

## 参考文献

### 3.章

- [3.1] G. Svane, E. J. Potchen, A. Sierra, and E. Azavedo, *Screening Mammography, Breast Cancer Diagnosis in Asymptomatic Women*. St. Louis, Missouri: Mosby-Year Book, 1993.
- [3.2] M. Le-Gal, G. Chavanne, and D. Pellier, "Diagnostic value of clustered microcalcifications discovered by mammography (apropos of 227 cases with histological verification and without a palpable breast tumor)," *Bull Cancer*, vol. 71(1), pp. 57-64, 1984.
- [3.3] M. Rossenlll-Del-Turco, S. Ciatto, P. Bravetti, and P. Pacini, "The significance of mammographic calcifications in early breast cancer detection," *Radiol. Med.*, vol. 72, pp. 7-12, 1986
- [3.4] S. Ciatto, L. Cataliotti, and Y. Distanto, "Nonpalpable lesions detected with mammography: review of 512 consecutive cases," *Radiology*, vol. 165(1), pp. 99-102, 1987.
- [3.5] E. A. Sickles, "Mammographic features of 300 consecutive nonpalpable breast cancer," *Am. J. Roentgenol*, vol. 146(4), pp. 661-663, 1986.
- [3.6] P. C. Stommer, J. L. Connolly, J. E. Meyer, and J. R. Harris, "Clinically occult ductal carcinoma in situ detected with mammography: analysis of 100 cases with radiologic-pathologic correlation," *Radiology*, vol. 172(1), pp. 235-241, 1989.
- [3.7] Y. C. Wu, M. T. Freedman, A. Hasegawa, R. A. Zuurbier, S. C. B. Lo, and S. K. Mun, "Classification of Microcalcifications in Radiographs of Pathologic Specimens for the Diagnosis of Breast Cancer," *Acad. Radiol.*, vol. 2, pp. 199-204, 1995.
- [3.8] D. L. Thiele, C. Kimme-Smith, T. D. Johnson, M. McCombs, and L. W. Bassett, "Using tissue texture surrounding calcification clusters to predict benign vs malignant outcomes," *Medical Physics*, vol. 23(4), pp. 549-555, 1996.
- [3.9] Y. Jiang, R. M. Nishikawa, D. E. Wolverton, C. E. Metz, M. L. Giger, R. A. Schmidt, C. J. Vyborny, and K. Doi, "Malignant and benign clustered microcalcifications: Automated feature analysis and classification," *Radiology*, vol. 198, pp. 671-678, 1996.
- [3.10] O. Tsujii, A. Hasegawa, Y. C. Wu, S. C. B. Lo, M. T. Freedman, and S. K. Mun, "Classification of Microcalcifications in Digital Mammograms for the Diagnosis of Breast Cancer," *SPIE Medical Imaging*, vol. 2710, pp. 794-804, 1996.
- [3.11] Suckling J, et. al., "The Mammographic Image Analysis Society Digital Mammogram Database," *Exerpa Medica, International Congress Series 1069*, pp. 375-378, 1994.

- [3.12] A. K. Jain, *Fundamentals of Digital Image Processing*. Prentice–Hall International, 1989.
- [3.13] Z. Chi, and H. Yan, “Feature evaluation and selection based on an entropy measure with data clustering,” *Opt. Eng.*, vol. 34(12), pp. 3514–3519, 1995.
- [3.14] D. S. Broomhead, and D. Lowe, “Multi–variable functional interpolation and adaptive networks,” *Complex Anal. Ser. B2*, pp. 205, 1988.
- [3.15] D. E. Rumelhart and J. L. McClelland, *Parallel Distributed Processing: Explorations in the Microstructure of Cognition, Vol. 1: Foundation*. Cambridge: The MIT Press, 1986.
- [3.16] A. N. Tikhonov, and V. Y. Arsenin, *Solutions of Ill–Posed Problems*. Washington: Winston, 1977.
- [3.17] C. Bishop, “Improving the Generalization Properties of Radial Basis Function Neural Networks,” *Neural Comp.*, vol. 3, pp. 579–588, 1991.
- [3.18] D. J. C. Mackay, “Bayesian interpolation,” *Neural Comp.*, vol. 4(3), pp. 415–447, 1992.
- [3.19] W. H. Press, S. A. Teukolsky, W. T. Vetterling, and B. P. Flannery, *Numerical Recipes in C, 2nd ed.* Cambridge, UK: Cambridge University Press, 1992.
- [3.20] S. Chen, C. F. N. Cowan, and P. M. Grant, “Orthogonal least squares learning for radial basis function networks,” *IEEE Trans. Neural Networks*, vol. 2(2), pp. 302–309, 1991.
- [3.21] M. J. L. Orr, “Regularization in the Selection of Radial Basis Function Centers,” *Neural Comp.*, vol. 7, pp. 606–623, 1995.
- [3.22] T. Kohonen, *Self Organization and Associative Memory*. New York: Springer–Verlag, 1988.
- [3.23] T. Poggio and F. Girosi, “Networks for Approximation and Learning,” *Proc. of the IEEE*, vol. 78(9), pp. 1481–1497, 1990.

#### 4.1.章

- [4.1.1] S. Katsuragawa, K. Doi, and H. MacMahon, “Image feature analysis and computer–aided diagnosis in digital radiographs: Detection and characterization on interstitial lung disease in digital chest radiographs,” *Med. Phys.*, 15, 311–319 (1988).
- [4.1.2] N. Asada, K. Doi, H. MacMahon, S. Montner, M. L. Giger, C. Abe, and Y. Wu, “Neural network approach for differential diagnosis of interstitial lung disease,” *Proc. Soc. Photo–Opt. Instrum. Eng., Medical Imaging 4: Image Processing*, 1233, 45–50 (1990).
- [4.1.3] J. S. Lin, P. A. Ligomenides, M. T. Freedman, and S. K. Mun, “Application of neural

- networks for improvement of lung nodule detection in radiographic images," Symposium for Computer Assisted Radiology (SCAR), 108–115 (Baltimore, 1992).
- [4.1.4] S. C. Lo, M. T. Freedman, J. S. Lin, and S. K. Mun, "Automatic Lung Nodule Detection Using Profile Matching and Back-Propagation Neural Network Techniques," *Journal of Digital Imaging*, 6, 48–54 (1993).
- [4.1.5] O. Tsujii, M. T. Freedman, and S. K. Mun, "Anatomic Region Based Dynamic Range Compression for Chest Radiographs Using Warping Transformation of Correlated Distribution," *SPIE*, 3034, 812–821 (1997).
- [4.1.6] M. F. McNitt-Gray, J. W. Sayre, H. K. Huang and M. Razavi, "A Pattern Classification Approach to Segmentation of Chest Radiographs," *SPIE*, 1898, 160–170 (1993).
- [4.1.7] A. Hasegawa, S. C. Lo, M. T. Freedman, and S. K. Mun, "Convolution Neural Network Based Detection of Lung Structure," *SPIE*, 2167, 654–662 (1994).
- [4.1.8] M. F. McNitt-Gray, H. K. Huang and J. W. Sayre, "Feature Selection in the Pattern Classification Problem of Digital Chest Radiograph Segmentation," *IEEE Trans. Med. Imag.*, 14, 537–547 (1995).
- [4.1.9] R. P. Kruger, J. R. Townes, D. L. Hall, S. J. Dwyer, III, and G. S. Lodwick, "Automated Radiographic Diagnosis via Feature Extraction and Classification of Cardiac Size and Shape Descriptors," *IEEE Trans. Biomed. Eng.*, BME-19, 3, 174–186 (1972).
- [4.1.10] G. F. Powell, K. Doi, and S. Katsuragawa, "Localization of inter-rib spaces for lung texture analysis and computer-aided diagnosis in digital chest images," *Med. Phys.*, 15, 581–587 (1988).
- [4.1.11] Z. Yue, A. Goshtasby, L. V. Ackerman, "Automatic Detection of Rib Borders in Chest Radiographs," *IEEE Trans. Med. Imag.*, 14, 525–536 (1995).
- [4.1.12] X. W. Xu, and K. Doi, "Image feature analysis for computer-aided diagnosis: Accurate determination of ribcage boundary in chest radiographs," *Med. Phys.*, 22, 617–626 (1995).
- [4.1.13] J. Duryea, and M. Boone, "A fully automated algorithm for the segmentation of lung fields on digital chest radiographic images," *Med. Phys.*, 22, 183–191 (1995).
- [4.1.14] A. Hasegawa, K. J. Cullen, and S. K. Mun, "Segmentation and Analysis of Breast Cancer Pathological Images by an Adaptive-Sized Hybrid Neural Network," *SPIE*, 2170, 752–762 (1996).
- [4.1.15] D. E. Rumelhart, and J. L. McClelland, *Parallel Distributed Processing: Explorations in the Microstructure of Cognition, Vol. 1: Foundation*. Cambridge: The MIT Press, 1986.

- [4.1.16] G. Tesauro, and B. Janssens, "Scaling relationships in back-propagation learning," *Complex Systems* 2, 39-44 (1988).
- [4.1.17] R. M. Haralick, K. Shanmugam, and I. Dinstein, "Textual Features for Image Classification," *IEEE Trans. Sys. Man. and Cyber.*, SMC-3, 6, 610-621 (1973).
- [4.1.18] A. K. Jain, *Fundamentals of Digital Image Processing*. Prentice-Hall International, 1989.

#### 4.2.章

- [4.2.1] R. P. Kruger, J. R. Townes, D. L. Hall, S. J. Dwyer, III, and G. S. Lodwick, "Automated Radiographic Diagnosis via Feature Extraction and Classification of Cardiac Size and Shape Descriptors," *IEEE Trans. Biomed. Eng.*, BME-19, 3, 174-186 (1972).
- [4.2.2] G. F. Powell, K. Doi, and S. Katsuragawa, "Localization of inter-rib spaces for lung texture analysis and computer-aided diagnosis in digital chest images," *Med. Phys.*, 15, 581-587 (1988).
- [4.2.3] A. Hasegawa, S. C. Lo, M. T. Freedman, and S. K. Mun, "Convolution Neural Network Based Detection of Lung Structure," *SPIE*, 2170, 654-662 (1994).
- [4.2.4] E. B. Baum and D. Haussler, "What Size Net Gives Valid Generalization?," *Neural Comp.*, 1, pp. 151-160 (1989).

#### 4.3.章

- [4.3.1] A. K. Jain, *Fundamentals of Digital Image Processing*. Prentice-Hall International, 1989.
- [4.3.2] J. Rogowska, J. K. Preston, and D. Sashin, "Evaluation of Digital Unsharp Masking and Local Contrast Stretching as Applied to Chest Radiographs," *IEEE Bio. Eng.*, vol. 35, pp. 817-827, 1988.
- [4.3.3] M. I. Sezan, A. M. Tekalp, and R. Schaetzing, "Automatic anatomically selective image enhancement in digital chest radiography," *IEEE Trans. Med. Img.*, vol. 8, pp. 154-162, 1989.
- [4.3.4] P. G. Tahoces, J. Corraera, M. Souto, C. Gonzales, L. Gomez, and J. J. Vidal, "Enhancement of Chest and Breast Radiographs by Automatic Spatial Filtering," *IEEE Trans. Med. Img.*, vol. 10, pp. 330-335, 1991.
- [4.3.5] J. S. Lin, D. S. Artz, H. Li, K. Legendre, M. T. Freedman, and S. K. Mun, "Region-Based Enhancement of Chest and Cervical Spine Radiographs," *SPIE* Vol. 2710, pp. 774-782, 1996.
- [4.3.6] J. S. Daponte and M. D. Fox, "Enhancement of Chest Radiographs with Gradient

- Operator," *IEEE Trans. Med. Img.*, vol. 7, pp. 109–117, 1988.
- [4.3.7] T. L. Ji, M. K. Sundareshan, and H. Roehrig, "Adaptive Image Contrast Enhancement Based on Human Visual Properties," *IEEE Trans. Med. Img.*, vol. 13, pp. 573–586, 1994.
- [4.3.8] S. M. Pizer, J. B. Zimmerman and E. V. Staab, "Adaptive gray level assignment in CT scan display," *J. Comput. Assist. Tomogr.*, Vol. 8, pp. 300–305, 1984.
- [4.3.9] S. M. Pizer, J. D. Austin, J. R. Perry, H. D. Safrit, and J. B. Zimmerman, "Adaptive histogram equalization for automatic contrast enhancement of medical images," *SPIE* Vol. 626, *Medicine XIV/PAC IV*, pp. 242–250, 1986.
- [4.3.10] J. B. Zimmerman, S. M. Pizer, E. V. Staab, J. R. Perry, W. McCartney, and B. C. Brenton, "An Evaluation of the Effectiveness of Adaptive Histogram Equalization for Contrast Enhancement," *IEEE Trans. Med. Img.*, vol. 7, pp. 304–312, 1988.
- [4.3.11] R. H. Sherrier and G. A. Johnson, "Regionally Adaptive Histogram Equalization of the Chest," *IEEE Trans. Med. Img.*, vol. 6, pp. 1–7, 1987.
- [4.3.12] I. Crooks and B. G. Fallone, "A novel algorithm for the edge detection and edge enhancement of medical images," *Med. Phys.*, 20, pp. 993–998, 1993.
- [4.3.13] M. F. McNitt-Gray, R. K. Taira, S. L. Johnson, and M. Razavi, "An Automatic Method for Enhancing the Display of Different Tissue Densities in Digital Chest Radiographs," *Journal of Dig. Img.* vol. 6, pp. 95–104, 1993.
- [4.3.14] Fuji Photo Film Co., Ltd., *Digital Image Processing. Fuji Computed Radiography: Technical Review*, vol. 1, pp. 8–13, 1993.
- [4.3.15] M. Otani, K. Seki, M. Sekiguchi, and H. Kato, "Development of a self-compensating digital filter using CR," *Japanese Journal of Radiological Technology*, vol. 45, pp. 1030, 1989.
- [4.3.16] M. F. McNitt-Gray, J. W. Sayre, H. K. Huang and M. Razavi, "A Pattern Classification Approach to Segmentation of Chest Radiographs," *SPIE* Vol. 1898, pp. 160–170, 1993.