

Program

Monday 07.06.2010			
8:00	Registration		
9:00	Opening		
Moderator: prof. dr hab. inż. Ewa Piętka			
9:30	Invited lecture: prof. dr hab. n. med. Stanislav Czudek & prof. dr hab. n. med. Józef Dzielicki <i>Minimally Invasive surgery - history and prospective</i>		
10:30	Invited lecture: prof. dr hab. n. med. Zbigniew Kotwica <i>The use of computer assisted planning in brain and spine surgery</i>		
11:30	Coffee break		
12:00	Invited lecture: prof. dr hab. inż. lek. med. Halina Podbielska <i>Information technologies in biomedicine – the way to preventive, predictive and personalized medicine</i>		
13:00	Lunch		
Image processing and CAD Chair: prof. dr hab. inż. Artur Przelaskowski		CAS Chair: prof. dr hab. inż. Piotr Augustyniak	
14:05	The method of brain structure extraction for CT-based stroke detection (p.133) A. Rutczyńska, A. Przelaskowski, M. Jasionowska	14:05	Computer-assisted navigation in brain tumor surgery (p.203) Z. Kotwica, A. Saracen
14:20	An instrument for monitoring of inflow and washout of an optical contrast agent into the brain (p.85) D. Milej, M. Kacprzak, N. Żolek, P. Sawosz, R. Maniewski, A. Liebert	Signal processing	
14:35	Multiseries MR Data in Brain Tumours Segmentation (p.53) J. Kawa, P. Szwarz, B. Bobek-Billewicz, E. Piętka	14:20	Myriad filter computation with the 2nd order approximation polynomial (p.239) T. Pander
14:50	4D Segmentation of Ewing's Sarcoma in MR Images (p.91) J. Czajkowska, P. Badura, E. Piętka	14:35	Electrophysiology-based monitoring system for human in motion (p.251) J. Jaworek, E. Kantoch
15:05	Anterior and posterior cruciate ligament – extraction and 3D visualization (p.115) P. Zarychta, A. Zarychta-Bargiela	14:50	Analysis of Major Adverse Cardiac Events with Entropy-based Complexity (p.261) T. D.Pham, C. C.To, H. Wang, X. Zhou
15:20	Computerized Evaluation of Abnormal Hand Bone Patterns in Skeletal Dysplasias (p.123) A. Gertych, M. Clond, R. Lachman, D. Rimoin	15:05	The Analysis of HR in EGG Examination (p.283) S. Pietraszek, D. Komorowski
15:35	Photodynamic Image e-Atlas in Diagnostic and Treatment Procedures (p.45) E. Piętka, A. Sieroń, D. Spinczyk, P. Szabelak, S. Kwiatek, J. Murawski	15:20	Convergence Improving in Optimization-Based Estimation of Electrooculography and Blinking Signals (p.293) R. Krupiński, P. Mazurek
16:00	Coffee break		
Image processing and CAD Chair: prof. dr hab. inż. Tadeusz Pałko		Biometrics Chair: prof. dr hab. inż. lek. med. Halina Podbielska	
16:20	A Two-Step Method for Detection of Architectural Distortions in Mammograms (p.73) M. Jasionowska, A. Przelaskowski, A. Rutczyńska, A. Wroblewska	16:20	An idea of the human voice reaction measurement system under the aspect of behavioral biometric (p.219) A.W. Mitas, M.D. Bugdol
16:35	Fractal Analysis of Dental Radiographic Images in the Irregular Regions of Interest (p.191) E. Oczeretko, M. Borowska, I.J. Szarmach, A. Kitlas, J. Szarmach, A. Radwański	16:35	Biomedically added car driver safety system (p.229) A.W. Mitas, A. Rygula
16:50	Reconstruction of the pelvic region based on the statistical shape modeling (p.165) P. Skadlubowicz, Z. Król, Z. Wrobel, F. Hefti, A. Krieg	Bioinformatics	
17:05	A Complete Gradient Clustering Algorithm for Features Analysis of X-ray Images (p.15) M. Charytanowicz, J. Niewczas, P. Kulczycki, P.A. Kowalski, S. Łukasik, S. Żak	16:50	Classification of DNA microarray data with Random Forests (p.305) T. Stokowy
17:20	Combined DICOM and HL7 viewer as a bridge from content-based image retrieval to computer-aided diagnosis (p.145) P. Welter, F. Topal, S. Jansen, T. M. Deserno, J. Riesmeier, Ch. Grouls, R. W. Gunther	17:05	Homogeneity Assessment of Cell Populations for High Content Screening Platforms (p.309) A. Gertych, J. Tajbakhsh
17:35	3D diagnostic system for anatomical structures detection based on parameterized method of body surface analysis (p.153) W. Glinkowski, R. Sitnik, M. Witkowski, J. Michoński	17:20	Automated cell nuclei segmentation in breast cancer fine needle biopsy smears (p.321) M. Kowal, A. Obuchowicz
17:35		17:35	Evaluation of Antibacterial Agents Activity (p.341) I. Buzalewicz, K. Wysocka-Król, K. Kowal, H. Podbielska
18:15	Concert		
19:00	Gala dinner		

Conference on Information Technologies in Biomedicine

Tuesday 08.06.2010			
Moderator: prof. dr hab. inż. Ewa Piętka			
9:00	Invited lecture: dr n. med. Wojciech Glinkowski <i>Medicus way from auscultation and percussion to telemedicine and telecare</i>		
10:00	Invited lecture: dr hab. inż. Marek Gzik <i>Computer modeling and experimental research of human motion organ</i>		
11:00	Coffee break/Poster session		
Telemedicine Chair: prof. dr hab. n. med. Zbigniew Kotwica		Biomechanics Chair: prof. dr hab. inż. Zbigniew Paszenda	
11:30	Discrete Nonlinear Control of the Diagnostic Quality in Distributed Telemedical Systems (p.355) P. Augustyniak	11:30	Control system for a limb rehabilitation robot (p.423) A. Michnik, J. Brandt, Z. Szczurek, Z. Paszenda, R. Michnik, J. Jurkoic
11:45	Data integration in multimodal home care surveillance and communication system (p.391) P. Augustyniak, M. Smoleń, A. Broniec, J. Chodak	11:45	Methodology of examining fracture surfaces of biomaterials by means of modelling and multifractal analysis (p.431) S. Stach, Z. Wróbel
12:00	A Graph Representation of the Subjects Time State Space (p.379) G. Ślusarczyk, P. Augustyniak	12:00	Numerical Analysis of Low Contact Plate Made of Alternative Metallic Biomaterials (p.457) M. Kaczmarek
12:15	Sleep Evaluation Device for Home-Care (p.367) M. Smoleń, K. Czopek, P. Augustyniak	12:15	Metatarsal osteotomy using double-threaded screws biomechanical analysis (p.465) A. Ziebowicz, A. Kajzer, W. Kajzer, J. Marciniak
12:30	Open Standards As a Basis of the Information Services Platform in Health Care Area (p.403) K. Frączkowski, M. Szczepaniak	12:30	Biomechanical behaviour of surgical drills in simulated conditions of drilling in a bone (p.473) M. Basiaga, Z. Paszenda, J. Szewczenko
12:45		12:45	ACL Rehabilitation Enhanced by 3D Modeling Software (p.439) M. Krótkiewicz, K. Wojtkiewicz, R. Kardas
13:00	Lunch		
14:00 - 15:00	Poster session		
15:15	Social event		
19:00	Dinner - fire place		

Poster Session	
On Hybrid Fuzzy Clustering Method (p.3) T. Przybyła, J. Jeżewski, D. Roj	Adaptive Time-Varying Frequency Characteristic Filtering of ECG Signal (p.273) A. Momot, M. Momot
The Dynamics of the Clusterization Process in an Adaptive Method of Image Segmentation (p.25) A. Lamża, Z. Wróbel	Model of optical sectioning by using structured light in a conventional microscope (p.333) J. Juszczyk
Application of Adaptive Weighed Averaging to Digital Filtering of 2D Images (p.33) A. Momot	Application of motion analysis systems in the designing of rehabilitation device (p.417) R. Michnik, J. Jurkoic, Z. Paszenda, A. Michnik, M. Bachorz, W. Rycerski, J. Janota
Symmetry plane of the brain on perfusion MRI images (p.65) R. H. Kartaszyński, P. Mikołajczak	Specific evaluation of pelvic radiograms and HIP BMD in structural scoliosis reflectorica and reactive pain conditions of the backbone (p.491) A. Dyszkiewicz, P. Poleć, D. Chachuński, P. Kępiński, J. Zajdel
Segmentation of Stained Lymphoma Tissue Section Images (p.101) U. Neuman, A. Korzyńska, C. Lopez, M. Lejeune	Fem analysis of instruments used in root canal preparation (p.483) W. Walke, Z. Paszenda, P. Winiarski
Parametric Curves in Liver Deformation for Laparoscopic Purposes (p.183) M. Bugdol	Numerical analysis of spine stabilizers on lumbar part of spine (p.447) M. Kiel, J. Marciniak, M. Basiaga, J. Szewczenko
Computer aided alternative methods of dental implant placement (p.211) J. Żmudzki	Automatic measuring of the iridocorneal angle on the optical coherence tomographic image of the anterior segment of the eye (p.175) R. Koprowski, Z. Wróbel, A. Nowińska, E. Wylęgała
Analysis of Magnetic Field Distribution And Mechanical Vibration of Magnetic Field Exciter Under Different Voltage Supply (p.613) M. Szczygieł, T. Trawinski, J. Wyszowska, K. Kluszczynski	

Wednesday 09.06.2010			
Bronchoscopy <i>Chair: prof. dr hab. inż. Tomasz Zieliński</i>			
09:00	The BRONCHOVID - computer system supporting bronchoscopy laboratory <i>(p.511)</i> <i>M. Duplaga, J. Bułat, M. Leszczuk, P. Romaniak, M. Socha, P. Turcza</i>		
09:15	3D segmentation and visualisation of mediastinal structures adjacent to tracheobronchial tree from CT data <i>(p.523)</i> <i>A. Skalski, M. Socha, M. Duplaga, K. Duda, T. Zieliński</i>		
09:30	Algorithms for automatic recognition of non-informative frames in video recordings of bronchoscopic procedures <i>(p.535)</i> <i>M. Grega, M. Leszczuk, M. Duplaga, R. Frączek</i>		
09:45	Using MPEG-7 Descriptors and Scorecard Model to Automatically Recognize of Medical Events in The Record of Bronchoscopy Video <i>(p.547)</i> <i>L. Janowski</i>		
10:00	Three stage method assisting intrabronchial tumor mass recognition in real bronchoscopy <i>(p.559)</i> <i>A. Przelaskowski, R. Józwiak</i>		
10:15	Application of SIFT image analysis method to support of transbronchial needle-aspiration biopsy <i>(p.571)</i> <i>P. Pawlik</i>		
10:30	Coffee break		
Bronchoscopy <i>Chair: prof. dr hab. inż. Tomasz Zieliński</i>		Warsztaty Medycyna Fotodynamiczna <i>Chair: prof. dr hab. n. med. Aleksander Sieroń</i>	
11:00	Analysis of images of bronchial tree ramifications for summarization of bronchoscopic videos <i>(p.583)</i> <i>Z. Mikrut, M. Duplaga</i>	11:00	Podstawy medycyny fotodynamicznej <i>E. Mazurek, S. Kwiatek</i>
11:15	The prototype software for video summarization of bronchoscopy procedures (leaving the most representative fragments) with the use of mechanisms designed to identify, index and search <i>(p.587)</i> <i>M. Leszczuk, M. Grega</i>	11:30	Obrazowanie w medycynie fotodynamicznej <i>A. Kawczyk-Krupka, W. Latos</i>
11:30	Perception enhancement of bronchoscopic video <i>(p.599)</i> <i>G. Ostrek, A. Przelaskowski, M. Duplaga, A. Rutczyńska</i>	12:00	Archiwizacja i udostępnianie obrazów fotodynamicznych <i>E. Pietka, D. Spinczyk</i>
		12:30	Klinika PDT <i>A.Sieroń</i>
13:00	Lunch & Closing		
		14:00	Warsztaty Komputerowe – Zdalna edukacja z wykorzystaniem elektronicznego atlasu obrazów fotodynamicznych