)

- Recent Advances on Generalization Bounds, part A (Konstantin Vorontsov)

14.40-15.00 Coffee Break (Г-317)

15.00-16.00 RSFDGrC Session 8: Image Processing (Chair: Olga Kosheleva) (Г-401)

- Automatic Image Annotation based on Low-Level Features and Classification of the Statistical Classes (Andrey Bronevich and Alexandra Melnichenko)
- Machine Learning Methods in Character Recognition (Lev Itskovich and Sergei O. Kuznetsov)
- A Liouville-Based Approach for Discrete Data Categorization (Nizar Bouguila)

15.00-16.00 RSFDGrC Session 9: Fuzzy Set Applications (Chair: TBA) (Г-405)

- Regularization of Fuzzy Cognitive Maps for Hybrid Decision Support System (Alexey N. Averkin and Sergei A. Kaunov)
- Approximate bicluster and tricluster boxes in the analysis of binary data (Boris Mirkin and Andrey Kramarenko)
- Time series processing and forecasting using Soft Computing tools (Nadezhda Yarushkina, Irina Perfilieva, Tatiana Afanasieva, Andrew Igonin, Anton Romanov and Valeria Shishkina)

15.00-16.00 PReMI Tutorial 4 (Chair: Chris Cornelis) (Г-313)

- Recent Advances on Generalization Bounds, part B (Konstantin Vorontsov)

RSFDGrC/PReMI party (Г-408)

June 28 (morning)

9.00-9.20 PReMI Opening (Γ-313 or Γ-411)

9.20-9.40 Coffee Break (Γ-317)

9.40-10.40 PReMI Keynote Talk (Chair: Sankar K Pal) (Γ-313)

- Enriching Education Through Data Mining (Rakesh Agrawal)

10.40-11.00 Coffee Break (Γ-317)

11.00-12.20 PReMI Session 1: Pattern Recognition and Machine Learning I (Chair: Deba P Mandal) (Γ-411)

- Bayesian Approach to the Pattern Recognition Problem in Nonstationary Environment (Olga V. Krasotkina, Vadim V. Mottl, and Pavel A. Turkov)
- The Classification of Noisy Sequences Generated by Similar HMMs (Alexander A. Popov and Tatyana A. Gultyaeva)
- NDoT: Nearest Neighbor Distance Based Outlier Detection Technique (Neminath Hubballi, Bidyut Kr. Patra, and Sukumar Nandi)
- Some Remarks on the Relation between Annotated Ordered Sets and Pattern Structures (Tim B. Kaiser and Stefan E. Schmidt)

11.00-12.20 Machine Intelligence and Soft Computing: Expert Foresight 2 (Chair: Sergei O. Kuznetsov) (Γ-313)

- Application of the Integrity, Purposefulness and Adaptivity Principle in OCR and Applied Linguistics (Aram Pakhchanian, ABBYY)
- Entity-oriented Search Result Diversification (Andrey Plakhov, Yandex)

12.20-13.20 Lunch

June 28 (afternoon)

13.20-14.00 PReMI Invited Talk 1 (Chair: Arun K Majumder) (Γ-313)

- Thematic clusters represented by higher ranks in taxonomy of the field (Boris Mirkin)

14.00-14.20 Coffee Break (Γ-317)

14.20-16:00 PReMI Session 2: Image Analysis I (Chair: B B Bhattacharyya) (Γ-411)

- Discrete Circular Mapping for Computation of Zernike Moments (Rajarshi Biswas and Sambhunath Biswas)
- Unsupervised Image Segmentation with Adaptive Archive-Based Evolutionary Multiobjective Clustering (Chin Wei Bong and Hong Yoong Lam)
- Modified Self-Organizing Feature Map Neural Network with Semi-supervision for Change Detection in Remotely Sensed Images (Susmita Ghosh and Moumita Roy)
- Image Retargeting through Constrained Growth of Important Rectangular Partitions (Rajarshi Pal, Jayanta Mukhopadhyay, and Pabitra Mitra)
- SATCLUS: An Effective Clustering Technique for Remotely Sensed Images (Sauravjyoti Sarmah and Dhruba K. Bhattacharyya)

14.20-16:00 Machine Intelligence and Soft Computing: Expert Foresight 3 (Chair: Jonas Poelmans) (Γ-313)

- Research Challenges of Dynamic Socio-Semantic Networks (Rostislav Yavorsky, Witology)
- Ontology for Multimedia Information Processing (Santanu Chaudhury)
- Image Processing and Analysis Using Soft Computing Tools (Malay K. Kundu)
- Determining Pattern of Variation in Gene Expression Profiles Using Correlation Clustering Algorithms (Rajat K. De)

16.00-16.20 Coffee Break

16.20-18.00 PReMI Session 3: Watermarking, Steganography and Biometrics (Chair: S Kuznetsov) (Γ-411)

- Optimal Parameter Selection for Image Watermarking Using MOGA (Dinabandhu Bhandari, Lopamudra Kundu, and Sankar K. Pal)
- Hybrid Contourlet-DCT Based Robust Image Watermarking Technique Applied to Medical Data Management (Sudeb Das and Malay Kumar Kundu)
- Accurate Localizations of Reference Points in a Fingerprint Image (Malay Kumar Kundu and Arpan Kumar Maiti)
- Adaptive Pixel Swapping Based Steganography Reducing Embedding Noise (Arijit Sur, Piyush Goel, and Jayanta Mukhopadhyay)
- Classification and Quantification of Occlusion Using Hidden Markov Model (Chitta Ranjan Sahoo, Shamik Sural, Gerhard Rigoll, and A. Sanchez)

16.20-18.00 Machine Intelligence and Soft Computing: Expert Foresight 4 (Chair: Boris Mirkin) (Γ-313)

- New Histogram-like Techniques for Cardinality Estimation in Database Query Optimization (B. John Oommen)
- High-tech Innovative Appliances (Soft Hardware) for Effective Management of Enterprises and Industries (Oleg V. Ena, AviComp)
- Gaining Insight into Clinical Pathway with Process Discovery Techniques (Jonas Poelmans)
- Trust Networks for Recommender Systems (Chris Cornelis)

June 29 (morning)

9.00-9.40 PReMI Invited Talk 2 (Chair: C A Murthy) (Γ-313)

- On Merging the Fields of Neural Networks and Adaptive Data Structures to Yield New Pattern Recognition Methodologies (B. John Oommen)

9.40-10.00 Coffee Break (Γ-317)

10.00-12.00 PReMI Session 4: Pattern Recognition and Machine Learning II (Chair: Sushmita Mitra) (Γ-408)

- Solving the Structure-Property Problem Using k-NN Classification (Aleksandr Perevoznikov, Alexey Shestov, Evgenii Permiakov, and Mikhail Kumskov)
- Stable Feature Extraction with the Help of Stochastic Information Measure (Alexander Lepskiy)
- Wavelet-Based Clustering of Social-Network Users Using Temporal and Activity Profiles (Lipika Dey and Bhakti Gaonkar)
- Tight Combinatorial Generalization Bounds for Threshold Conjunction Rules (Konstantin Vorontsov and Andrey Ivahnenko)
- An Improvement of Dissimilarity-Based Classifications Using SIFT Algorithm (Evensen E. Masaki and Sang-Woon Kim)
- Introduction, Elimination Rules for $\neg$ and $\supset$: A Study from Graded Context (Soma Dutta)

10.00-12.00 PReMI Session 5: Bio and Chemo Informatics (Chair: Mikhail Roytberg) (Γ-313)

- Neuro-fuzzy Methodology for Selecting Genes Mediating Lung Cancer (Rajat K. De and Anupam Ghosh)
- A Methodology for Handling a New Kind of Outliers Present in Gene Expression Patterns (Anindya Bhattacharya and Rajat K. De)
- Developmental Trend Derived from Modules of Wnt Signaling Pathways (Losiana Nayak and Rajat K. De)
- Evaluation of Semantic Term and Gene Similarity Measures (Michal Kozielski and Aleksandra Gruca)
- Finding Bicliques in Digraphs: Application into Viral-Host Protein Interactome (Malay Bhattacharyya, Sanghamitra Bandyopadhyay, and Ujjwal Maulik)

12.00-13.00 Lunch

June 29 (afternoon)

13.00-13.40 PReMI Invited Talk 3 (Chair: Malay K Kundu) (Г-313)

- Multiple Kernel Learning: Application in Recognition and Retrieval (Santanu Chaudhury)

13.40-14.00 Coffee Break (Г-317)

14.00-15:20 PReMI Session 6: Image Analysis II (Chair: TBA) (Г-408)

- Blur Estimation for Barcode Recognition in Out-of-Focus Images (Duy Khuong Nguyen, The Duy Bui, and Thanh Ha Le)
- Entropy-Based Automatic Segmentation of Bones in Digital X-ray Images (Oishila Bandyopadhyay, Bhabatosh Chanda, and Bhargab B. Bhattacharya)
- Principle and Method of Image Recognition under Diffusive Distortions of Image (Jaser Doroshenko, Lev Dulkin, Viktor Salakhutdinov, and Yury Smetanin)
- Regression Models for Texture Image Analysis (Anatoliy Plastinin)

14.00-15:20 PReMI Session 7: Natural Language Processing and Text and Data Mining I (Chair: Deba P Mandal) (Г-313)

- Finding Potential Seeds through Rank Aggregation of Web Searches (Rajendra Prasath and Pinar Ozturk)
- Combining Evidence for Automatic Extraction of Terms (Boris Dobrov and Natalia Loukachevitch)
- A New Centrality Measure for Influence Maximization in Social Networks (Suman Kundu, C.A. Murthy, and Sankar K. Pal)
- Method of Cognitive Semantic Analysis of Russian Sentence (Alexander Bolkhovityanov and Andrey Chepovskiy)

15.20-15.40 Coffee Break

15.40-17.00 PReMI Session 8: Image and Video Information Retrieval I (Chair: Santanu Chaudhury) (Г-408)

- Interactive Image Retrieval with Wavelet Features (Malay Kumar Kundu, Manish Chowdhury, and Minakshi Banerjee)
- OSiMa : Human Pose Estimation from a Single Image (Nipun Pande and Prithwijit Guha)
- Combined Topological and Directional Relations Based Motion Event Predictions (Nadeem Salamat and El-hadi Zahzah)
- Recognizing Hand Gestures of a Dancer (Divya Hariharan, Tinku Acharya, and Sushmita Mitra)

15.40-17.00 PReMI Session 9: Soft Computing and Applications (Chair: Rajat K De) (Г-313)

- IC-Topological Spaces and Applications in Soft Computing (Subrata Bhowmik)
- Neuro-Genetic Approach for Detecting Changes in Multitemporal Remotely Sensed Images (Aditi Mandal, Susmita Ghosh, and Ashish Ghosh)
- Synthesis and Characterization of Gold Nanoparticles – A Fuzzy Mathematical Approach (D. Dutta Majumder, Sankar Karan, and A. Goswami)
- A Rough Set Based Decision Tree Algorithm and Its Application in Intrusion Detection (Lin Zhou and Feng Jiang)
- Information Systems and Rough Set Approximations: An Algebraic Approach (Md. Aquil Khan and Mohua Banerjee)

Conference Dinner (time and place to be announced)

June 30 (morning)

9.00-9.40 PReMI Invited Talk 4 (Chair: Sankar K Pal) (Γ-313)

- Problems of Machine Learning (Alexei Chervonenkis)

9.40-10.00 Coffee Break (Γ-317)

10.00-12.00 PReMI Session 10: Clustering and Network Analysis (Chair: TBA) (Γ-408)

- Approximation of a Coal Mass by an Ultrasonic Sensor Using Regression Rules (Marek Sikora, Marcin Michalak, and Beata Sikora)
- Forecasting the U.S. Stock Market via Levenberg-Marquardt and Haken Artificial Neural Networks Using ICA and PCA Pre-processing Techniques (Sergey Golovachev)
- Empirical Study of Matrix Factorization Methods for Collaborative Filtering (Evgeny Kharitonov)
- Simultaneous Non-gaussian Data Clustering, Feature Selection and Outliers Rejection (Nizar Bouguila, Djemel Ziou, and Sabri Boutemedjet)
- Simultaneous Clustering: A Survey (Malika Charrad and Mohamed Ben Ahmed)
- Analysis of Centrality Measures of Airport Network of India (Manasi Sapre and Nita Parekh)
- Clusters of Multivariate Stationary Time Series by Differential Evolution and Autoregressive Distance (Roberto Baragona)

10.00-12.00 PReMI Session 11: Document Image Processing I (Chair: B Uma Shankar) (Γ-313)

- Advantages of the Extended Water Flow Algorithm for Handwritten Text Segmentation (Darko Brodirc)
- Construction of Model of Structured Documents Based on Machine Learning (Sergey Golubev)
- Segmental K-Means Learning with Mixture Distribution for HMM Based Handwriting Recognition (Tapan Kumar Bhowmik, Jean-Paul van Oosten, and Lambert Schomaker)
- Feature Set Selection for On-line Signatures Using Selection of Regression Variables (Desislava Boyadzieva and Georgi Gluhchev)
- Author Identification in Bengali Literary Works (Suprabhat Das and Pabitra Mitra)

12.00-13.00 Lunch

June 30 (afternoon)

13.00-13.40 PReMI Invited Talk 5 (Chair: S Kuznetsov) (Г-313)

- Quality of Algorithms for Sequence Comparison (Mikhail Roytberg)

13.40-14.00 Coffee Break (Г-317)

14.00-15:20 PReMI Session 12: Image Analysis III (Chair: Arun K Majumder) (Г-313)

- Shape Descriptor Based on the Volume of Transformed Image Boundary (Xavier Descombes and Sergey Komech)
- Color Image Segmentation Using a Semi-wrapped Gaussian Mixture Model (Anandarup Roy, Swapan K. Parui, Debyani Nandi, and Utpal Roy)
- Perception-Based Design for Tele-presence (Santanu Chaudhury, Shantanu Ghosh, Amrita Basu, Brejesh Lall, Sumantra Dutta Roy, Lopamudra Choudhury, R. Prashanth, Ashish Singh, and Amit Maniyar)
- Automatic Adductors Angle Measurement for Neurological Assessment of Post-neonatal Infants during Follow Up (Debi Prosad Dogra, Arun Kumar Majumdar, Shamik Sural,Jayanta Mukherjee, Suchandra Mukherjee, and Arun Singh)

14.00-15:20 PReMI Session 13: Natural Language Processing and Text and Data Mining II (Chair: Natalia Loukashevitch) (Г-408)

- Data Representation in Machine Learning-Based Sentiment Analysis of Customer Reviews (Ivan Shamshurin)
- Automatic Retrieval of Parallel Collocations (Valeriy I. Novitskiy)
- A Scheme for Attentional Video Compression (Rupesh Gupta and Santanu Chaudhury)
- Sentence Ranking for Document Indexing (Saptaditya Maiti, Deba P. Mandal, and Pabitra Mitra)

15.20-15.40 Coffee Break (Г-317)

15.40-17.00 PReMI Session 14: Image and Video Information Retrieval II (Chair: Mikhail Roytberg) (Г-313)

- Spatiotemporal Approach for Tracking Using Rough Entropy and Frame Subtraction (B. Uma Shankar and Debarati Chakraborty)
- Moving Objects Detection from Video Sequences Using Fuzzy Edge Incorporated Markov Random Field Modeling and Local Histogram Matching (Badri Narayan Subudhi and Ashish Ghosh)
- Scene Categorization Using Topic Model Based Hierarchical Conditional Random Fields (Vikram Garg, Ehtesham Hassan, Santanu Chaudhury, and Madan Gopal)
- Uncalibrated Camera Based Interactive 3DTV(M.S. Venkatesh, Santanu Chaudhury, and Brejesh Lall)

15.40-17.00 PReMI Session 15: Document Image Processing II (Chair: Vladik Kreinovich) (Г-408)

- Headline Based Text Extraction from Outdoor Images (Ranjit Ghoshal, Anandarup Roy, Tapan Kumar Bhowmik, and Swapan K. Parui)
- Incremental Methods in Collaborative Filtering for Ordinal Data (Elena Polezhaeva)
- Using Conceptual Graphs for Text Mining in Technical Support Services (Michael Bogatyrev and Alexey Kolosoff)

17.00-18.00 Farewell