

Tentative Program of ICCTA 2007

March 05, 2007

| Time | Geology Auditorium | NAB-I Seminar Room | CVPR Seminar Room | NAB-II Seminar Room |
|---------------|--|--------------------|-------------------|---------------------|
| 08:00 – 09:30 | Registration | | | |
| 09:30 – 10:00 | Inauguration | | | |
| 10:00 – 10:15 | Tea Break | | | |
| 10:15 – 11:00 | Plenary Talk Track-II | | | |
| | <i>Speaker:</i> Witold Pedrycz, University of Alberta, Canada | | | |
| | <i>Title:</i> Distributed and collaborative soft computing: an emerging development environment. | | | |
| 11:00 – 11:45 | Plenary Talk Track-III | | | |
| | <i>Speaker:</i> Hiromichi Fujisawa, Hitachi Ltd., Japan | | | |
| | <i>Title:</i> to be announced. | | | |
| 11:45 – 12:00 | Tea Break | | | |
| 12:00 – 13:30 | Session TI-A | Session TII-A | Session TIII-A | Session TIV-A |
| 13:30 – 14:15 | Lunch Break | | | |
| 14:15 – 16:15 | Session TI-B | Session TII-B | Session TIII-B | Session TIV-B |
| 16:15 – 16:30 | Tea Break | | | |
| 16:30 – 18:30 | Session TI-C | Session TII-C | Session TIII-C | Session TIV-C |

March 06, 2007

| Time | Geology Auditorium | NAB-I Seminar Room | CVPR Seminar Room | NAB-II Seminar Room |
|---------------|---|--------------------|-------------------|---------------------|
| 10:15 – 12:15 | Session TI-D | Session TII-D | Session TIII-D | Session TIV-D |
| 12:15 – 12:30 | Tea Break | | | |
| 12:30 – 13:30 | Keynote Speech | | | |
| | <i>Speaker:</i> Sir Michael Brady, Oxford University, UK. | | | |
| | <i>Title:</i> Oncological Image Analysis: Medical and Molecular Image Analysis. | | | |
| 13:30 – 14:15 | Lunch Break | | | |
| 14:15 – 16:15 | Session TI-E | Session TII-E | Session TIII-E | Session TIV-E |
| 16:15 – 16:30 | Tea Break | | | |
| 16:30 – 17:30 | Session TI-F | Session TII-F | Session TIII-F | Session TIV-F |
| 18:30 – 21:00 | Cultural programme and Banquet | | | |

March 07, 2007

| Time | Geology Auditorium | NAB-I Seminar Room | CVPR Seminar Room | NAB-II Seminar Room |
|---------------|--|--------------------|-------------------|---------------------|
| 10:15 – 11:00 | Plenary Talk Track-I | | | |
| | <i>Speaker:</i> Reinhard Klette, Univ. of Auckland, New Zealand | | | |
| | <i>Title:</i> Rubberband algorithms for solving various 2D or 3D shortest path problems. | | | |
| 11:00 – 11:45 | Plenary Talk Track-IV | | | |
| | <i>Speaker:</i> B. F. Buxton, Univ. College London, UK. | | | |
| | <i>Title:</i> Development of an Extension of the Otsu Algorithm for Multidimensional Image Segmentation of Thin-film Blood Slides. | | | |
| 11:45 – 12:00 | Tea Break | | | |
| 12:00 – 13:00 | Session TI-G | Session TII-G | Session TIII-G | Session TIV-G |
| 13:00 – 13:30 | Valedictory Session | | | |
| 13:30 – 14:15 | Lunch Break | | | |
| 15:00 – 16:30 | Institute Convocation | | | |

Notes:

- Audio Visual equipments including PC/Laptop, Windows OS, MS PowerPoint, PDF viewer, USB port and CD-ROM, LCD Projector will be available for paper presentation.
- Time allotted for each contributed talk is 20 (15 + 5) minutes.
- Geology Auditorium: 2nd floor, Pamela Robinson Bhaban.
- NAB-I & NAB-II Seminar Room: Ground floor, Kolmogorov Bhaban.
- CVPR Seminar Room: 8th floor, Satyendra Nath Bhaban.

Details of Invited Lectures and Technical Paper Sessions

| Session TI-A: Parallel and Distributed Computing | | |
|--|---|---------------|
| March 05, 2007 | Room: Geology Auditorium | 12:00 – 13:30 |
| Session Chair: to be announced | | |
| TI-A-1 | Distributed Protocols for Defensive and Offensive Alliances in Network Graphs <i>P. Srimani and Z. Xu</i> | |
| TI-A-2 | Partially Dynamic Concurrent Update of Distributed Shortest Paths <i>G. D'Angelo, G. Di Stefano, S. Cicerone, and D. Frigioni</i> | |
| TI-A-3 | Checkpointing using Mobile Agents in Distributed Systems <i>P. S. Mandal and K. Mukhopadhyaya</i> | |
| TI-A-4 | Distributed Data Gathering Scheduling in Multihop Wireless Sensor Networks for Improved Lifetime <i>S. Bhattacharjee and N. Das</i> | |
| TI-A-5 | A Distributed Trust Establishment Scheme for Mobile Ad Hoc Networks <i>J. Sen, P. Roy Chowdhury, and I. Sengupta</i> | |

| Session TII-A: Artificial Neural Network | | |
|--|---|---------------|
| March 05, 2007 | Room: NAB-I Seminar Room | 12:00 – 13:30 |
| Session Chair: to be announced | | |
| TII-A-1 | Neural Network aided Unscented Kalman Filter for Maneuvering Target Tracking in Distributed Acoustic Sensor Networks <i>Zhi-Jun Yu, Shao-Long Dong, Tao Xing, and Hai-Tao Liu</i> | |
| TII-A-2 | Neural Network Control of Coordinated Multiple Manipulator Systems <i>Naveen Kumar, Vikas Panwar, and N. Sukavanam</i> | |
| TII-A-3 | Smell Peak Prediction during Black Tea Fermentation Process using Time-Delay Neural Network on Electronic Nose Data <i>Bipan Tudu, Barun Das, Nabarun Bhattacharyya, Arun Jana, Debdulal Ghosh, and Rajib Bandyopadhyay</i> | |
| TII-A-4 | Neural Network Based Effort Estimation using Class Points for OO Systems <i>S. Kanmani, J.Kathiravan, S. SenthilKumar, and M. Shanmugam</i> | |

| Session TIII-A: Document Processing I | | |
|--|---|----------------------|
| March 05, 2007 | Room: CVPR Seminar Room | 12:00 – 13:30 |
| Session Chair: to be announced | | |
| INVITED | Co-articulation Modeling for Handwriting Synthesis <i>J. H. Kim</i> <i>AIPR Lab, KAIST, Korea</i> | |
| TIII-A-1 | PATRAM: A Unified Word Processing System for Handwritten Characters in Indian Languages <i>M. Kasirajan and V. S. Chakravarthy</i> | |
| TIII-A-2 | Ranking of Optical Character Prototypes in a Large Database using Isothetic Chord Lengths <i>P. Bhowmick, A. Biswas, and B. B. Bhattacharya</i> | |
| TIII-A-3 | A Fuzzy Technique for Segmentation of Handwritten Bangla Word Images <i>S. Basu, R. Sarkar, N. Das, M. Kundu, M. Nasipuri, and D. K. Basu</i> | |

| Session TIV-A: Biometrics | | |
|---------------------------------------|--|----------------------|
| March 05, 2007 | Room: NAB-II Seminar Room | 12:00 – 13:30 |
| Session Chair: to be announced | | |
| INVITED | Biometric Research and Development <i>David Zhang</i> <i>Department of Computing, Hong King Polytechnic University, Hong Kong</i> | |
| TIV-A-1 | Localization of Ear using Outer Helix Curve of the Ear <i>S. Ansari and P. Gupta</i> | |
| TIV-A-2 | Secondary Diagonal FLD for Fingerspelling Recognition <i>M. G. Suraj and D. S. Guru</i> | |
| TIV-A-3 | Optimal Objective Functional Selection for Image Reconstruction in Diffuse Optical Tomography <i>A. V. Patil and U. B. Desai</i> | |

Session TI-B: Mobile and Wireless Networks

| | | | |
|---------------------------------------|---|---------------------------------|----------------------|
| March 05, 2007 | | Room: Geology Auditorium | 14:15 – 16:15 |
| Session Chair: to be announced | | | |
| TI-B-1 | Lower Bound on Bandwidth for Channel Assignment in Multimedia Cellular Networks with 2-Band Buffering <i>G. K. Audhya and B. P. Sinha</i> | | |
| TI-B-2 | A Heuristic Technique for Solving Dual-homing Assignment Problem of 2.5G Cellular Networks <i>S. K. Sadhukhan, S. Mandal, and D. Saha</i> | | |
| TI-B-3 | On the Link Excess Life in Mobile Wireless Networks <i>A. Nayebi, A. Khosravi, and H. Sarbazi-Azad</i> | | |
| TI-B-4 | A Finite State Analysis of Time-triggered CAN (TTCAN) Protocol using Spin <i>I. Saha and S. Roy</i> | | |
| TI-B-5 | SISO based Turbo Equalization and Decoding for ISI corrupted Wireless Channels <i>A. Tripathy, S. S. Pathak, and S. Chakrabarti</i> | | |
| TI-B-6 | A Beacon Selection Algorithm for Bounded Error Location Estimation in Ad hoc Networks <i>K. Sinha and A. Datta Chowdhury</i> | | |

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|---------------------------------------|---|---------------------------------|----------------------|
| Session TII-B: Fuzzy Sets | | | |
| March 05, 2007 | | Room: NAB-I Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | | |
| TII-B-1 | Intuitionistic fuzzy automata and associated topologies <i>Arun K. Srivastava and S. P. Tiwari</i> | | |
| TII-B-2 | AFDM approach for Experience Inclusion in Learning Controllers <i>S. Gopinath, Indra Narayan Kar and R. K. P. Bhatt</i> | | |
| TII-B-3 | Methods of Evaluation and Extraction of Membership Functions - Review with a New Approach <i>Dwijesh Dutta Majumder, Rupak Bhattacharyya and Supratim Mukherjee</i> | | |
| TII-B-4 | Parallel Evolutionary Asymmetric Subsethood Product Fuzzy-Neural Inference System: An Island Model Approach <i>Lotika Singh and Satish Kumar</i> | | |
| TII-B-5 | A Fuzzy Ontology Generation Framework for Handling Uncertainties and Non-uniformity in Domain Knowledge Description <i>Muhammad Abulaish and Lipika Dey</i> | | |

| Session TIII-B: Natural Language Processing I | | |
|--|---|----------------------|
| March 05, 2007 | Room: CVPR Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| TIII-B-1 | Algorithm for Identifying the Syntactic and Semantic Categories of Prepositions: Case of Over <i>Y. S. Alam</i> | |
| TIII-B-2 | Semantics of ‘to’ <i>A. Almeida, R. K. Mohanty, and P. Bhattacharyya</i> | |
| TIII-B-3 | Word Sense Disambiguation Using Extended WordNet <i>S. K. Naskar and S. Bandyopadhyay</i> | |
| TIII-B-4 | An Example Based Approach for Parsing Natural Language Sentences <i>N. Chatterjee and S. Goyal</i> | |

| Session TIV-B: Content based Image Retrieval | | |
|---|---|----------------------|
| March 05, 2007 | Room: NAB-II Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| INVITED | Current Status and Future Trends of Nanoscale Technology and Its Impact on Modern Computing, Biology, Medicine and Agricultural Biotechnology <i>D. Dutta Majumder, Christian Ulrichs, Debosmita Majumder, Inga Mewis, Ashoke Ranjan Thakur, R. L. Brahmachary, Rajat Banerjee, Ayesha Rahman, Nitai Debnath, Dipankar Seth, Sumistha Das, Indrani Roy, Amrita Ghosh, Prity Sagar, Carsten Schulz, Nguyen Quang Linh, and Arunava Goswami</i> | |
| TIV-B-1 | Characterization of Isothetic Polygons for Image Indexing and Retrieval <i>A. Biswas, P. Bhowmick, and B. B. Bhattacharya</i> | |
| TIV-B-2 | Content Based Image Retrieval System for Multi Object Images using Combined Features <i>A. Katare, S. Mitra, and A. Banerjee</i> | |
| TIV-B-3 | An Approach Based on Regression Line Features for Low Complexity Content Based Image Retrieval <i>R. P. Kumar and P. Nagabhushan</i> | |
| TIV-B-4 | Concept Pre-digestion Method for Image Relevance Reinforcement Learning <i>P. S. Reddy, R. S. Bapi, C. Bhagvati, and B. L. Deekshatulu</i> | |

| Session TI-C: VLSI Design I | | |
|---------------------------------------|--|----------------------|
| March 05, 2007 | Room: Geology Auditorium | 16:30 – 18:30 |
| Session Chair: to be announced | | |
| TI-C-1 | Process Variability-aware Statistical Hybrid Modeling of Dynamic Power Dissipation in 65 nm CMOS Designs <i>B. P. Harish, N. Bhat, and M. B. Patil</i> | |
| TI-C-2 | An Approach for Pre-Silicon Power Modeling <i>P. Agrawal, R. Srinivasa, A. N. Oke, and S. Vijay</i> | |
| TI-C-3 | An Overlap Removal Algorithm for Macrocell Placement <i>M. Thenappan, A. T. Senthil, K. M. Sreekanth, and R. S. Guzar</i> | |
| TI-C-4 | A Novel Scheme for Encoding and Watermark Embedding in VLSI Physical Design for IP Protection <i>D. Saha, P. S. Dasgupta, S. Sur-Kolay, and S. Sen-Sarma</i> | |
| TI-C-5 | Faster Placer for Island-style FPGAs <i>P. Banerjee and S. Sur-Kolay</i> | |
| TI-C-6 | Reconfigurable Frame Parser Design for Multi-radio Support on Asynchronous Microprocessor Cores <i>D. Guha and T. Srikanthan</i> | |

| Session TII-C: SVMs and Clustering | | |
|---|---|----------------------|
| March 05, 2007 | Room: NAB-I Seminar Room | 16:30 – 18:30 |
| Session Chair: to be announced | | |
| TII-C-1 | Fast Single-Shot Multiclass Proximal Support Vector Machines and Perceptrons <i>K. P. Soman, Loganathan R, M. S. Vijaya, V. Ajay, and Shivsubramani K</i> | |
| TII-C-2 | Scalable clustering with smoka <i>Jacob Kogan</i> | |
| TII-C-3 | Cluster based training for scaling non-linear Support Vector Machines <i>Asharaf S, M Narasimha Murty, and S K Shevade</i> | |
| TII-C-4 | A Fuzzy Genetic Clustering Technique Using A New Symmetry Based Distance for Automatic Evolution of Clusters <i>Sriparna Saha and Sanghamitra Bandyopadhyay</i> | |

| Session TIII-C: Speech and Signal Processing I | | |
|---|---|----------------------|
| March 05, 2007 | Room: CVPR Seminar Room | 16:30 – 18:30 |
| Session Chair: to be announced | | |
| TIII-C-1 | High Computational Performance in Code Exited Linear Prediction Speech Model using Faster Codebook Search Techniques <i>R. P. Kumar</i> | |
| TIII-C-2 | Capturing Complementary Information via Reversed Filter Bank and Parallel Implementation with MFCC for Improved Text-Independent Speaker Identification <i>S. Chakroborty, A. Roy, S. Majumdar, and G. Saha</i> | |
| TIII-C-3 | ISPIHT-Improved SPIHT: a Simplified and Efficient Sub-band Coding Scheme <i>Y. K. Singh</i> | |

| Session TIV-C: Image Processing | | |
|--|---|----------------------|
| March 05, 2007 | Room: NAB-II Seminar Room | 16:30 – 18:30 |
| Session Chair: to be announced | | |
| TIV-C-1 | Non-parametric mixture model based evolution of level sets <i>N. Joshi and M. Brady</i> | |
| TIV-C-2 | Edge Filtering using Orientation Entropy <i>A. K. Das, P. K. Mitra, A. K. Ray, and S. K. Ghosh</i> | |
| TIV-C-3 | A Noise Fading Technique for Images Highly Corrupted with Impulse Noise <i>S. Indu and C. Ramesh</i> | |
| TIV-C-4 | High Fidelity Inpainting for Critical Applications using Image Fusion <i>A. Mishra, B. Sharma, and S. Rakshit</i> | |
| TIV-C-5 | Adaptive Index Coding Scheme for VQ Indices Compression <i>K. Somasundaram and S. Domic</i> | |
| TIV-C-6 | New Filter Based Unsupervised Rules for Boolean Blur Metric <i>P. Shivakumara, S. Noushat, and G. H. Kumar</i> | |

| Session TI-D: VLSI Design II | | |
|---------------------------------------|--|----------------------|
| March 06, 2007 | Room: Geology Auditorium | 10:00 – 12:00 |
| Session Chair: to be announced | | |
| TI-D-1 | What graphs can be efficiently represented by BDDs? <i>C. Dong and P. Molitor</i> | |
| TI-D-2 | Register Sharing Verification During Data-path Synthesis <i>C. Karfa, C. Mandal, D. Sarkar, and C. Reade</i> | |
| TI-D-3 | Genetic Algorithm Based Approach For Hierarchical SOC Testing <i>C. Giri, D. K. R. Tipparthi, and S. Chattopadhyay</i> | |
| TI-D-4 | Test Data Compression by Split-VIHC(SVIHC) <i>C. Giri, B. M. Rao, and S. Chattopadhyay</i> | |
| TI-D-5 | Timing Analysis of Sequential Circuits using Symbolic Event Propagation <i>A. Mondal, P. P. Chakrabarti, and P. Dasgupta</i> | |
| TI-D-6 | A Low-Cost Pipelined Multilingual E-Dictionary Using a Pipelined CTAM <i>S. K. Ray, S. Dutta, and A. K. Saha</i> | |

| Session TII-D: Data Mining and Soft Computing | | |
|--|---|----------------------|
| March 06, 2007 | Room: NAB-I Seminar Room | 10:00 – 12:00 |
| Session Chair: to be announced | | |
| TII-D-1 | A Multi-objective Genetic Algorithm with Relative Distance: Method, Performance Measures and Constraint Handling <i>Praveen Kumar Tripathi, Sanghamitra Bandyopadhyay, and Sankar Kumar Pal</i> | |
| TII-D-2 | Exploitation of Multivalued Type Proximity for Symbolic Feature <i>Bapu B. Kiranagi, D. S. Guru, and Manabu Ichino</i> | |
| TII-D-3 | Semantic Integration of Heterogeneous Databases on the Web <i>Niladri Chatterjee and Madhav Krishna</i> | |
| TII-D-4 | Discretization Using Clustering and Rough Set Theory <i>Girish Kumar Singh and Sonajharia Minz</i> | |

| Session TIII-D: Natural Language Processing II | | |
|---|---|----------------------|
| March 06, 2007 | Room: CVPR Seminar Room | 10:00 – 12:00 |
| Session Chair: to be announced | | |
| TIII-D-1 | Resolution of Pronominals in Tamil <i>L. Sobha</i> | |
| TIII-D-2 | A Hybrid Approach to Sentence Alignment Using Genetic Algorithm <i>M. Gautam and R. M. K. Sinha</i> | |
| TIII-D-3 | Some Improvements over the BLEU Metric for Measuring Translation Quality for Hindi <i>N. Chatterjee, M. Krishna, and A. Johnson</i> | |
| TIII-D-4 | A Novel Approach for Re-Ranking of Search results using Collaborative Filtering <i>U. Rohini and V. Varma</i> | |

| Session TIV-D: Motion and 3D Vision | | |
|--|--|----------------------|
| March 06, 2007 | Room: NAB-II Seminar Room | 10:00 – 12:00 |
| Session Chair: to be announced | | |
| TIV-D-1 | Pose-Invariant 3D Object Recognition using Linear Combination of 2D Views and Evolutionary Optimisation <i>V. Zografos and B. F. Buxton</i> | |
| TIV-D-2 | Using object models as domain knowledge in perceptual organization: An approach for object category identification in video sequences <i>G. Harit, R. Bharatia, and S. Chaudhury</i> | |
| TIV-D-3 | An efficient motion re-estimation in frame-skipping video transcoding <i>V. Patil and R. Kumar</i> | |
| TIV-D-4 | Stabilisation of Active Contours using Tangential Evolution Term: An Application to Tracking <i>V. Srikrishnan, S. Chaudhuri, and S. D. Roy</i> | |
| TIV-D-5 | Kernel PCA in Detecting Moving Vehicle from its Viewpoint <i>M. M. Rahman and A. Santhanam</i> | |

| Session TI-E: High Performance Computing | | |
|---|---|----------------------|
| March 06, 2007 | Room: Geology Auditorium | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| INVITED | Cache-Oblivious Computation: Algorithms and Experimental Evaluation <i>V. Ramachandran</i> <i>University of Texas at Austin, USA</i> | |
| TI-E-1 | Utility Based Multiple QoS Guaranteed Resource Scheduling Optimization In Grid Computing <i>L. Chunlin and L. Layuan</i> | |
| TI-E-2 | Unintelligent Guided Ant-Based Solution to the Application Service Mapping Problem in a Grid Environment <i>S. B. Musunoori and G. Horn</i> | |
| TI-E-3 | Generation of Group Key using Enhanced One Way Function Tree Group Rekey Protocol <i>B. P. Varthini and S.Valli</i> | |
| TI-E-4 | Privacy Preserving Vehicle Purchase Marketplace <i>S. K. Sehgal and A. Saroop</i> | |

| Session TII-E: Bio Informatics | | |
|---------------------------------------|--|----------------------|
| March 06, 2007 | Room: NAB-I Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| INVITED | Pattern Recognition in Mining High-throughput Genomics/proteomics Data: the New Challenges in Old Questions <i>Xuegong Zhang</i> <i>Tsinghua University, Beijing, China</i> | |
| TII-E-1 | New Distance Measure for Microarray Gene Expressions using Linear Dynamic Range of Photo Multiplier Tube <i>Shubhra Sankar Ray, Sanghamitra Bandyopadhyay, and Sankar K. Pal</i> | |
| TII-E-2 | Unsupervised Thresholding of Affymetrix Microarray Data <i>Matthew W. B. Trotter and Bernard F. Buxton</i> | |

| Session TIII-E: Document Processing II | | |
|---|---|----------------------|
| March 06, 2007 | Room: CVPR Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| INVITED | Star Compression and Compressed Domain Pattern Matching <i>Amar Mukherjee</i> <i>University of Central Florida, Orlando, USA</i> | |
| TIII-E-1 | Document Frauds: Identification and Linking Fake Document to Scanners and Printers <i>G. Gupta, S. K. Saha, C. Mazumdar, and S. Chakraborty</i> | |
| TIII-E-2 | Automatic Seal Information Reader <i>F. Nourbakhsh, P. B. Pati, and A. G. Ramakrishnan</i> | |
| TIII-E-3 | An Integrated Scheme for Compression and Interactive Access to Document Images <i>G. Harit, R. Garg, and S. Chaudhury</i> | |

| Session TIV-E: Remote Sensing and Image Analysis | | |
|---|--|----------------------|
| March 06, 2007 | Room: NAB-II Seminar Room | 14:15 – 16:15 |
| Session Chair: to be announced | | |
| TIV-E-1 | Neuro-Wavelet Classifier for Remote Sensing Image Classification <i>B. Uma Shankar, S. K. Meher, and A. Ghosh</i> | |
| TIV-E-2 | Unsupervised Change Detection in Remote-Sensing Images using Modified Self-Organizing Feature Map Neural Network <i>S. Patra, S. Ghosh, and A. Ghosh</i> | |
| TIV-E-3 | Machine Extraction of Landforms from Multispectral Images using Texture and Neural Methods <i>P. Roychowdhury, B. Deshmukh, and A. Goswami</i> | |
| TIV-E-4 | Chromatogram Image Pre-Processing and Feature Extraction for Automatic Soil Analysis <i>V. Saritha, M. M. Joseph, S. Das, and D. Khemani</i> | |
| TIV-E-5 | Weed Classification using Angular Cross Sectional Intensities for Real-time Selective Herbicide Applications <i>A. M. Naeem, I. Ahmad, M. Islam, and S. Nawaz</i> | |
| TIV-E-6 | A Novel Integrated Approach using Dynamic Thresholding and Edge Detection (IDTED) for Automatic Detection of Exudates in Digital Fundus Retinal Images <i>A. Vidyasagar, S. Balasubramaniam, and V. Chandrasekaran</i> | |

| Session TI-F: Architectures | | |
|---------------------------------------|---|----------------------|
| March 06, 2007 | Room: Geology Auditorium | 16:30 – 17:30 |
| Session Chair: to be announced | | |
| TI-F-1 | Diameter and Routing in Enhanced OTIS-cube <i>R. Das</i> | |
| TI-F-2 | Empirical Performance Evaluation of Adaptive Routing in Necklace Hypercubes: A Comparative Study <i>S. Meraji, A. Nayebi, and H. Sarbazi-Azad</i> | |
| TI-F-3 | NLPBench: A tool for studying the architectural characteristics of Natural Language and Speech Applications <i>A. Mukhopadhyay</i> | |
| TI-F-4 | A Model for Service Composition with Multiple QoS Constraints <i>X. Feng, Y. Ren, J. Hu, Q. Wu, and Y. Jia</i> | |
| TI-F-5 | Handling Parameter Passing In Dynamic Rendering of Enterprise Reports <i>D. Jana, A. Mandal, C. Bose, and D. Ghosh</i> | |
| TI-F-6 | NLPBench: A tool for studying the architectural characteristics of Natural Language and Speech Applications <i>A. Mukhopadhyay</i> | |

| Session TII-F: Classification and Prediction | | |
|---|--|----------------------|
| March 06, 2007 | Room: NAB-I Seminar Room | 16:30 – 17:30 |
| Session Chair: to be announced | | |
| TII-F-1 | A Unified Approach to Encoding and Classification using Bimodal Projection-based Features <i>Dipti Deodhare, M. Vidyasagar and M. Narasimha Murthy</i> | |
| TII-F-2 | Kernel Auto-Regressive Model with eXogenous Inputs for Nonlinear Time Series Prediction <i>Venkataramana Kini B and C. Chandra Sekhar</i> | |
| TII-F-3 | Modeling Time-Varying Population for Biometric Authentication <i>Vandana Roy and C. V. Jawahar</i> | |

| Session TIII-F: Speech and Signal Processing II | | |
|--|---|----------------------|
| March 06, 2007 | Room: CVPR Seminar Room | 16:30 – 17:30 |
| Session Chair: to be announced | | |
| TIII-F-1 | Total Removal of Baseline Drift from ECG Signal <i>V.S. Chouhan and S.S. Mehta</i> | |
| TIII-F-2 | Comparision of Estimation Techniques using Kalman Filter and Grid based Filter for linear System <i>S. Bhowmik and C. Roy</i> | |
| TIII-F-3 | Digital Signal Types Identification Using a Hierarchical SVM-Based Classifier and Efficient Features <i>Ataollah Ebrahimzadeh and Seyed Alireza Seyedin</i> | |
| TIII-F-4 | Fast Reliable & Secure Digital Communication Using Hadamard Matrices <i>S.K. Pal</i> | |

| Session TIV-F: Graphics | | |
|---------------------------------------|---|----------------------|
| March 06, 2007 | Room: NAB-II Seminar Room | 16:30 – 17:30 |
| Session Chair: to be announced | | |
| TIV-F-1 | Point Based Representation for Hierarchical Environments <i>T. Kedarnath, G. Lakshmi, Jagmohan, and P. J. Narayanan</i> | |
| TIV-F-2 | Finite Automata Inspired Model for Dominant Point Detection: A Non-Parametric Approach <i>R. Dinesh and D. S. Guru</i> | |
| TIV-F-3 | A Comparative Study on 2D Curvature Estimators <i>S. Hermann and R. Klette</i> | |

| Session TI-G: Algorithms | | |
|---------------------------------------|---|----------------------|
| March 07, 2007 | Room: Geology Auditorium | 12:00 – 13:00 |
| Session Chair: to be announced | | |
| TI-G-1 | Covering a Set of Points in a Plane using Two Parallel Rectangles <i>C. Saha and S. Das</i> | |
| TI-G-2 | ICE: The Isothetic Convex Envelope of a Digital Object <i>P. Bhowmick, A. Biswas, and B. B. Bhattacharya</i> | |
| TI-G-3 | A Local Search Heuristic for Biobjective Intersecting Geometric Graphs <i>R. Kumar, P. K. Singh, and B. B. Bhattacharya</i> | |

| Session TII-G: Applications in Image Analysis | | |
|--|--|----------------------|
| March 07, 2007 | Room: NAB-I Seminar Room | 12:00 – 13:00 |
| Session Chair: to be announced | | |
| TII-G-1 | Face Recognition by Combination of RBF Neural Networks Using Dempster-Shafer Theory <i>S. Thakur, J. K. Sing, D. K. Basu, M. Nasipur,i and M. Kundu</i> | |
| TII-G-2 | Deformation Correction in Brain MRI Using Mutual Information and Genetic Algorithm <i>Pradipta Maji, Bhabatosh Chanda, Malay K. Kundu, and Suman Dasgupta</i> | |
| TII-G-3 | A Pose Recovery Algorithm to Minimize the Effects of Pose Variation on the Matching Performance of Elastic Bunch Graph Based Multiview Face Recognition System <i>D. Mazumdar, K. Chanda, M. Bhattacharya and S. Mitra</i> | |
| TII-G-4 | Analysis of Ultrasound Kidney Images using Content Descriptive Multiple Features for Disorder Identification and ANN based Classification <i>K. Bommanna Raja, M.Madheswaran and K. Thyagarajah</i> | |
| TII-G-5 | Hyperspectral Image Analysis -A Robust Algorithm using Support Vectors and Principal Components <i>Sindhumul S and Wilsy M</i> | |

| Session TIII-G: Document Processing III | | |
|--|--|----------------------|
| March 07, 2007 | Room: CVPR Seminar Room | 12:00 – 13:00 |
| Session Chair: to be announced | | |
| INVITED | Comprehensive Check Image Reader <i>M. Shridhar,</i> <i>University of Michigan-Dearborn, USA</i> | |
| TIII-G-1 | Indexing of Document Images based on Triangular Spatial Relationships <i>P. P. Naveen and D. S. Guru</i> | |
| TIII-G-2 | A Study of Different Kinds of Degradation in Printed Gurmukhi Script <i>M.K. Jindal, R. K. Sharma, and G.S.Lehal</i> | |
| TIII-G-3 | Text/Graphics Separation in Color maps <i>P. P.Roy, J. Lladós, and U. Pal</i> | |

| Session TIV-G: Watermarking | | |
|---------------------------------------|---|----------------------|
| March 07, 2007 | Room: NAB-II Seminar Room | 12:00 – 13:00 |
| Session Chair: to be announced | | |
| TIV-G-1 | An Efficient Digital Watermarking Scheme for Dynamic Estimation of Wireless Channel Condition <i>S. P. Maity, M. K. Kundu, and S. Maity</i> | |
| TIV-G-2 | Image Watermarking Using Krawtchouk Moments <i>A.V. Ramana and P.A. Raj</i> | |
| TIV-G-3 | Image Quality Assessment Complemented with Visual Regions of Interest <i>D.V. Rao, N. Sudhakar, I. R.Babu, and L.P. Reddy</i> | |