

Venue of the Conference

The Kolkata campus of the Indian Statistical Institute is located in a sprawling 30 acre estate on the Barrackpore Trunk Road (B T Road) in the Baranagore suburb of Greater Kolkata at its extreme north. It consists of two approximately equal parts—the office complex (conference venue) and the residential complex (comprising the Guest House and Hostels), separated by a public road. This road (Girish Chandra Ghosh Street) connects B T Road with Gopal Lal Tagore Road. The last mentioned road runs along the western boundary of the main campus. The office complex bears door numbers 202, 203 and 204, and the residential complex 205 and 206. There is a subway connecting the two parts of the campus— residential and office complexes to easily move between these two complexes.

The principal buildings in the office complex are the R A Fisher Bhavan (RAFB), the Pamela Robinson Bhavan (PRB), the A N Komogorov Bhavan (ANKB), the Platinum Jubilee Bhavan (PJB), the Satyendra Nath Bose Bhavan (SNBB), the P N Haksar Bhavan (PNHB), the Rani Kuthi (Canteen) and the Amrapali (P C Mahalanobis Museum). The residential campus at 205, and 206, B. T. Road premises includes, apart from several staff quarters, the Guest House, the Medical Welfare Unit, the Boys' Hostel, the M. Tech Hostel, the Research Scholars' and ISEC Hostel, the Ladies Hostel.

Registration Desk: *Center for Soft Computing Research (CSCR) meeting room: R A Fisher Bhavan (RAFB 1st floor, western side)*

Inauguration, Keynote and Plenary Talks, and Valedictory Session:
Auditorium: Platinum Jubilee Bhavan (PJBA) (PJB 1st Floor)

Tutorial: *ANKB Seminar Hall (NAB): A N Kolmogorov Bhavan (ANKB Ground Floor)*

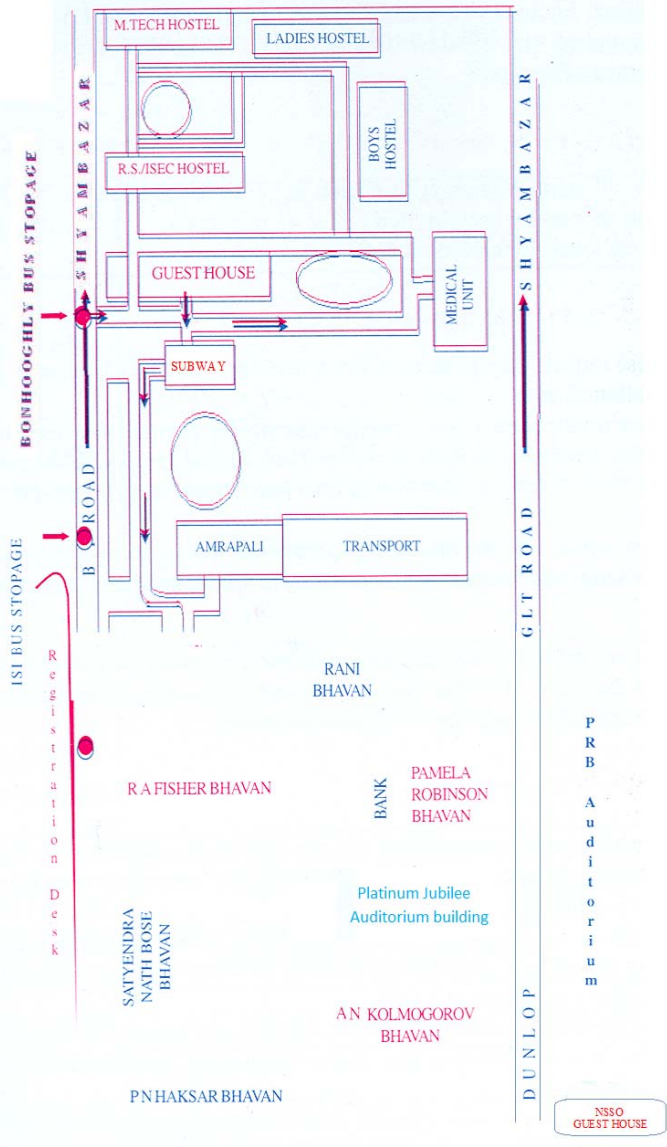
Invited Talks and Conference Sessions:
ANKB Seminar Hall (NAB) : A N Kolmogorov Bhavan (ANKB Ground Floor)
CSCR 1: CSCR seminar room R A Fisher Bhavan (RAFB 1st Floor, eastern side)
CSCR 2: CSCR meeting room R A Fisher Bhavan (RAFB 1st Floor, western side)

Conference Lunch : *ISI Guest House*

Internet and Email facility: *Eastern side Lab, Center for Soft Computing Research*

Foreign Exchange Counter: *Eastern side, Center for Soft Computing Research*

Accommodation: *ISI Guest House, ISEC Hostel, MTech Hostel, R S Hostel, NSSO Guest House*



Paper Presentation Details

Audio Visual Equipment available includes PC/Laptop (with USB port, CD-ROM) equipped with Windows O/S MS power Point, PDF Viewer and LCD and Overhead Projector.

Instructions for Speakers:

Time allotted for **plenary and each keynote** talk is 60 minutes.

Time allotted for each **invited** talk is 45 minutes.

Time allotted for each **contributed** talk is 15 minutes.

Instructions for Chairpersons:

- Please request the speakers to finish their presentation 5 minutes before the allotted time.
- Please note that there is no specific time slot for pre and post session moderation. Please apply your judgment to adjust/monitor this so that overall time limit for the session could be maintained.
- Representative of the organizing committee will try to inform you about any change of schedule/non-availability of speakers for any particular session.

In case of any difficulty, the chairperson should communicate with the volunteers present in the room. The chairperson may seek assistance of the registration desk for contacting organizing committee members.

PROGRAM IN BRIEF

Keynote Talk (12.12.2013)	Bayesian Methods to Detect Dye-labelled DNA Oligonucleotides in Multiplexed Raman Spectra, Mark A. Girolami, University College London, London.
Plenary Talk 1 (13.12.2013)	Interactive Computations: Toward Risk Management in Interactive Intelligent Systems, Andrzej Skowron, University of Warsaw, Poland.
Plenary Talk 2 (14.12.2013)	Body-wide Automatic Anatomy Recognition in Medical Imagery via Fuzzy Models, Jayaram K. Udupa, University of Pennsylvania, USA.
Invited Talk 1 (11.12.2013)	Genetic Learning Algorithms in developing a framework for Cloud Security Insurance, Dipankar Dasgupta, University of Memphis, USA.
Invited Talk 2 (12.12.2013)	A Recurrent Neural Network with Non-gesture Rejection Model for Recognizing Gestures with Smartphone Sensors, Sung-Bae Cho, Yonsei University, Korea.
Invited Talk 3 (12.12.2013)	Scalable Knowledge Discovery in Complex Data with Pattern Structures, Sergei O. Kuznetsov, Higher School of Economics, Moscow.
Invited Talk 4 (12.12.2013)	Identifying Topics, Topical Experts and Users Interested in Specific Topics in Twitter, Niloy Ganguly, Indian Institute of Technology, Kharagpur, India
Invited Talk 5 (13.12.2013)	Granular Attribute Selection: A Case Study of Rough Set Approach to MRI Segmentation, Dominik Slezak, University of Warsaw, Poland.
Invited Talk 6 (13.12.2013)	Inferring the "Laws" of Finance from Big Data: Data-Driven Modeling of Market Dynamics, Sitabhra Sinha, Institute of Mathematical Sciences, Chennai, India.
Invited Talk 7 (13.12.2013)	Fuzzy Digital Topology and Geometry and Their Applications to Medical Imaging, Punam K. Saha, University of Iowa, USA
Tutorial 1 (10.12.2013)	Model-based anatomy recognition and medical image segmentation, Jayaram Udupa, University of Pennsylvania, USA.
Tutorial 2 (10.12.2013)	Game Theoretic Approaches to Social and Economic Network Research, Y. Narahari, Indian Institute of Science, Bangalore, India
Tutorial 3 (11.12.2013)	Computational Intelligence for Games in Competition, Sung-Bae Cho, Yonsei University, Korea.
Tutorial 4 (11.12.2013)	Big Data Analysis, Santanu Choudhuri, Indian Institute of Technology, New Delhi, India
Technical Sessions (12.12.2013-14.12.2013)	Seventeen Technical Sessions and IUPRAI Workshop on Big Data: A Soft Computing Perspective

PROGRAM DETAILS: AT A GLANCE

Tutorials and Evening Lecture

Venue: ANKB seminar hall (NAB)

10 December 2013

08:30-09:30	TUTORIAL REGISTRATION (CSCR) 1st FLOOR
09:30-10:00	Tutorial Inauguration (NAB)
10:00-11:30	Speaker: Prof. Jayaram Udupa <i>Chair:</i> S. N. Biswas Title: Model-based anatomy recognition and medical image segmentation. (Part-I)
11:30-11:45	TEA
11:45-13:15	Speaker: Prof. Y. Narahari <i>Chair:</i> Sushmita Mitra Title: Game Theoretic Approaches to Social and Economic Network Research (Part-I)
13:15-14:30	LUNCH BREAK
14:30-16:00	Speaker: Prof. Y. Narahari Title: Game Theoretic Approaches to Social and Economic Network Research (Part-II)
16:00-16:15	TEA
16:15-17:45	Speaker: Prof. Jayaram Udupa Title: Model-based anatomy recognition and medical image segmentation. (Part-II)

11 December 2013

09:30-11:00	Speaker: Prof. Sung-Bae Cho <i>Chair:</i> S. N. Biswas Title: Computational Intelligence for Games in Competition (Part-I)
11:00-11:15	TEA
11:15-12:45	Speaker: Prof. Santanu Choudhuri <i>Chair:</i> Sushmita Mitra Title: Big Data Analysis. (Part-I)
12:45-14:00	LUNCH BREAK
14:00-15:30	Speaker: Prof. Sung-Bae Cho Title: Computational Intelligence for Games in Competition (Part-II)
15:30-15:45	TEA
15:45-17:15	Speaker: Prof. Santanu Choudhuri Title: Big Data Analysis. (Part-II)
18:15-19:15	Evening Lecture: Invited Talk I Speaker: D. Dasgupta <i>Chair:</i> Santanu Choudhuri Title: Genetic Learning Algorithms in developing a framework for Cloud Security Insurance

19:30-21:00	WELCOME DINNER
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PROGRAM DETAILS: AT A GLANCE

12 December 2013

08:30-09:30	CONFERENCE REGISTRATION (CSCR) 1st FLOOR
10:00-10:30	I N A U G U R A T I O N Auditorium : Platinum Jubilee Bhavan (PJBA)
10:30-11:00	HIGH TEA
11:00-12:00	Keynote Talk (PJB Auditorium) <i>Speaker:</i> Mark A. Girolami <i>Chair:</i> Sankar K. Pal <i>Title:</i> Bayesian Methods to Detect Dye-labelled DNA Oligonucleotides in Multiplexed Raman Spectra
12:00-13:30	Session I: Pattern Recognition 1 (CSCR 1) Session II: Image Processing 1 (ANKB) Session III: Soft Computing 1 (CSCR 2)
13:30-14:45	LUNCH
14:45-15:45	Invited Talk II (CSCR 2) <i>Speaker:</i> S. B. Cho <i>Chair:</i> Nikhil R. Pal <i>Title:</i> A Recurrent Neural Network with Non-gesture Rejection Model for Recognizing Gestures with Smartphone Sensors
	Invited Talk III (ANKB) <i>Speaker:</i> Sergei O. Kuznetsov <i>Chair:</i> C. A. Murthy <i>Title:</i> Scalable Knowledge Discovery in Complex Data with Pattern Structures
	Invited Talk IV (CSCR 1) <i>Speaker:</i> Niloy Ganguly <i>Chair:</i> Probal Chaudhuri <i>Title:</i> Identifying Topics, Topical Experts and Users Interested in Specific Topics in Twitter
15:45-16:00	T E A
16:00-17:30	Session IV: Machine Learning (ANKB) Session V: Signal, Speech, Video Processing 1 (CSCR 1) Session VI: Applications of Pattern Recognition 1 (CSCR 2)

PROGRAM DETAILS: AT A GLANCE

13 December 2013

09:00-10:00	CONFERENCE REGISTRATION (CSCR) 1st FLOOR
10:00-11:00	Plenary Talk 1 (PJB Auditorium) <i>Speaker:</i> A. Skowron <i>Chair:</i> Sankar K. Pal <i>Title:</i> Interactive Computations: Toward Risk Management in Interactive Intelligent Systems
11:00-11:15	T E A
11:15-12:45	Session VII: Pattern Recognition 2 (CSCR 1) Session VIII: Image Processing 2 (ANKB) Session IX: Soft Computing 2 (CSCR 2)
12:45-14:00	LUNCH
14:00-15:00	Invited Talk V (ANKB) <i>Speaker:</i> Dominik Slezak <i>Chair:</i> Mihir K. Chakraborty <i>Title:</i> Granular Attribute Selection: A Case Study of Rough Set Approach to MRI Segmentation
	Invited Talk VI (CSCR 2) <i>Speaker:</i> Sitabhra Sinha <i>Chair:</i> Vadim Mottl <i>Title:</i> Inferring the "Laws" of Finance from Big Data: Data-Driven Modeling of Market Dynamics
	Invited Talk VII (CSCR 1) <i>Speaker:</i> Punam K. Saha <i>Chair:</i> Jayaram Udupa <i>Title:</i> Fuzzy Digital Topology and Geometry and Their Applications to Medical Imaging
15:00-15:15	T E A
15:15-16:45	Session X: Medical Image Processing (CSCR 1) Session XI: Signal, Speech & Video Processing 2 (ANKB) Session XII: Applications of pattern Recognition 2 (CSCR 2)
18:00-21:30	 Cultural Program & Banquet

PROGRAM DETAILS: AT A GLANCE

14 December 2013

09:00-10:00	CONFERENCE REGISTRATION (CSCR) 1st FLOOR
10:00-11:00	<p>Plenary Talk 2 (PJB Auditorium) <i>Speaker:</i> Jayaram K. Udupa <i>Chair:</i> Malay K. Kundu <i>Title:</i> Body-wide Automatic Anatomy Recognition in Medical Imagery via Fuzzy Models</p>
11:00-11:15	T E A
11:15-12:45	<p>Session XIII: Document Image Processing (CSCR 1) Session XIV: Social Media & Data Mining 1 (CSCR 2) IUPRAI Workshop on Big Data: A Soft Computing Perspective (ANKB)</p>
12:45-14:00	LUNCH
14:00-15:30	<p>Session XV: Applications of Pattern Recognition 3 (CSCR 2) Session XVI: Bioinformatics (CSCR 1) IUPRAI Workshop on Big Data: A Soft Computing Perspective (ANKB)</p>
15:30-15:45	T E A
15:45-17:15	<p>Session XVII: Social Media & Data Mining 2 (CSCR 1) IUPRAI Workshop on Big Data: A Soft Computing Perspective (ANKB)</p>

Valedictory

CONFERENCE SESSIONS

Session I: Pattern Recognition 1		
12 December 2013	Venue: CSCR 1	12:00–13:30
Session Chair: Pabitra Pal Choudhury		
1	A Modified K-Modes Clustering Algorithm <i>Partha Sarathi Bishnu and Vandana Bhattacharjee</i>	
2	BiAS: a theme metric to model mutual association <i>Ramkishore Bhattacharyya</i>	
3	Inter-Domain Cluster Mapping And GMCV based Transformation For Domain Adaptation <i>Suranjana Samanta and Sukhendu Das</i>	
4	Performance Analysis of Multiclass Common Spatial Patterns in Brain-Computer Interface <i>Soumyadip Chatterjee, Saugat Bhattacharyya, Amit Konar, Anwesha Khasnobish, D. N. Tibarewala and R. Janarthanan</i>	
5	Classification of Fricative using Novel Modulation Spectrogram Based Features <i>Kewal Malde, Anshu Chittora and Hemant Patil</i>	
6	Kernel Based Rough-Fuzzy C-Means Rohan Bhargava and Balakrushna Tripathy	

Session II: Image processing 1		
12 December 2013	Venue: ANKB	12:00–13.30
Session Chair: Swapan K. Parui		
1	Recognition of Cross Profiles of Roadbed Based on Polygonal Representations <i>Andrey Bronevich, Alexander Lepskiy, Vladimir Umanskiy and Dmitriy Yakushev</i>	
2	A New Orthogonalization of Locality Preserving Projection and Applications <i>Gitam Shikkenawis, Ajit Rajwade and Suman Mitra</i>	
3	Extracting Linear Features from SAR Images Using CGVF Snake Model and Beamlet Transform <i>Ramachandran V</i>	
4	Learning Semantic Interaction among Graspable Objects <i>Swagatika Panda, A. H. Abdul Hafez and C. V. Jawahar</i>	
5	New Additive Wavelet Image Fusion Algorithm for Satellite Images <i>Sathyabama B, Siva Sankari, Evangeline Jenita Kamalam and Santhosh kumar p</i>	
6	Iris Recognition under Non-Ideal Imaging Conditions and CCD Noise <i>P.V.L. Suvarchala, S. Srinivas Kumar and B. Chandra Mohan</i>	

CONFERENCE SESSIONS

Session III: Soft Computing 1		
12 December 2013	Venue: CSCR 2	12:00–13:30
Session Chair: Suman Mitra		
1	On the Role of Compensatory Operators in Fuzzy Result Merging for Metasearch <i>Arijit De</i>	
2	The fuzzy parametrized model for classifying blocks in the non-binary motion mask <i>Dmitry Matsypaev and Andrey Bronevich</i>	
3	Homomorphisms on the Monoid of Fuzzy Implications (I,*) – A complete characterization <i>Nageswara Rao Vemuri and Balasubramaniam Jayaram</i>	
4	Monotonicity Of SISO Fuzzy Relational Inference Mechanisms with Yager's Class Of Fuzzy Implications <i>Sayantana Mandal and Balasubramaniam Jayaram</i>	
5	Small World Particle Swarm Optimizer for Global Optimization Problems <i>Megha Vora and T. T. Mirnalinee</i>	
6	Intuitionistic Multi Fuzzy Soft Set and its Application in Decision Making <i>Sujit Das and Dr. Samarjit Kar</i>	

Session IV: Machine Learning		
12 December 2013	Venue: ANKB	16:00–17:30
Session Chair: Sergei O. Kuznetsov		
1	C-MAP: Framework for Multi-Agent Planning in Cyber Physical Systems <i>Sumant Mukherjee and Santanu Choudhury</i>	
2	A New Intelligent Approach for Mobile Robot Navigation <i>Prases Kumar and Dayal R Parhi</i>	
3	Ordered Solution Generation for Implicit AND/OR Search Spaces <i>Priyanka Ghosh, Partha Pratim Chakrabarti and Pallab Dasgupta</i>	
4	Real Parameter Optimization Using Levy Distributed Differential Evolution <i>Nanda Dulal Jana, Aditya Narayan Hati, Rajkumar Darbar and Jaya Sil</i>	
5	Weighted Coordinate-Wise Pegasos <i>Vilen Jumutc and Johan Suykens</i>	
6	Anytime Pack Heuristic Search Satya Gautam Vadlamudi, Sandip Aine and Partha Pratim Chakrabarti	

CONFERENCE SESSIONS

Session V: Signal, Speech, & Video Processing 1		
12 December 2013	Venue: CSCR 1	16:00-17:30
Session Chair: Niloy Ganguly		
1	Corpus based emotional speech synthesis in Hindi <i>Ravi Kalyan Bhakat, N. P. Narendra and K. Sreenivasa Rao</i>	
2	Tracking Objects With Rigid Body Templates: An Iterative Constrained Linear Least Squares Approach <i>Satarupa Mukherjee, Nilanjan Ray and Dipti Prasad Mukherjee</i>	
3	A complex diffusion driven approach for removing data-dependent multiplicative noise <i>Jidesh P and Bini A A</i>	
4	Duration modeling using multi-model based on positional information <i>Ramu Reddy Vempada and Sreenivasa Rao Krothapalli</i>	
5	A Composite Wavelets and Morphology Approach for ECG Noise Filtering <i>Vikrant Bhateja, Shabana Urooj, Rini Mehrotra, Rishendra Verma, Aime' Lay-Ekuakille and Vijay Deepak Verma</i>	
6	Visualisation of multibeam echosounder measurement data <i>Wojciech Maleika and Piotr Czapiewski</i>	

Session VI: Applications of Pattern Recognition 1		
12 December 2013	Venue: CSCR 2	16:00-17:30
Session Chair: S. B. Cho		
1	Performance Tuning of PCA by CFS-Shapley Ensemble and its Application to Medical Diagnosis <i>S.Sasi Kala, Appavu Balamurugan and S. Geetha</i>	
2	Structural Feature based Classification of Printed Gujarati Characters <i>Mukesh Goswami and Suman Mitra</i>	
3	Discriminant Analysis for Identifying Individuals of Electrocardiogram <i>Yogendra Narain Singh</i>	
4	Training by ART-2 and Classification of Ballistic Missiles using Hidden Markov Models <i>Upendra Kumar Singh and Vineet Padmanabhan</i>	
5	A Fuzzy Hybrid Framework for Offline Signature Verification <i>Geetha Ganapathi and Nadarajan R</i>	
6	Speaker Recognition using Sparse Representation via Superimposed Features <i>Yashesh Gaur, Maulik Madhavi and Hemant Patil</i>	

CONFERENCE SESSIONS

Session VII: Pattern Recognition 2		
13 December 2013	Venue: CSCR 1	11:15-12:45
Session Chair: Sukhendu Das		
1	Highly Sparse Reductions to Kernel Spectral Clustering <i>Raghvendra Mall, Rocco Langone and Johan Suykens</i>	
2	A Rough Clustering Algorithm for Mining Outliers in Categorical Data <i>Ranga Suri N N R, Narasimha Murty Musti and Athithan Gopalasamy</i>	
3	Dynamic Programming for Bayesian Logistic Regression Learning under Concept Drift <i>Pavel Turkov, Olga Krasotkina and Vadim Mottl</i>	
4	Semi-Supervised Clustering by Selecting Informative Constraints <i>Vidyadhar Rao and C. V. Jawahar</i>	
5	Distance based Incremental Clustering for Mining Clusters of Arbitrary Shapes <i>Bidyut Kumar Patra, Ollikainen Ville, Raimo Launonen, Sukumar Nandi and Sathya Babu Korra</i>	

Session VIII: Image Processing 2		
13 December 2013	Venue: ANKB	11:15-12:45
Session Chair: Bhabatosh Chanda		
1	KID: Kirsch Directional Features based Image Descriptor <i>Shekar B H, Raghurama Holla K and Sharmila Kumari M</i>	
2	Local Morphological Pattern Spectrum Based Approach for Off-line Signature Verification <i>Shekar B H, Bharathi R.K and Bharathi Pilar</i>	
3	A Robust On-Road Moving Platform Image Stabilization Using Derivative Curve Warping <i>Deepika Shukla and Rajib Kumar Jha</i>	
4	Efficient Image Plane Rotation Invariant Frequency Domain Face Recognition Technique Using Eye Localization <i>Papia Banerjee, Pradipta Banerjee and Asit Datta</i>	
5	A Bi-Level IHS Transform for fusing Panchromatic and Multispectral Images <i>Navaneeth K. Ramakrishnan and Philomina Simon</i>	
6	Image Annotation in Presence of Noisy Labels <i>Chandrashekar V, Shailesh Kumar and C. V. Jawahar</i>	

CONFERENCE SESSIONS

Session IX: Soft Computing 2		
13 December 2013	Venue: CSCR 2	11:15-12:45
Session Chair: Mita Nasipuri		
1	Rapid Game Strategy Evaluation Using Fuzzy Extreme Learning Machine <i>Yingjie Li, Hiu Fung Peter Ng and Chi Keung Simon Shiu</i>	
2	New Fuzzy Integral for the Unit Maneuver in RTS game <i>Peter Ng, Y. J. Li and Simon Shiu</i>	
3	Incorporation of Particle Swarm Optimization in Adaptive Boosting <i>Gaurav Mishra, Rohit Kumar and Santanu Chaudhury</i>	
4	Exploring a Quantum Hebbian Model of Feature Map Formation <i>Priti Gupta and C.M. Markan</i>	
5	Particle Swarm Optimization with Exploratory Move <i>Nanda Dulal Jana and Jaya Sil</i>	
6	Multi Objective Optimization of Expense and Revenue in a Cognitive Radio Network Using NSGA-II <i>Subhasree Bhattacharjee, Suman Bhattacharjee and Roukna Sengupta</i>	

Session X: Medical Image Processing		
13 December 2013	Venue: CSCR 1	15:15-16:45
Session Chair: Punam K. Saha		
1	A new nonlocal maximum likelihood estimation method for denoising Magnetic Resonance images <i>Jeny Rajan, Arnold J. Den Dekker, Jaber Juntu and Jan Sijbers</i>	
2	Object Shape Recognition from EEG Signals during Tactile and Visual Exploration <i>Anwasha Khasnobish, Amit Konar, D.N. Tibarewala, Saugat Bhattacharyya and R. Janarthanan</i>	
3	Bone Contour Tracing in Digital X-ray Images based on Adaptive Thresholding <i>Oishila Bandyopadhyay, Arindam Biswas, Bhabatosh Chanda and Bhargab B. Bhattacharya</i>	
4	Content Based Image Retrieval of T2 Weighted Brain MR Images Similar to T1 Weighted Images <i>Abraham Varghese</i>	
5	Robust classification of MR brain images based on multiscale geometric analysis <i>Sudeb Das and Malay Kumar Kundu</i>	
6	A New Rotation Invariant Weber Local Descriptor for Recognition of Skin Diseases <i>Anabik Pal, Nibarun Das, Somenath Sarkar, Dwijendranath Gangopadhyay and Mita Nasipuri</i>	

CONFERENCE SESSIONS

Session XI: Signal, Speech, & Video Processing 2		
13 December 2013	Venue: ANKB	15:15-16:45
Session Chair: Dominik Slezak		
1	Video Key frame Extraction through Canonical Correlation Analysis and Graph Modularity <i>Rameswar Panda, Sanjay Kuanar and Ananda Chowdhury</i>	
2	Semi-Automated Magnification of Small Motions in Videos <i>Sushma M, Anubha Gupta and Jayanthi Sivaswamy</i>	
3	Pixel-wise Background Segmentation with Moving Camera <i>Manas Kamal Bhuyan, Neeraj Mishra, Yuji Iwahori, Robert J. Woodham and Malathi T</i>	
4	A fast video inpainting technique <i>Mrinmoy Ghorai, Pulak Purkait and Bhabatosh Chanda</i>	
5	Static Summarization of Video Scenes Based on Minimal Spanning Tree <i>Partha Mohanta, Sudipta Chowdhury, Arnab Roy, Sanjoy Saha and Bhabatosh Chanda</i>	
6	Real-Time Smoke Detection in Video Sequences: Combined Approach <i>Anton Malenichev and Olga Krasotkina</i>	

Session XII: Applications of Pattern Recognition 2		
13 December 2013	Venue: CSCR 2	15:15-16:45
Session Chair: Sitabhra Sinha		
1	Palmprint Recognition Using Data Field and PCNN <i>Yanxia Wang, Jinmin Zhao and Guanghua Sun</i>	
2	On the use of monogenic scale space for efficient face representation and recognition <i>Sharmila Kumari M and Shekar B H</i>	
3	Fingerprint Recognition Based on Adaptive Neuro-Fuzzy Inference System <i>Tripti Borah, Kandarpa Kumar Sarma and Pran Hari Talukdar</i>	
4	Gait Recognition from Front and Back View Sequences captured using Kinect <i>Pratik Chattopadhyay, Shamik Sural and Jayanta Mukherjee</i>	
5	Unconstrained Kannada Handwritten Character Recognition using Multi-level SVM Classifier <i>G G Rajput and Rajeshwari Horakeri</i>	
6	Spatio-Temporal Change Detection of Urban Heat Islands using Spatial Interpolation <i>Shrutilipi Bhattacharjee, Titas Aikat and Soumya K. Ghosh</i>	

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Session XIII: Document Image Processing		
14 December 2013	Venue: CSCR1	11:15-12:45
Session Chair: Bidyut B. Chaudhuri		
1	Query Expansion using PRF-CBD approach for Documents Retrieval <i>Rajendra Prasath and Sudeshna Sarkar</i>	
2	Identification of Devnagari and Roman Scripts from Multiscript Handwritten Documents <i>Pawan Singh, Ram Sarkar, Nibaran Das, Subhadip Basu and Mita Nasipuri</i>	
3	Extraction of Doodles and Drawings from Manuscripts Chandranath Adak and Bidyut B Chaudhuri	
4	Text Segmentation from Land Map Images <i>Samit Biswas and Amit Kumar Das</i>	
5	A New Image Binarization Technique by Classifying Document Images <i>Soumik Datta, Pawan Singh, Ram Sarkar and Mita Nasipuri</i>	
6	Colored Rubber Stamp Removal from Document Images <i>Soumyadeep Dey, Jayanta Mukherjee, Shamik Sural and Partha Bhowmick</i>	

Session XIV: Social Media & Data Mining 1		
14 December 2013	Venue: CSCR 2	11:15-12:45
Session Chair: Jaya Sil		
1	FlowSummary: Summarizing Network Flows for Communication Periodicity Detection <i>Neminath Hubballi and Deepanshu Goyal</i>	
2	Mining Anomalous Sub-graphs in Graph Data using Non-negative Matrix Factorization <i>Ranga Suri N N R, Narasimha Murty Musti and Athithan Gopalasamy</i>	
3	Trust Based Secure and Energy Efficient Clustering in Wireless Sensor Network: A Bee Mating Approach <i>Rashmi Ranjan Sahoo, Abdur Rahaman Sardar, Moutushi Singh, Sudhabindu Ray and Subir Kumar Sarkar</i>	
4	A Graph Based Approach to Multiview Clustering <i>Moumita Saha</i>	
5	Precedence Mining in Group Recommender Systems <i>Venkateswara Rao Kagita, Vineet Padmanabhan and Arun Pujari</i>	
6	Optimising Research Progress Trajectories with Semantic Power Graphs <i>Mahalakshmi G.S. and Sendhilkumar S.</i>	

CONFERENCE SESSIONS

Session XV: Applications of Pattern Recognition 3		
14 December 2013	Venue: CSCR 2	14:00–15:30
Session Chair: Andrey Bronevich		
1	A Copula Based Statistical Model for Text Extraction from Scene Images <i>Ranjit Ghoshal, Anandarup Roy and Swapan Kr. Parui</i>	
2	Text Localization in Historical Document Images with Local Binary Patterns and Variance Models Tapan Kumar Bhowmik and Manika Kar	
3	Rough–Fuzzy Clustering and M–Band Wavelet Packet for Text–Graphics Segmentation <i>Pradipta Maji, Shaswati Roy and Malay K Kundu</i>	
4	Fuzzy SVM with a novel membership function for prediction of protein–protein interaction sites in Homo sapiens <i>Brijesh Sriwastava, Subhadip Basu and Ujjwal Maulik</i>	
5	Gaussian Fuzzy Index (GFI) for cluster validation: Identification of high quality biologically enriched clusters of genes and selection of some possible genes mediating lung cancer Anupam Ghosh and Rajat K. De	
6	Semi–Supervised Self–organizing Feature Map for Gene Expression Data Classification Moumita Roy, Anwesha Law and Susmita Ghosh	

Session XVI: Bioinformatics		
14 December 2013	Venue: CSCR1	14:00–15:30
Session Chair: Joydev Chattopadhyay		
1	A subspace Module Extraction Technique for Gene Expression Data <i>Priyakshi Mahanta, Dhruba Bhattacharyya and Ashish Ghosh</i>	
2	Simultaneous Gene Selection and Cancer Classification using a Hybrid Intelligent Water Drop Approach <i>Manish Kumar, Shameek Ghosh, Jayaraman Valadi and Patrick Siarry</i>	
3	Scored Protein–Protein Interaction to Predict Subcellular Localizations for Yeast using Diffusion Kernel <i>Ananda Mondal and Jianjun Hu</i>	
4	An Evolutionary Approach for Analyzing the Effect of Interaction Site Structural Features on Protein– Protein Complex Formation <i>Archana Chowdhury, Pratyusha Rakshit, Amit Konar and Ramadoss Janarthanan</i>	
5	Random weighting through linear programming into intracellular transporters of rice metabolic network <i>Rahul Shaw and Sudip Kundu</i>	
6	A consensus approach for identification of protein–protein interaction sites in Homo sapiens <i>Brijesh Sriwastava, Subhadip Basu, Ujjwal Maulik and Dariusz</i>	

CONFERENCE SESSIONS

Session XVII: Social Media & Data Mining 2		
14 December 2013	Venue: CSCR 1	15:45-17:15
Session Chair: Pawan Lingras		
1	An Induced Fuzzy Rasch-Vikor Model for Warehouse Location evaluation under Risky Supply Chain <i>Kajal Chatterjee and Samarjit Kar</i>	
2	Discourse based Sentiment Analysis for Hindi Reviews <i>Namita Mittal, Basant Agarwal, Garvit Chouhan, Prateek Pareek and Nitin Bania</i>	
3	Rel-Div: Generating Diversified Query Interpretations from Semantic Relations <i>Ramakrishna Bairi, Ambha A and Ganesh Ramakrishnan</i>	
4	Automatic Generation of Multiple Choice Questions using Wikipedia <i>Arjun Singh Bhatia, Manas Kirti and Sujan Kumar Saha</i>	
5	Link Prediction Using Power Law Clique Distribution and Common Edges <i>Srinivas Virinchi and Pabitra Miitra</i>	
6	A Hybrid Algorithm for the Permutation Flow Shop Scheduling Problem <i>Arindam Chakravorty and Dipak Laha</i>	

IUPRAI Workshop on Big Data: A Soft Computing Perspective

Session 1: Techniques & Challenges		
14 December 2013	VENUE: ANKB (NAB)	11:30-13:15
11:30-11:45	Opening Remarks: Prof. Sankar K. Pal	
11:45-12:15	Recursive and iterative clustering in granular hierarchical, network, and temporal datasets: Prof. Pawan Lingras,	
12:15-12:45	Toward Granular Scalability of Analytical Data Processing: Prof. Dominik Slezak, University of Warsaw & Infobright	
12:45-13:15	Ocius, minutus, exactius – the Olympic Theme for Next Generation Machine Learning: Prof. Jayadeva, IIT Delhi	
Session 2: Applications		
14:30-15:00	Soft Computing Challenges in Algorithmic Trading: Saugata Mukerji, Marketopper Securities Pvt. Ltd.	
15:00-15:30	Persona Based Mobile Marketing: Prateek Kapadia, Flytxt Mobile Solutions	
Session 3: New Technologies		
16:00-16:30	Mining large document repositories: Girish Keshav Palshikar, Tata Research Development and Design Centre, Pune, India	
16:30-17:00	Cognitive Computing: Raghavendra Singh, IBM Research	