[149] H. Henry Yue and Masayuki Tomoyasu. Weighted principal component analysis and its applications to improve fdc performance. In *Conference on decision and control*, 2004.

[150] Stella X. Yu and Jianbo Shi. Multiclass spectral clustering. In *ICCV '03: Proceedings of the Ninth IEEE International Conference on Computer Vision*, page 313, Washington, DC, USA, 2003. IEEE Computer Society.

[151] P Hansen and N Mladenovic. J-means: a new local search heuristic for minimum sum of squares clustering. *Pattern Recognition*, 34:405–413, 2001.

[152] G. Hamerly and C. Elkan. Alternatives to the k-means that find better clusterings. *Pattern Recognition*, 2002.

[153] J. L. Rodríguez Sotelo, D. Peluffo, D. Cuesta Frau, D. Peluffo Ordónez, and G. Castellanos Domínguez. Non-parametric density-based clustering for cardiac arrhythmia analysis. *Computers in cardiology. CINC*, 2009.

[154] Sangkeun Lee and M.H. Hayes. Properties of the singular value decomposition for efficient data clustering. *Signal Processing Letters, IEEE*, 11(11):862–866, Nov. 2004.

[155] Andrew Y. Ng, Michael I. Jordan, and Yair Weiss. On spectral clustering: Analysis and an algorithm. In *Advances in Neural Information Processing Systems 14*, pages 849–856. MIT Press, 2001.

[156] Lihi Zelnik-manor and Pietro Perona. Self-tuning spectral clustering. In *Advances in Neural Information Processing Systems 17*, pages 1601–1608. MIT Press, 2004.

[157] S.M.M. Martens, M. Mischi, S.G. Oei, and J.W.M Bergmans. An improved adaptive power line interference canceller for electrocardiography. *IEEE transactions on Biomedical Engineering*, 53(11):2220 – 2231, November 2006.

[158] D. Kicmerova. Modelling of arrhythmics ecg signals with mcsharrys model. In *Radioelektronika, 2007. 17th International Conference*, pages 1 –5, 24-25 2007.

[159] Address Dr, Riccardo Poli, Riccardo Poli, Riccardo Poli, Stefano Cagnoni, Stefano Cagnoni, Guido Valli, and Guido Valli. Genetic design of optimum linear and non-linear qrs detectors. *IEEE Trans. on Biomed. Engineering*, 42(42):1137–1141, 1995.

[160] W. A. H. Engelse and C. Zeelenberg. A single scan algorithm for qrs-detection and feature extraction. *Computers in Cardiology*, 6:37–42, 1979.

[161] M.L.Mehta. *Random matrices*. Elsevier/Academic Press, 2004.

[162] E. P. Wigner. On the distribution of the roots of certain symmetric matrices. volume 67, pages 325–327. Ann. of Math., 1958.

[163] Z. Furedi and J. Komlos. The eigenvalues of random symmetric matrices. volume 1, pages 233 – 241. Combinatorica, 1981.

[164] W. Hoeffding. Probability inequalities for sums of bounded random variables. In *Journal of the American Statistical Association*, volume 58, pages 13–30, 1963.

[165] D.D Lee and H.S. Seung. Learning the parts of objects by non-negative matrix factorization. *Nature*, 401:788–791, 1999.

[166] O. Bousquet and D.J. Herman. On the complexity of learning the kernel matrix. *NIPS*, 2003.

[167] T. Oates, L. Firoiu, and P. Cohen. Clustering time series with hidden markov models and dynamic time warping. Computer Science Department, LGRC, University of Massachusetts.

[168] José Luis Rodríguez-Sotelo, David Cuesta-Frau, and César Germán Castellanos-Domínguez. An improved method for unsupervised analysis of ecg beats based on wt features and j-means clustering. In *Computers in Cardiology, 2007*, pages 581 –584, sept. 2007.

[169] P. K. Chan, M. D. F. Schlag, and J. T. Zien. K-way ratio cut partitioning and clustering. *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems*, 13:1088 – 1096, 1994.

[170] Bruce Hendrickson and Robert Leland. An improved spectral graph partitioning algorithm for mapping parallel computations. *SIAM Journal on Scientific Computing*, 16(2):452–469, 1995.

[171] H. Ishikawa and D. Geiger. Segmentation by grouping junctions. In *CVPR '98: Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, page 125, Washington, DC, USA, 1998. IEEE Computer Society.

[172] Jianbo Shi and J. Malik. Normalized cuts and image segmentation. *Pattern Analysis and Machine Intelligence, IEEE Transactions on*, 22(8):888–905, Aug 2000.