MIMI 2007 Programmes

Tuesday, August 14, 2007: Registration

, , ,				
Wednesday, August	15, 2007			
9:00 - 9:10	Opening: chairs: Prof. S. Luo, Prof. D. Comley			
9:10 – 9:40		K1		
9:40 – 10:10	K2			
10:10 - 10:40		К3		
10:40 – 11:00	Tea Break			
11:00 - 11:30	K4			
11:30 – 12:00		K5		
12:00 – 12:30		K6		
12:30	Lunch			
14:00 – 16:00	Session 201 Chair: Prof. D. Caramella	Session 202 Chair: Dr. H. Muller	Poster Session I (301)	
16:00 – 16:20	Tea Break			
16:20 – 17:50	Session 201 Chair: Dr. A. Albrecht	Session 202 Chair: Dr. H. Cho	Poster Session I (301)	
18: 15		Dinner		
Thursday, August 1	6, 2007			
9:00 – 10:20	Workshop I (203) Chair: Dr. C George	Workshop II (204) Chair: Prof. H. Fujita	Poster Session II (302)	
16:00 – 16:20		Tea Break		
10:40 – 12:00	Session 205 Chair Dr. J Clark	Workshop II (204) Chair: Prof. J. H. Kim	Poster Session II (302)	
12:15		Lunch		
14:00 – 16:00	Session 205 Chair: Dr. H. Pohjonen	Session 206 Chair: Dr. F. Turkhaimer		
16:00 - 16:20		Tea Break		
16:20 – 17:50	Session 205 Chair: Dr. R. Bergstrom	Session 206 Chair: Prof. J. Cheng Chen		
18:00	Dinn	er & Closing Ceren	nonv	

Friday, August 17, 2007 (optional): one day city tour to Great Wall and Summer Palace.

Contents of MIMI2007 Proceedings

ID	Title	Authors	Page	
101 Plenary Session				
T59	E-learning in diagnostic imaging	Prof. Davide Caramella, Italy	2	
T58	Complexity Aspects of Image Classification	Dr. Andreas Albrecht, UK	4	
132	Breast CAD: Lessons Learned and Vision for the Future	Prof. Maryellen L. Giger, USA	5	
T62	Synergistic fusion of structural (CT/MRI) and functional (PET) medical images	Dr. Federico Turkheimer, UK	6	
T57	Extending the radiological workplace across the borders	Dr. Hanna Pohjonen, Finland	8	
140	From frame to frameless stereotactic operation	Prof. Zengmin Tian, China	14	
	201 Medical Image Segmentation	n and Registration		
T10	Medical Image Segmentation Based on The Bayesian Level Set Method	Yao-Tien Chen, Din-Chang Tseng	16	
088	A Worm Model Based on Artificial Life for Automatic Segmentation of Medical Image	Jian Feng, Shuqian Luo	28	
T30	An Iterative Reconstruction for Poly-energetic X-ray Computed Tomography	Ho-Shiang Chueh, Wen-Kai Tsai, Chih-Chieh Chang	38	
T16	Application of Tikhonov regularization to super- resolution reconstruction of brain MRI	Xin Zhang, Edmund Y. Lam, Ed X. Wu, Kenneth K.Y. Wong	45	
091	A New Fast Enhancement Algorithm for Head MRI	Xiaolin Tian, Jun Yin, Yankui Sun, Zesheng Tang	52	
087	A New Deformable Model for Real-Time Guide-wire Simulation in Vascular Structure	Qiukui Zhang, Haigron Pascal, Limin Luo	57	
123	DR Image Stitching Based on Feature Points	Jiaxi Shen, Zhengmin Liu, Heqin Zhou, Huanqing Feng	67	
090	A Novel Image Segmentation Algorithm Based on Artificial Ant Colonies	Huizhi Cao, Peng Huang, Shuqian Luo	77	
072	Multi Threshold Segmentation of Brain Magnetic Resonance Image	Jiang Hong, Ren Zhang	89	
T32	Interactive Medical Image Segmentation Algorithm Based on RBF Curve Fitting	Wenming Huang, Xiaojun Wu	96	
083	Preserving Characteristics of Digital Images Based on Kernel Principal Component Analysis	Tongsen Hu, Ting Gui	106	
114	Robust Automatic Segmentation of Cell Nucleus Using Multi-scale Space Level Set Method	Chaijie Duan, Shanglian Bao, Hongyu Lu, Jinsong Lu	114	
T51	Principal Geodesic Analysis for the study of Nonlinear Minimum Description Length	Zhihua Su	126	
202 Medical Informatics				
T39	Learning a frequency based weighting for medical image classification	Tobias Gass, Adrien Depeursinge, Antoine Geissbuhler, Henning Müller	137	
T43	Telemedicine and Cross Boarder Services	Roald Bergstrom	148	
T44	Greek-English Cross Language Retrieval of Medical Information	S. Eliakis, T.Z. Kalamboukis, E. Kotsonis	151	
094	Using ROC Curve to Evaluate ANN properties of Pattern	Baikun Wan, Longlong Cheng,	160	

	Classifying	Dong Ming, Rui-ping Wang	
071	Kernel Random Projection-Support Vector Classifier for	Shutao Li, Xixian Wu, Chen	167
	Cancer Classification using Gene Expression	Liao	
084	Interest Point Based Medical Image Retrieval	Xia Zheng, MingQuan Zhou, XingCe Wang	176
113	Texture Analysis Using Modified Computational Model of Grating Cells in Content-based Medical Image Retrieval	Gang Zhang, Z.M. Ma	184
122	Application of Nonlinear Dynamics In ECG Analysis	Mingjing Yang, Hui Zhang, Qiang Lin	192
T15	A New Solution to Business Entity Change in Hospital Information System	Zhijun Rong, Peigen Li, Xinyu Shao, Baoshang Ying	199
T63	The Open Three Consortium: a world-wide full-service and open-source initiative at the service of people's health-care and inclusion	Paolo Inchingolo	209
T75	A Software Client for Wi-Fi Based Real Time Location Tracking of Patients	Xing Liu, Abhijit Sen, Johannes Bauer, Christian Zitzmann	217
T27	The separation of tongue coat and substance using clustering method	Feng Liu, Boliang Wang, Xiaoyang Huang	229
T65	Bandwidth of Ultrasound Doppler Signal to Distinguish Blood from Tissue and Applications Related to Detection in the Left Ventricle	Sigve Hovda, Havard Rue, Bjorn Olstad	236
203	Workshop 1:Legal, Ethical and S Imaging and Inform		.cal
T71	Principles to Practice: Ethics and Medical Imaging	Penny Duquenoy (UK)	251
T72	Legal Issues regarding Electronic Medical Data	Carlisle George (UK)	251
T73	Grid Computing: Ethical, Legal and Socio-economic issues	Anthony Solomonides (UK)	251
	204 Workshop 2: Computer-ai	ided Diagnosis (CAD)	
125	CAD: State-of-the-art and future	Maryellen Giger (USA)	270
126	CAD on brain, fundus, and breast images	Hiroshi Fujita (Japan)	278
127	CAD on liver CT and MRI	Xuejun Zhang (China)	279
128	CAD on CT colonography	Jong Hyo Kim (Korea)	302
129	CAD on chest CT	Noboru Niki (Japan)	303
130	CAD on breast ultrasography	Ruey-Feng Chang (China)	310
131	CAD on brain imaging	Wieslaw Nowinski (Singapore)	320
	205 PET, fMRI, Ultrasound &	Thermal Imaging	
098	Gender Effect on Functional Networks in Resting Brain	Liang Wang, Chaozhe Zhu, Yong He, Yufeng Zang, Qiuhai Zhong	332
Т36	Transferring Independent Component Analysis Estimated FDG Whole Blood Time Activity Curve to Plasma in Rodents using Blood-Cell-Two-Compartment Model	Jih-Shian Lee, Kuan-Hao Su, Jun-Cheng Lin, Ya-Ting Chuang, Ho-Shiang Chueh, Ren-shyan Liu, Shyu-Jen Wang, Jyh-cheng Chen	341
T14	Three-dimensional dose distribution measurement and mapping with intraoral and panoramic radiographies	Y. H. Huang, C.L. Chen, S.Y. Wang, T. H. Wu, C. C. Yang, J.	353

T45 High-Precision Detection of Facial Landmarks to Estimate Head Motions Based on Vision Models S. Lee Xiaohong W. Gao, Sergey Anishenko, Dmitry	360
Shaposhnikov	300
T33 Evaluation of Reference Tissue Model for Serotonin Transporters Using [123I] ADAM Tracer Bang-Hung Yang, Shyh-Jen Wang, Yuan-Hwa Chou, Tung- Ping Su	369
T46 A Fast, Robust Approach to Segmentation of PET Brain Xiaohong Wang Gao, John Clark Images	377
The Noninvasive 3-D Reconstruction of Inner Heat Source and Temperature Field for Biological Body by Monte Carlo Method" Cheng Chen, Kai-Yang Li and Shao-Ping Zhang	389
O99 The Noninvasive Reconstruction of 3-D Temperature Dai-Qiang Yin, Kai-Yang Li, Field in Biological Bodies by Boundary Element Method Shao-Ping Zhang	399
T66 New Doppler-Based Imaging Method in Sigve Hovda, Havard Rue, Echocardiography with Applications in Bjorn Olstad Blood/Tissue Segmentation	408
T38 Removing the Non-Vertebral parts of the Ultrasound Images of Human Spine Ketut E. Purnama, Michael. H. F. Wilkinson, Albert G. Veldhuizen	422
The Research of Omnidirectional M-mode Qiang Lin, Hua Zhang, RuiZeng Echocardiography Based on DICOM Standard Lai, JianBin Wang	430
A Model-based Approach to Improve Thickness Measurement of Acetabular Cartilage using Magnetic Resonance Imaging Yuanzhi Cheng, Shuguo Wang, Yili Fu, Yoshinobu Sato, Shinichi Tamura	437
T50 Comparison of Chang's with Sorenson's Attenuation Sayed Inayatullah Shah Correction Method by Varying Linear Attenuation Coeffecient Values in Tc-99m SPECT Imaging	448
T61 Data Separation of 3-D scanning result from dental cast Yong Wang, Zhongke Li	456
An improved median filtering system and its application of calcified lesions' detection in digital mammograms Kun Wang, Yuejian Xie, Sanli Li, Yunpeng Chai	462
206 3D Reconstruction & Visualization	
O86 Applications of the Visible Korean Human Jun Won Lee, Min Suk Chung, Jin Seo Park	471
Preliminary Application of the First Digital Chinese Yuan Yuan, Lina Qi, Shuqian Human Luo	481
T31 3D Colored Head Reconstruction and Visualization Using Chinese Visible Human Fan Bao, Yankui Sun, Xiaolin Tian, Zesheng Tang	491
A Fast Method to Segment the Liver according to Couinaud's Classification Shao-hui Huang, Bo-liang Wang, Ming Cheng, Wei-li Wu, Xiao-yang Huang, Ying Ju	500
The Application of Watersnakes Algorithm in Xiang Lu, Shuqian Luo Segmentation of the Hippocampus from Brain MR Image	507
T09 Spiral MRI Reconstruction using Least Squares Dong Liang, Edmund Y. Lam, Quantization Table George S. K. Fung	517
117 A Hybrid Method for Automatic and Highly Precise VHD Chen Ding, Yankui Sun, Xiaolin Background Removal Tian, Zesheng Tang	523
O89 Seven Tesla MRIs and Advanced Anatomic Images of Hyo Seok Park, Min Suk Chung, Cadaver Head Jin Seo Park, Zang-Hee Cho	532
O97 Analytic Modeling and Simulating of the Cornea with Finite Element Method Jie-zhen Xie, Bo-liang Wang, Ying Ju, Shi-hui Wu	541
O95 An Improved Hybrid Projection Function for Eye Yi Li, Xia Hu, Dong Ming, Bai-	549

081	Spectropolarimetric Imaging for Skin Characteristics Analysis	Yongqiang Zhao, TieHeng Yang, PeiFeng Wei, DaoRong Wang, Quan Pan	559
111	Image-Based Augmented Reality Model for Image- Guided Surgical Simulation	Junyi Zhang, Shuqian Luo	567
	301 Poster session I, Wednesda	ay, August 15, 2007	
082	Segmentation and 3D Visualization of Cerebral Blood Vessels from Magnetic Resonance Angiography Images	Shifeng Zhao, Mingquan Zhou, Xingce Wang	579
085	CT Image Contrast Enhancement Algorithms Based on The Shapes and Nonlinear Measurements	Jianmin Dong, Mingquan Zhou, Guohua Geng	589
093	Effects of scattering on ultrasound-modulated scattering light in turbid media	Cuncheng Weng	597
101	On Segmenting X-ray CT Images of Lungs	Qixin Gao, Dazhe Zhao, Jiren Liu	604
107	An Improved Run Length Encoding Method with Its Application on Compression of CT Images	Xiaoyang Huang, Boliang Wang, Shaohui Huang, Ying Ju, Lili Huang	612
108	Correlation between Epicardial Electrogram and Body Surface Electrocardiogram of Rabbit	Qian Wang, Zheng-Guo Zhang	619
109	Application of Elution Time in Peptide Identification	Rui-Feng Yang, Wei Sun, You- He Gao, Zheng-Guo Zhang	627
110	Analyzing Method of the Inner Heat Source in Breast Based on Infrared Imaging and Clinical Application	Yong Liu, Kai-Yang Li, Xian-Lin Zhang, Sheng-Rong Sun, Yin-Wen Wan	634
120	Multi-fractal detrended fluctuation analysis on CT images of hepatic fibrosis	Ping Zhou, Shaoyu Qiao, Longzheng Tong	644
T67	Breast Tumor Detection in Medical Image Processing using Wavelet Enhancement	A.R. Behrad, P. Derakhshan.B	651
3(02 Poster session II, Thursday, A	August 16, 2007	
124	Characterization of the Correlation, SPM, ICA and Specified-Resolution Wavelet Methods in Analysis of fMRI Study with Visual Task	Liang-Kung Chen, Chia-Lin Chen, Yung-Hui Huang, Kun- Mu Lu, Tung-Hsin Wu	659
T04	A Multi-Resolution Framework for Real-Time Medical Image Registration	Huaijing Zhang and Jing Ren	668
T13	Evaluating the screening power of Cognitive Abilities Screening Instrument by Voxel-Based Morphometry for Brain Atrophy Analysis in Alzheimer's Disease	Yi-Ying Wu, Bang-Hung Yang, Ching-Ching Yang, Tung-Hsin Wu	678
T24	Iris Recognition for Authentication	Parul Shah Jyoti Kashyap	680
T28	Significance of Region of Interest applied on MRI Image in TeleRadiology-Telemedicine	Pervez Akhtar, Muhammad Iqbal Bhatti, Tariq Javid Ali, Muhammad Abdul Muqeet	681
T37	Transcranial Ultrasound: Brain Phantom and device development for non-invasively	Songeeta Palchaudhuri	682
T52	A Parallel MRI Reconstruction Method Based on Nonlinear Diffusion Filter	Hong Jun Tian, Siping Chen, Chongxun Zheng, Pan Lin	683
T55	Novel fluorescent x-ray tomography system for atomic imaging	Eiichi Sato	689
T74	Visualization of volume information from PET data	Oyewole Oyekoya, X.W.Gao	690
T70	Wavelet-based compression of medical images: filter- bank selection and evaluation	Emhimed Mohamed Saffour	693