



February 26-27, 2015

Organized by
Centre for Development of Advanced Computing, Kolkata, India

PerM'n'15 Conference Program Schedule

26th February, 2015

8:30 A.M	-	9:30 A.M	Registration
9:30 A.M	-	9:35 A.M	Invocation and Presentation of Floral Bouquet
9:35 A.M	-	9:45 A.M	Welcome Address by ED, CDAC(Kolkata)
9:45 A.M	-	9:50 A.M	Address by General Chair, PerM'n'15
9:50 A.M	-	9:55 A.M	Address by Programme Chair I, PerM'n'15
9:55 A.M	-	10:00 A.M	Address by Programme Chair II, PerM'n'15
10:00 A.M	-	10:15 A.M	Inaugural Address by Chief Guest
10:15 A.M	-	10:20 A.M	Address by Guest of Honour
10:20 A.M	-	10:25 A.M	Vote of Thanks
10:25 A.M	-	10:45 A.M	High Tea
10:45 A.M	-	11:45 A.M	Plenary Talk - I (Central Hall) Topic : Biologically Inspired Machine Learning Speaker : Ravi Kothari

11:45 A.M - 1:15 P.M Technical Session I (Perception) (Hall - I)

1. Adaptive Analog Disparity Model using Ocular Dominance Map by Sheena Sharma, Priti Gupta and C.M. Markan.
2. Framework for analysis of bio-inspired self-organization in urban pervasive system by Sumant Mukherjee and Santanu Chaudhury.
3. An EEG Study on Working Memory and Cognition by Poulami Ghosh, Ankita Mazumder, Saugat Bhattacharyya and D.N. Tibarewala.
4. Traffic Analysis and Prediction using a Committee of Experts by Keshav Parthasarathy, Sundararam Rathod, Sashank Ramesh, Dhruv Vora and Susan Elias.
5. PAA: Perception based Anti-Aliasing for High Quality Transformed Image Reconstruction from Single Image by Sankaralingam M. and Apurba Das.
6. An unification of Inner Distance Shape Context and Local Binary Pattern for Shape Representation and Classification by Bharathi Pilar and B. H. Shekar.

11:45 A.M - 1:15 P.M Technical Session II (Perception Driven Visualization) (Hall - II)

1. *MRI Denoising using Visual System Response Model Simulating PCNN by Sudeb Das and Malay Kumar Kundu.*
2. *Endoscopic Image Retrieval System Using Multi-scale Image Features by Manish Chowdhury and Malay Kumar Kundu.*
3. *X-Ray Imaging and General Regression Neural Network (GRNN) for Estimation of Silk Content in Cocoons by Gopinath Bej, Amitava Akuli, Abhra Pal, Tamal Dey, Arkarag Chaudhuri, Shamshad Alam, Rajendra Khandai and Nabarun Bhattacharya.*
4. *A Framework for Ischemic Beat Detection using Multi - Layer Feedforward Neural Network and Principal Component Analysis (IBD-MLFFNN-PCA) by Sounak Mohanta and Kousik Dasgupta.*
5. *Automatic Characterization of Mammograms using Fractal Texture Analysis and Fast Correlation Based Filter method by Shradhananda Beura.*
6. *A new multi focus image fusion method using principal component Analysis in shearlet domain by Biswajit Biswas, Ritamshirsa Choudhuri and Kashi Nath Dey.*

1:15 P.M - 2:15 P.M Lunch

2:15 P.M - 3:15 P.M Plenary Talk - II (Central Hall)

**Topic : Wearable and Robotic Camera Networks,
Speaker : Andrea Cavallaro**

3:15 P.M - 3:30 P.M Tea

3:30 P.M - 4:45 P.M Technical Session III (Biometrics) (Hall - I)

1. *Significance of Phase-based Features for Person Recognition Using Humming by Hardik Sailor, Maulik Madhavi and Hemant Patil.*
2. *Salient Keypoint Detection using Entropy Map for Iris Biometric by Beeren Sahu, Pankaj Sa and Banshidhar Majhi.*
3. *Pose Invariant Face Detection In Video by Vaidehi Vijayakumar.*
4. *Face Recognition using Face-Autocropping and Facial Feature Points Extraction by Dhiman Karmakar and C.A. Murthy.*
5. *Unsupervised method of Domain Adaptation on representation of discriminatory regions of the face image for surveillance face datasets by Samik Banerjee, Suranjana Samanta and Sukhendu Das.*

3:30 P.M - 4:45 P.M Technical Session IV (Speech Synthesis and Recognition) (Hall - II)

- 1. Combining Evidences from Bark Scale and Mel Scale Warped Features for VTLN by Shubham Sharma and Hemant Patil*
- 2. Effect of Nonlinear Compression Function on the Performance of the Speaker Identification System under Noisy Conditions by Naresh Jawarakar, Raghunath Holambe and Tapan Kumar Basu.*
- 3. Classification of Stop Consonants using Modulation Spectrogram-Based Features by Anshu Chittora, Hemant Patil and Kewal Malde.*
- 4. Behavioural Modelling of Ragas of Indian Classical Music using Unified Modelling Language by Sudipta Chakrabarty, Debashis De and Payel Gupta.*
- 5. Fusion of TEO Phase with MFCC Features for Speaker Verification Purvi Agrawal and Hemant Arjun Patil.*

4:45 P.M - 6:00 P.M Demonstration of Products(by C-DAC, Kolkata)

6:00 P.M - 6:30 P.M Tea

6:30 P.M - 9:30 P.M Cultural Program and Dinner

27th February, 2015

- 10:00 A.M - 11:00 A.M Plenary Talk - III(Hall I)**
Topic : Application of Machine Learning in Haptic Perception,
Speaker: Subhasis Choudhury
- 11:00 A.M - 11:20 A.M High Tea**
- 11:20 A.M - 12:20 P.M Plenary Talk - IV(Hall I)**
Topic: Emotion Perception and Attention,
Speaker: Narayanan Srinivasan
- 12:20 P.M - 1:35 P.M Technical Session V (Man Machine Interface and Robotics) (Hall - I)**

1. An Efficient Expression Recognition Method using Contourlet Transform by Suparna Biswas and Jaya Sil.

2. Controlling Wall Following Robot Navigation Based on Gravitational Search and Feed Forward Neural Network by Tirtharaj Dash, Tanistha Nayak and Rakesh Ranjan Swain.

3. Interactive Facial Expression Reader and Extension to First Impression Improver by Tatsuya Yamazaki, Ken'ichi Maehara and Koichiro Enomoto.

4. Low Complexity Graph based Navigation and path Finding of mobile Robot using BFS by Hrudaya Kumar Tripathy and Prabin Kumar Panigrahi.

5. DI-BOW: Domain Invariant Feature Descriptor Using Bag of Words by Tirumarai Selvan, Suranjana Samanta and Sukhendu Das.

- 12:20 P.M - 1:20 P.M Technical Session VI (Cognitive Model, Perception and Machine Intelligence) (Hall - II)**

1. Cognitive Inspired WOR Framework to Reveal Image Semantics, for Efficient Content Based Image Retrieval by Nitin Gupta, Sukhendu Das and Gyanesh Dwivedi.

2. Sparsifying Dense Features for Action Classification by Debaditya Roy, M. Srinivas and C Krishna Mohan.

3. Perceptual Depth Preserving Saliency based Image Compression by Meera Khanna, Karan Rai and Santanu Chaudhury.

4. Stereo Pair Generation by Introducing Bokeh Effect in 2D Images by Nidhi Chahal and Santanu Chaudhury.

1:35 P.M - 2:45 P.M Lunch

2:45 P.M - 3:45 P.M Plenary Talk - V(Hall I)

Topic : Tactile information processing in the brain and the effects of the effects of spinal cord injuries

Speaker: Neeraj Jain

3:45 P.M - 4:00 P.M Tea

4:00 P.M - 5:00 P.M Technical Session VII (Perception Based Sensory System) (Hall – I)

1. Sliding Window-based DCT Features for Tea Quality Prediction Using Electronic Tongue by Pradip Saha, Santanu Ghorai, Bipan Tudu, Rajib Bandyopadhyay and Nabarun Bhattacharyya.

2. Selection of Optimum Level of Data Compression for Voltammetric Electronic Tongue Signal Using DWT by Ashmita De, Arunangshu Ghosh and Bipan Tudu.

3. Towards artificial flavor perception of black tea: an approach using fusion of electronic nose and electronic tongue responses with fuzzy ART classification technique by Angiras Modak, Runu Banerjee Roy, Bipan Tudu, Rajib Bandyopadhyay and Nabarun Bhattacharyya.

4. Multi-frequency Large Amplitude Pulse Voltammetric Electronic Tongue to Assess Key Compounds Imparting the Taste of Briskness to Finished Black Tea Liquor by Arunangshu Ghosh, Trisita Chatterjee, Paban Kumar Borah, Dilip Sing, Prolay Sharma, Bipan Tudu, Pradip Tamuly, Nabarun Bhattacharya and Rajib Bandyopadhyay.

4:00 P.M - 5:00 P.M Technical Session VIII (Industrial research trends on Image Processing, Perception Engineering and Machine Intelligence) (Hall –II)

1.3D reconstruction from multi-view images by Brojeshwar Bhowmick, TCS Innovation Lab, Kolkata.

2. RELEVANCE OF Visual perception on image quality, steganography and Compression by Apurba Das, TCS Innovation Lab, Bangalore.