

Contents

Discarding Non Informative Regions for Efficient Colonoscopy Image Analysis	1
<i>Jorge Bernal, Debora Gil, Carles Sánchez, and F. Javier Sánchez</i>	
Video-Specific SVMs for Colonoscopy Image Classification	11
<i>Siyamalan Manivannan, Ruixuan Wang, Maria P. Trujillo, Jesus Arbey Hoyos, and Emanuele Trucco</i>	
Impact of Keypoint Detection on Graph-Based Characterization of Blood Vessels in Colonoscopy Videos	22
<i>Joan M. Núñez, Jorge Bernal, Miquel Ferrer, and Fernando Vilariño</i>	
A Novel Approach on the Colon Wall Segmentation and Its' Application . . .	34
<i>Huafeng Wang, Wenfeng Song, Lihong Li, Yuan Cao, Haixia Pan, Ming Ma, Jiang Huang, Guangming Mao, and Zhengrong Liang</i>	
Cerebral Ventricle Segmentation from 3D Pre-term IVH Neonate MR Images Using Atlas-Based Convex Optimization	46
<i>Wu Qiu, Jing Yuan, Martin Rajchl, Jessica Kishimoto, Eranga Ukwatta, Sandrine de Ribaupierre, and Aaron Fenster</i>	
Fully Automatic CT Segmentation for Computer-Assisted Pre-operative Planning of Hip Arthroscopy	55
<i>Chengwen Chu, Cheng Chen, and Guoyan Zheng</i>	
A Comparative Study of Ego-Motion Estimation Algorithms for Teleoperated Robotic Endoscopes	64
<i>Gustavo A. Puerto-Souza, Aaron N. Staranowicz, Charreau S. Bell, Pietro Valdastri, and Gian-Luca Mariottini</i>	
Image-Based Navigation for a Robotized Flexible Endoscope	77
<i>Nanda van der Stap, C.H. Slump, Ivo A.M.J. Broeders, and F. van der Heijden</i>	
Is Multi-model Feature Matching Better for Endoscopic Motion Estimation? . . .	88
<i>Xiang Xiang, Daniel Mirota, Austin Reiter, and Gregory D. Hager</i>	
Algorithms for Automated Pointing of Cardiac Imaging Catheters	99
<i>Paul M. Loschak, Laura J. Brattain, and Robert D. Howe</i>	

Endoscopic Sheffield Index for Unsupervised <i>In Vivo</i> Spectral Band Selection	110
<i>Sebastian J. Wirkert, Neil T. Clancy, Danail Stoyanov, Shobhit Arya, George B. Hanna, Heinz-Peter Schlemmer, Peter Sauer, Daniel S. Elson, and Lena Maier-Hein</i>	
Towards Personalized Biomechanical Model and MIND-Weighted Point Matching for Robust Deformable MR-TRUS Registration	121
<i>Yi Wang, Dong Ni, Jing Qin, Muqing Lin, Xiaoyan Xie, Ming Xu, and Pheng Ann Heng</i>	
Author Index	131

Computer-Assisted and Robotic Endoscopy
First International Workshop, CARE 2014, Held in
Conjunction with MICCAI 2014, Boston, MA, USA,
September 18, 2014. Revised Selected Papers
Luo, X.; Reichl, T.; Mirota, D.; Soper, T. (Eds.)
2014, X, 130 p., Softcover
ISBN: 978-3-319-13409-3