















- [11] Cruz-Roa A, Caicedo JC, Gonzalez FA. Visual pattern analysis in histopathology images using bag of features. In: Bayro-Corrochano E, Eklundh J-O, editors. Proceedings of the 14th Iberoamerican conference on pattern recognition: progress in pattern recognition, image analysis, computer vision, and applications, Vol. 5856 of Lecture Notes in Computer Science. 2009. p. 521-8.
- [12] Allalou A, van de Rijke FM, Tafrechi RJ, Raap AK, Wahlby C. Image based measurements of single cell mtDNA mutation load. In: Ersboll B, Pedersen K, editors. Image analysis, vol. 4522 of Lecture Notes in Computer Science. 2007. p. 631-40.
- [13] Diaz G, Gonzalez FA, Romero E. A semi-automatic method for quantification and classification of erythrocytes infected with malaria parasites in microscopic images. *Journal of Biomedical Informatics* 2009;42(2):296-307.
- [14] Diamond J, Anderson NH, Bartels PH, Montironi R, Hamilton PW. The use of morphological characteristics and texture analysis in the identification of tissue composition in prostatic neoplasia. *Human Pathology* 2004;35(9):1121-31.
- [15] Doyle S, Hwang M, Shah K, Madabhushi A, Feldman M, Tomaszewski J. Automated grading of prostate cancer using architectural and textural image features. In: 4th IEEE international symposium on biomedical imaging: nano to macro, 2007. ISBI 2007. 2007. p. 1284-7.
- [16] Kong J, Sertel O, Shimada H, Boyer KL, Saltz JH, Gurcan MN. Computer-aided evaluation of neuroblastoma on whole-slide histology images: classifying grade of neuroblastic differentiation. *Pattern Recognition* 2009;42(6):1080-92.
- [17] Mosaliganti K, Janoos F, Irfanoglu O, Ridgway R, Machiraju R, Huang K, et al. Tensor classification of n-point correlation function features for histology tissue segmentation. *Medical image analysis* 2009;13(1):156-66.
- [18] Sertel O, Kong J, Catalyurek U, Lozanski G, Saltz J, Gurcan M. Histopathological image analysis using model-based intermediate representations and color texture for follicular lymphoma grading. *Journal of Signal Processing Systems* 2009;55(1):169-83.
- [19] Orlov N, Shamir L, Macura T, Johnston J, Eckley DM, Goldberg IG. Wnd-charm: multi-purpose image classification using compound image transforms. *Pattern Recognition Letters* 2008;29(11):1684-93.
- [20] Tang H, Hanka R, Ip H. Histological image retrieval based on semantic content analysis. *IEEE Transactions on Information Technology in Biomedicine* 2003;7(1):26-36. Naik J, Doyle S, Basavanally A, Ganesan S, Feldman MD, Tomaszewski JE, et al. A boosted distance metric: application to content based image retrieval and classification of digitized histopathology. *SPIE Medical Imaging: Computer-Aided Diagnosis* 2009;7260, 72603F1-12.
- [21] Peng H. Bioimage informatics: a new area of engineering biology. *Bioinformatics* 2008;24(17):1827-36.
- [22] Swedlow JR, Goldberg IG, Eliceiri KW. Bioimage informatics for experimental biology. *Annual review of biophysics* 2009;38(1):327-46.
- [23] Swedlow JR, Eliceiri KW. Open source bioimage informatics for cell biology. *Trends in Cell Biology* 2009;19(11):656-60.
- [24] Tommasi T, Orabona F, Caputo B. Discriminative cue integration for medical image annotation. *Pattern Recognition* 2008;29(15):1996-2002.
- [25] Madabhushi A. Digital pathology image analysis: Opportunities and challenges (editorial). *Imaging In Medicine* 2009;1(1):7-10.
- [26] Madabhushi A, Basavanally A, Doyle S, Agner S, Lee G. Computer-aided prognosis: predicting patient and disease outcome via multi-modal image analysis. In: Proceedings of the 2010 IEEE international conference on biomedical imaging: from nano to macro, ISBI'10. 2010. p. 1415-8.
- [27] Bosch A, Munoz X, Oliver A, Martí J. Modeling and classifying breast tissue density in mammograms. In: Proceedings of the 2006 IEEE Computer Society Conference on computer vision and pattern recognition, vol. 2 of CVPR '06. 2006. p. 1552-8.
- [28] Avni U, Greenspan H, Sharon M, Konen E, Goldberger J. X-ray image categorization and retrieval using patch-based visual words representation. In: ISBI'09: proceedings of the sixth IEEE international conference on symposium on biomedical imaging. 2009. p. 350-3. Bosch A, Munoz X, Martí R. Review: which is the best way to organize/classify images by content? *Image and Vision Computing* 2007;25:778-91.
- [29] Hofmann T. Unsupervised learning by probabilistic latent semantic analysis. *Machine Learning* 2001;42:177-96.
- [30] Blei DM, Ng AY, Jordan MI. Latent dirichlet allocation. *Journal of Machine Learning Research* 2003;3:993-1022.
- [31] Rogers S, Girolami M, Campbell C, Breitling R. The latent process decomposition of cDNA microarray data sets. *IEEE/ACM Transactions on Computational Biology and Bioinformatics* 2005;2:143-56.
- [32] Bicego M, Lovato P, Ferrarini A, Delledonne M. Biclustering of expression microarray data with topic models. In: Proceedings of the 2010 20th international conference on pattern recognition, vol. 0 of ICPR '10. 2010. p. 2728-31.
- [33] Diaz G, Romero E. Histopathological image classification using stain component features on a pLSA model. In: Bloch I, Cesar R, editors. Proceedings of the 15th Iberoamerican congress conference on progress in pattern recognition, image analysis, computer vision, and applications, vol. 6419 of CIARP'10. 2010. p. 55-62.
- [34] Csurka G, Dance CR, Fan L, Willamowski J, Bray C. Visual categorization with bags of keypoints. In: ECCV international workshop on statistical learning in computer vision. 2004. p. 1-22.
- [35] Nowak E, Jurie F, Triggs B. Sampling strategies for bag-of-features image classification. In: Leonardis A, Bischof H, Pinz A, editors. Computer vision - ECCV 2006, vol. 3954 of Lecture Notes in Computer Science. 2006. p. 490-503.
- [36] Li J, Allinson NM. A comprehensive review of current local features for computer vision. *Neurocomputing* 2008;71(10-12):1771-87.
- [37] Lowe DG. Distinctive image features from scale-invariant keypoints. *International Journal of Computer Vision* 2004;60:91-110.
- [38] Kamiya Y, Takahashi T, Ide I, Murase H. A multimodal constellation model for object category recognition. In: Huet B, Smeaton A, Mayer-Patel K, Avrithis Y, editors. Advances in multimedia modeling, vol. 5371 of Lecture Notes in Computer Science. 2009. p. 310-21.
- [39] Deselaers T, Ferrari V. Global and efficient self-similarity for object classification and detection. In: IEEE computer society conference on computer vision and pattern recognition, CVPR 2010. 2010. p. 1633-40.
- [40] Han J, Kamber M. Data mining: concepts and techniques. Morgan Kaufmann; 2000.
- [41] Hsu W, Lee ML, Zhang J. Image mining: trends and developments. *Journal of Intelligent Information Systems* 2002;19:7-23.
- [42] Berlage T. Analyzing and mining image databases. *Drug Discovery Today* 2005;10(11):795802.
- [43] Hsu W, Lee ML, Zhang J. Image mining: trends and developments. *Journal of Intelligent Information Systems* 2002;19:7-23.



