

## DAFTAR PUSTAKA

- Bishop, C.M., 2006, *Pattern Recognition and Machine Learning*, edisi ke 1, M. Jordan, J. Kleinberg, dan B. Scholkopf, eds., Springer, New York.
- Braunstein, G.D., 2012, *Thyroid Cancer*, edisi ke 1, G. D. Braunstein, ed., Springer, US, Boston, MA.
- Bresson, X., Esedo, S. dan Thiran, P.V.J., 2007, Fast Global Minimization of the Active Contour / Snake Model, *Journal of Mathematical Imaging and Vision*, 28, 2, 151–167.
- Chang, C.Y., Chen, S.J. dan Tsai, M.F., 2010, Application of support-vector-machine-based method for feature selection and classification of thyroid nodules in ultrasound images, *Pattern Recognition*, 43, 10, 3494–3506.
- Chang, T.C., 2015, The Role of Computer-aided Detection and Diagnosis System in the Differential Diagnosis of Thyroid Lesions in Ultrasonography, *Journal of Medical Ultrasound*, 23, 4, 177–184.
- Choi, Y.J., Baek, J.H., Park, H.S., Shim, W.H., Kim, T.Y., Shong, Y.K. dan Lee, J.H., 2017, A Computer-Aided Diagnosis System Using Artificial Intelligence for the Diagnosis and Characterization of Thyroid Nodules on Ultrasound: Initial Clinical Assessment, *Thyroid*, 27, 4, 546–552.
- Cooper, D.S., 2006, Management guidelines for patients with thyroid nodules and differentiated thyroid cancer, *Thyroid*, 16, 2, 109–142.
- Cortes, C. dan Vapnik, V., 1995, Support-Vector Networks, *Machine Learning*, 20, 3, 273–297.
- Dorigo, M., Maniezzo, V. dan Colorni, A., 1996, Ant System: Optimization by a Colony of Cooperating Agents, *Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics)*, 26, 1, 1–13.
- Efford, N., 2000, *Digital Image Processing: A Practical Introduction Using Java*, Addison-Wesley, Harlow, England.
- Frates, M.C., Benson, C.B., Charboneau, J.W., Cibas, E.S., Clark, O.H., Coleman, B.G., Cronan, J.J., Doubilet, P.M., Evans, D.B., Goellner, J.R., Hay, I.D., Hertzberg, B.S., Intenzo, C.M., Jeffrey, R.B., Langer, J.E., Larsen, P.R., Mandel, S.J., Middleton, W.D., Reading, C.C., Sherman, S.I. dan Tessler, F.N., 2006, Management of Thyroid Nodules Detected at US: Society of Radiologists in Ultrasound Consensus Conference Statement, *Ultrasound Quarterly*, 22, 4, 231–238.
- Fus, K.S. dan Mui, J.K., 1980, A Survey on Image Segmentation, *Pattern Recognition*, 13, 1, 3–16.
- Gaillard, F., 2017, Thyroid Gland, <https://radiopaedia.org/articles/thyroid-gland>, diakses 5 December 2017.
- Gul, K., Ersoy, R., Dirikoc, A., Korukluoglu, B., Ersoy, P.E., Aydin, R., Ugras, S.N., Belenli, O.K. dan Cakir, B., 2009, Ultrasonographic Evaluation of Thyroid Nodules: Comparison of Ultrasonographic, Cytological, and Histopathological Findings, *Endocrine*, 36, 3, 464–472.
- Gürsoy, A. dan Erdoğan, M.F., 2012, *Ultrasonographic Approach to Thyroid Nodules : State of Art*, P. P. Smyth, ed., Merek KGaA, Darmstadt.

- Halliday, D. dan Resnick, R., 2015, *Fundamental of Physics 10th Edition*, edisi ke 10, J. Walker, ed., Jhon Willey dan Son, Inc., New York.
- Han, J., Kamber, M. dan Pei, J., 2011, *Data Mining: Concepts and Techniques*, edisi ke 3, Elsevier Inc., Waltham, USA.
- Haugen, B.R., Alexander, E.K., Bible, K.C., Doherty, G.M., Mandel, S.J., Nikiforov, Y.E., Pacini, F., Randolph, G.W., Sawka, A.M., Schlumberger, M., Schuff, K.G., Sherman, S.I., Sosa, J.A., Steward, D.L., Tuttle, R.M. dan Wartofsky, L., 2016, 2015 American Thyroid Association Management Guidelines for Adult Patients with Thyroid Nodules and Differentiated Thyroid Cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer, *Thyroid*, 26, 1, 1–133.
- Haykin, S., 1998, *Neural Networks: A Comprehensive Foundation*, edisi ke 2, Prentice Hall PTR Upper Saddle River, NJ, USA.
- Hedinger, C., Dillwyn Williams, E. dan Sobin, L.H., 1989, The WHO histological Classification of Thyroid Tumors: A Commentary on The Second Edition, *Cancer*, 63, 5, 908–911.
- Heilo, A. dan Sigstat, E., 2011, *Atlas of Thyroid Nodule*, K. Groeholt, ed., Springer, Norway.
- Huang, C.L. dan Wang, C.J., 2006, A GA-Based Feature Selection and Parameters Optimization for Support Vector Machines, *Expert Systems with Applications*, 31, 2, 231–240.
- Huque, A.E., Olsson, B. dan Wisskirchen, P., 2006, *Shape Analysis and Measurement for The HeLa Cell Classification of Cultured Cells in High Throughput Screening*,. University of Skovde, Sweden,
- Iannuccilli, J.D., Cronan, J.J. dan Monchik, J.M., 2004, Risk for Malignancy of Thyroid Nodules as Assessed by Sonographic Criteria: The Need for Biopsy, *Journal of Ultrasound in Medicine*, 23, 11, 1455–1464.
- Joachims, T., 1998, Text Categorization with Support Vector Machines: Learning with Many Relevant Features, *Machine Learning*, 1398, LS-8 Report 23, 137–142.
- Kadir, A. dan Susanto, A., 2013, *Teori dan Aplikasi Pengolahan Citra*, ANDI, Yogyakarta.
- Kass, M., Witkin, A. dan Terzopoulos, D., 1988, Snakes : Active Contour Models, *Computer Vision*, 331, 321–331.
- Kementrian Kesehatan RI Pusat Data dan Informasi Kesehatan, 2015, *Stop Kanker*, Jakarta, Indonesia.
- Keramidas, E.G., Maroulis, D. dan Iakovidis, D.K., 2012, TND: A thyroid nodule detection system for analysis of ultrasound images and videos, *Journal of Medical Systems*, 36, 3, 1271–1281.
- Kharchenko, V.P., Kotlyarov, P.M., Mogutov, M.S., Alexandrov, Y.K., Sencha, A.N., Patrunov, Y.N. dan Belyaev, D. V., 2010, *Ultrasound Diagnostics of Thyroid Diseases*, edisi ke 1, Springer-Verlag, Berlin.
- Khusna, D.A., 2016, Klasifikasi Lesi Citra Ultrasonografi Payudara Berdasarkan Karakteristik Tepi, *Tesis*, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta.
- Kowalczyk, A., 2017, *Support Vector Machine Succinctly*, edisi ke 1, D. Jebaraj, J.

- McCaffrey, dan C. Wright, eds., SynCFusion, Inc., Morrisville.
- Lokesh, Shailaja dan Nanda, 2014, Segmentation And Classification Of Breast Lesions In Ultrasound Images, *International Journal of Scientific dan Technology Research*, 3, 6, 238–242.
- Maroulis, D.E., Savelonas, M. a., Karkanis, S. a., Iakovidis, D.K. dan Dimitropoulos, N., 2005, Computer-Aided Thyroid Nodule Detection in Ultrasound Images, *18th IEEE Symposium on Computer-Based Medical Systems (CBMS'05)*, 271–276.
- Medical News, 2013, Kanker Tiroid Pengobatan (PDQ®): Pengobatan - Informasi Pasien [NCI] Informasi -Jenderal Tentang Kanker Tiroid, , 12. <http://www.moryz.com/cancer/tc/ncicdr0000258038-general-information-about-thyroid-cancer.html>, diakses 2 January 2017.
- Moon, W.-J., Jung, S.L., Lee, J.H., Na, D.G., Baek, J.-H., Lee, Y.H., Kim, J., Kim, H.S., Byun, J.S. dan Lee, D.H., 2008, Benign and Malignant Thyroid Nodules: US Differentiation-Multicenter Retrospective Study., *Radiology*, 247, 3, 762–770.
- Munir, R., 2004, *Pengolahan Citra Digital*, ITB, Bandung.
- Nugroho, A., 2015, Klasifikasi Nodul Tiroid Berbasis Ciri Tekstur pada Citra Ultrasonografi, *Tesis*, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta.
- Nugroho, A.S., 2008, *Pengantar Support Vector Machine*, Pusat Teknologi Informasi dan Komunikasi BPP Teknologi, Jakarta.
- Nugroho, H.A., Frannita, E.L., Nugroho, A., Zulfanahri, Ardiyanto, I. dan Choridah, L., 2017, Classification of Thyroid Nodules Based on Analysis of Margin Characteristic, In, *International Conference on Computer, Control, Informatics and its Applications Classification*, IEEE, pp. 47–51.,
- Ozel, A., Erturk, S.M., Ercan, A., Yilmaz, B., Basak, T., Cantisani, V., Basak, M. dan Karpat, Z., 2012, The Diagnostic Efficiency of Ultrasound in Characterization for Thyroid Nodules: How Many Criteria are Required to Predict Malignancy?, *Medical Ultrasonography*, 14, 1, 24–28.
- Papini, E., Guglielmi, R., Bianchini, A., Crescenzi, A., Taccogna, S., Nardi, F., Panunzi, C., Rinaldi, R., Toscano, V. dan Pacella, C.M., 2002, Risk of Malignancy in Nonpalpable Thyroid Nodules: Predictive Value of Ultrasound and Color-Doppler Features, *Journal of Clinical Endocrinology and Metabolism*, 87, 5, 1941–1946.
- Pontil, M. dan Verri, A., 1998, Support Vector Machines for 3D Object Recognition, *Pattern Analysis and Machine Intelligence (Pami)*, 20, 6, 637–646.
- Prasetyo, E., 2013, *Data Mining: Konsep dan Aplikasi menggunakan Matlab*, edisi ke 1, ANDI, Yogyakarta.
- Rashedi, E., Nezamabadi-pour, H. dan Saryazdi, S., 2009, GSA: A Gravitational Search Algorithm, *Information Sciences*, 179, 13, 2232–2248.
- Reading, C.C., Charboneau, J.W., Hay, I.D. dan Sebo, T.J., 2005, Sonography of Thyroid Nodules: A “Classic Pattern” Diagnostic Approach, *Ultrasound Quarterly*, 21, 3, 157–65. <http://www.ncbi.nlm.nih.gov/pubmed/16096611>.
- Sarafrazi, S. dan Nezamabadi-Pour, H., 2013, Facing The Classification of Binary Problems with A GSA-SVM Hybrid System, *Mathematical and Computer*

- Modelling*, 57, 1–2, 270–278.
- Schutz, B., 2003, *Gravity from The Ground Up*, edisi ke 1st, Cambridge University Press, New York.
- Sckit-learn, 2008, SVM, <https://scikit-learn.org/stable/modules/generated/sklearn.svm.SVC.html>, diakses 8 Desember 2018.
- Sharma, A., Zaidi, A., Singh, R., Jain, S. dan Sahoo, A., 2013, Optimization of SVM Classifier Using Firefly Algorithm, *IEEE Second International Conference on Image Information Processing*, 198–202.
- Shoelson, B., 2012, Calculating Arclengths...Made Easy!, *Mathwork*, 1. <https://blogs.mathworks.com/pick/2012/04/27/calculating-arclengths-made-easy/>, diakses 7 Desember 2017.
- Tang, J., Guo, S., Sun, Q., Deng, Y. dan Zhou, D., 2010, Speckle Reducing Bilateral Filter for Cattle Follicle Segmentation, *BMC Genomics*, 11, Suppl 2, S9. <http://www.biomedcentral.com/1471-2164/11/S2/S9>.
- Tomasi, C., 1998, Bilateral Filtering for Gray and Color Images, In, *International Conference on Computer Vision*, IEEE, Bombay, India.
- Wibowo, K.B., 2015, Kesesuaian Penentuan Karakteristik Lesi Kistik dan Solid Tiroid Pemeriksaan Ultrasonografi dan Computer Aided Detection Metode Bilateral Filtering dan Active Control without Edge, *Tesis*, Fakultas Kedokteran, Universitas Gadjah Mada, Yogyakarta.
- Wu, Q., Wu, S. dan Liu, J., 2010, Hybrid Model Based on SVM with Gaussian Loss Function and Adaptive Gaussian PSO, *Engineering Applications of Artificial Intelligence*, 23, 4, 487–494.
- Wulandari, E.S., 2017, Kesesuaian Penentuan Fitur Bentuk, Tepi dan Orientasi Nodul Tiroid Jinak dan Ganas Antara Pembacaan Ultrasonografi oleh Dokter Spesialis Radiologi dan Computer Aided Diagnostic (CAD), *Tesis*, Fakultas Kedokteran, Universitas Gadjah Mada, Yogyakarta.
- Xie, C., Cox, P., Taylor, N. dan LaPorte, S., 2016, Ultrasonography of Thyroid Nodules: A Pictorial Review, *Insights into Imaging*, 7, 1, 77–86.
- Yu, G., Geist, A. dan Ostrouchov, G., 2008, An SVM-Based Algorithm for Identification of Photosynthesis-specific Genome Features,