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## Referensi

1. Yoav Goldberg. *Neural Network Methods in Natural Language Processing*. Morgan & Claypool Publishers, 2017.
2. Peter Linz. *An Introduction to Formal Language and Automata*. Jones and Bartlett Publishers, Inc., USA, 2006.
3. Ronald Brachman and Hector Levesque. *Knowledge Representation and Reasoning*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 2004.
4. Tom Mitchell. *Machine Learning*. McGraw-Hill, 1997.
5. Stuart Russel and Peter Norvig. *Artificial Intelligence: A Modern Approach*. Prentice Hall, 1995.
6. Jonathan Gratch and Stacell Marsella. Computationally modelling human emotion. *Communications of the ACM*, 57(12):71–99, 2014.
7. Masayu Leylia Khodra and Dessi Puji Lestari. Odd semester lecture on machine learning. Lecture of Institute Teknologi Bandung, 2015.
8. Christopher M. Bishop. *Pattern Recognition and Machine Learning*. Springer, 2006.
9. Sumio Watanabe and Hidetoshi Nishimori. Fall lecture note on statistical learning theory. Lecture note for Tokyo Institute of Technology, 2016.
10. Brian Caffo. *Statistical Inference for Data Science*. Lean Publishing, 2015.
11. Ian Goodfellow, Yoshua Bengio, and Aaron Courville. *Deep Learning*. MIT Press, 2016.
12. Daniel Jurafsky and James H. Martin. *Speech and Language Processing Second Edition*. Prentice Hall, 2009.
13. Thomas M. Cover and Joy A. Thomas. *Elements of Information Theory*. Wiley, 1991.
14. Hidetoshi Nishimori. *Statistical Physics of Spin Glasses and Information Processing: An Introduction*. Clarendon Press, 2001.
15. Sharon L. Myres Ronald E. Walpole, Raymond H. Myers and Keying Ya. *Probability and Statistics for Engineers and Scientists*. Prentice Hall, 2012.
16. Gilbert Strang. *Linear algebra and its applications*. Thomson, Brooks/Cole, Belmont, CA, 2006.
17. Ian H. Witten, Eibe Frank, and Mark A. Hall. *Data Mining: Practical Machine Learning Tools and Techniques*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 3rd edition, 2011.
18. Jeff Leek. *The Elements of Data Analytic Style*. Leanpub, 2015.

19. Takao Terano and Tsuyoshi Murata. Spring lecture on machine learning. Lecture of Tokyo Institute of Technology, 2017.
20. Kishore Papineni, Salim Roukos, Todd Ward, and Wei-Jing Zhu. Bleu: A method for automatic evaluation of machine translation. In *Proceedings of the 40th Annual Meeting on Association for Computational Linguistics*, ACL '02, pages 311–318, Stroudsburg, PA, USA, 2002. Association for Computational Linguistics.
21. Chin-Yew Lin. Rouge: A package for automatic evaluation of summaries. In *Proc. ACL workshop on Text Summarization Branches Out*, page 10, 2004.
22. Irina Rish. An empirical study of the naive bayes classifier. In *IJCAI 2001 workshop on empirical methods in artificial intelligence*, volume 3, pages 41–46. IBM New York, 2001.
23. J. A. Hartigan and M. A. Wong. A k-means clustering algorithm. *JSTOR: Applied Statistics*, 28(1):100–108, 1979.
24. T. Cover and P. Hart. Nearest neighbor pattern classification. *IEEE Trans. Inf. Theor.*, 13(1):21–27, September 2006.
25. Marti A. Hearst. Support vector machines. *IEEE Intelligent Systems*, 13(4):18–28, July 1998.
26. John Duchi, Elad Hazan, and Yoram Singer. Adaptive subgradient methods for online learning and stochastic optimization, 2010.
27. J. R. Quilan. *Discovering rules by induction from large collections of examples*. Edinburgh University Press, 1979.
28. J.R. Quinlan. Induction of decision trees. *Mach. Learn.*, 1(1):81–106, March 1986.
29. C. E. Shannon. A mathematical theory of communication. *The Bell System Technical Journal*, 27(3):379–423, 1948.
30. Takao Terano and Tsuyoshi Murata. Spring lecture on machine learning. Lecture of Tokyo Institute of Technology, 2017.
31. L. R. Rabiner and B. H. Juang. An introduction to hidden markov models. *IEEE ASSp Magazine*, 1986.
32. James Allen. *Natural Language Understanding*. Benjamin-Cummings Publishing Co., Inc., 1995.
33. George Karypis Michael Steinbach and Vipin Kumar. A comparison of document clustering techniques. In *KDD Workshop on Text Mining*, pages 525 – 526, 2000.
34. Omer I. E. Mohamed Fathi H. Saad and Rafa E. Al-Qutaish. Comparison of hierarchical agglomerative algorithms for clustering medical documents. *International Journal of Software Engineering and Applications (IJSEA)*, 3(3), 2012.
35. Rajeev Rastogi Sudipto Guha and Kyuseok Shim. Cure: An efficient clustering algorithm for large databases. In *Proceedings of ACM SIGMOD International Conference on Management of Data*, pages 73 – 84, 1998.
36. Jack D. Cowan. Neural networks: The early days. In *Proceedings of Advances in Neural Information Processing Systems 2*, 1989.
37. Amir Atiya. *Learning Algorithms for Neural Network*. PhD thesis, California Institute of Technology, 1994.
38. Al. Cripps. Using artificial neural nets to predict academic performance. In *Proceedings of the 1996 ACM Symposium on Applied Computing*, pages 33–37, 1996.

39. Thomas Mikolov. *Statistical Language Models Based on Neural Networks*. PhD thesis, Brno University of Technology, 2012.
40. Kai Chen Greg Corrado Thomas Mikolov, Ilya Sutskever and Jeffrey Dean. Distributed representations of words and phrases and their compositionality. In *Proceedings of CoRR*, 2013.
41. Gred Corrado Thomas Mikolov, Kai Chen and Jeffrey Dean. Efficient estimation of word representations in vector space. In *Proceedings of CoRR*, 2013.
42. Kai Yu. Large-scale deep learning at baidu. In *Proceedings of the 22<sup>nd</sup> ACM International Conference on Information and Knowledge Management*, pages 2211–2212, 2013.
43. M. A. Aizerman, E. A. Braverman, and L. Rozonoer. Theoretical foundations of the potential function method in pattern recognition learning. In *Automation and Remote Control*, number 25, pages 821–837, 1964.
44. F. Rosenblatt. The perceptron: A probabilistic model for information storage and organization in the brain. *Psychological Review*, pages 65–386, 1958.
45. Marvin L. Minsky and Seymour A. Papert. *Perceptrons: Expanded Edition*. MIT Press, Cambridge, MA, USA, 1988.
46. D. E. Rumelhart, G. E. Hinton, and R. J. Williams. Parallel distributed processing: Explorations in the microstructure of cognition, vol. 1. chapter Learning Internal Representations by Error Propagation, pages 318–362. MIT Press, Cambridge, MA, USA, 1986.
47. Tao Lei, Regina Barzilay, and Tommi Jaakkola. Rationalizing neural predictions. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 107–117, Austin, Texas, November 2016. Association for Computational Linguistics.
48. David Alvarez-Melis and Tommi Jaakkola. A causal framework for explaining the predictions of black-box sequence-to-sequence models. In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*, pages 412–421, Copenhagen, Denmark, September 2017. Association for Computational Linguistics.
49. Dzmitry Bahdanau, KyungHyun Cho, and Yoshua Bengio. Neural machine translation by jointly learning to align and translate. In *Proceedings of the International Conference on Learning and Representation (ICLR)*, 2015.
50. Thang Luong, Hieu Pham, and Christopher D. Manning. Effective approaches to attention-based neural machine translation. In *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing*, pages 1412–1421, Lisbon, Portugal, September 2015. Association for Computational Linguistics.
51. Finale Doshi-Velez and Been Kim. A roadmap for a rigorous science of interpretability. In *ArXiv e-prints*.
52. Jeffrey L. Elman. Learning and development in neural networks: The importance of starting small. *Journal of Cognition*, (48):71–99, 1993.
53. Yoshua Bengio, Jérôme Louradour, Ronan Collobert, and Jason Weston. Curriculum learning. In *Proceedings of the 26th Annual International Conference on Machine Learning*, ICML '09, pages 41–48, New York, NY, USA, 2009. ACM.
54. Nitish Srivastava, Geoffrey Hinton, Alex Krizhevsky, Ilya Sutskever, and Ruslan Salakhutdinov. Dropout: A simple way to prevent neural networks from overfitting. *J. Mach. Learn. Res.*, 15(1):1929–1958, January 2014.

55. Dzmitry Bahdanau Kyunghyun Cho, Bart van Merriënboer and Yoshua Bengio. On the properties of neural machine translation: Encoder–decoder approaches. In *Proceedings of SSST-8, Eighth Workshop on Syntax, Semantics and Structure in Statistical Translation*, pages 103–111, Doha, Qatar, October 2014. Association for Computational Linguistics.
56. Christopher D. Manning and Hinrich Schütze. *Foundations of Statistical Natural Language Processing*. MIT Press, 1999.
57. Prabhakar Raghavan Christopher D. Manning and Hinrich Schütze. *An Introduction to Information Retrieval*. Cambridge UP, 2009.
58. Andrew Y. Ng Richard Socher, Cliff Chiung-Yu Lin and Christopher D. Manning. Parsing natural scenes and natural language with recursive neural networks. In *Proceedings of the 28<sup>th</sup> International Conference on Machine Learning*, 2011.
59. Jean Y. Wu Jason Chuang Richard Socher, Alex Perelygin and Christopher D. Manning. Recursive deep models for semantic compositionality over a sentiment treebank. In *Proceedings of the Empirical Methods in Natural Language Processing*, 2013.
60. Erhc H. Huang Andrew Y. Ng Richard Socher, Jeffrey Pennington and Christoper D. Manning. Semi-supervised recursive autoencoders for predicting sentiment distributions. In *Proceedings of the Empirical Methods in Natural Language Processing*, 2011.
61. Quoc Le and Tomas Mikolov. Distributed representations of sentences and documents. In *Proceedings of the 31<sup>st</sup> International Conference on Machine Learning*, 2014.
62. Richard Socher Jeffrey Pennington and Christopher D. Manning. Glove: Global vectors for word representation. In *Proceedings of the Empirical Methods in Natural Language Processing*, pages 1532 – 1543, 2014.
63. Yoshua Bengio, Réjean Ducharme, Pascal Vincent, and Christian Janvin. A neural probabilistic language model. *J. Mach. Learn. Res.*, 3:1137–1155, March 2003.
64. Omer Levy, Yoav Goldberg, and Ido Dagan. Improving distributional similarity with lessons learned from word embeddings. *Transactions of the Association for Computational Linguistics*, 3:211–225, 2015.
65. Guoqiang Zhong, Li-Na Wang, Xiao Ling, and Junyu Dong. An overview on data representation learning: From traditional feature learning to recent deep learning. *The Journal of Finance and Data Science*, 2(4):265 – 278, 2016.
66. Peter D. Turney and Patrick Pantel. From frequency to meaning: Vector space models of semantics. *Journal of Artificial Intelligence Research*, (37):141–188, 2010.
67. Jan Wira Gotama Putra and Takenobu Tokunaga. Evaluating text coherence based on semantic similarity graph. In *Proceedings of TextGraphs-11: the Workshop on Graph-based Methods for Natural Language Processing*, pages 76–85, Vancouver, Canada, August 2017. Association for Computational Linguistics.
68. Y. LeCun and Y. Bengio. Convolutional networks for images, speech, and time-series. In M. A. Arbib, editor, *The Handbook of Brain Theory and Neural Networks*. MIT Press, 1995.
69. Jeffrey L. Elman. Finding structure in time. *Cognitive Science*, 14(2):179–211, 1990.

70. Sepp Hochreiter and Jürgen Schmidhuber. Long short-term memory. *Neural Comput.*, 9(8):1735–1780, November 1997.
71. Paul J. Werbos. Backpropagation through time: what does it do and how to do it. In *Proceedings of IEEE*, volume 78, pages 1550–1560, 1990.
72. Caglar Gulcehre Dzmitry Bahdanau Fethi Bougares HolgerSchwenk Kyunghyun Cho, Bart van Merriënboer and Yoshua Bengio. Learning phrase representations using rnn encoder–decoder for statistical machine translation. In *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 1724–1734, Doha, Qatar, October 2014. Association for Computational Linguistics.
73. Ilya Sutskever, Oriol Vinyals, and Quoc V. Le. Sequence to sequence learning with neural networks. In *Proceedings of the 27th International Conference on Neural Information Processing Systems, NIPS’14*, pages 3104–3112, Cambridge, MA, USA, 2014. MIT Press.
74. Yan Shao, Christian Hardmeier, Jörg Tiedemann, and Joakim Nivre. Character-based joint segmentation and pos tagging for chinese using bidirectional rnn-crf. In *Proceedings of the Eighth International Joint Conference on Natural Language Processing (Volume 1: Long Papers)*, pages 173–183, Taipei, Taiwan, November 2017. Asian Federation of Natural Language Processing.
75. Tobias Horsmann and Torsten Zesch. Do lstms really work so well for pos tagging? – a replication study. In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*, pages 727–736, Copenhagen, Denmark, September 2017. Association for Computational Linguistics.
76. Barbara Plank, Anders Søgaard, and Yoav Goldberg. Multilingual part-of-speech tagging with bidirectional long short-term memory models and auxiliary loss. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics, ACL 2016, August 7-12, 2016, Berlin, Germany, Volume 2: Short Papers*, 2016.
77. Ryohei Sasano Hiroya Takamura Yuta Kikuchi, Graham Neubig and Manabu Okumura. Controlling output length in neural encoder-decoders. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 1328–1338, Austin, Texas, November 2016. Association for Computational Linguistics.
78. Ramesh Nallapati, Bowen Zhou, Cícero Nogueira dos Santos, and aglar Gülehre and Bing Xiang. Abstractive text summarization using sequence-to-sequence rnns and beyond. In *CoNLL*, 2016.
79. Yan-Kai Lin Cun-Chao Tu Yu Zhao Zhi-Yuan Liu Ayana, Shi-Qi Shen and Mao-Song Sun. Recent advances on neural headline generation. *Journal of Computer Science and Technology*, 32(4):768–784, Jul 2017.
80. Chloé Kiddon, Luke Zettlemoyer, and Yejin Choi. Globally coherent text generation with neural checklist models. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 329–339, Austin, Texas, November 2016. Association for Computational Linguistics.
81. Xiaojun Wan Jiwei Tan and Jianguo Xiao. Abstractive document summarization with a graph-based attentional neural model. In *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1171–1181, Vancouver, Canada, July 2017. Association for Computational Linguistics.

82. Oriol Vinyals, Alexander Toshev, Samy Bengio, and Dumitru Erhan. Show and tell: A neural image caption generator. *2015 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 3156–3164, 2015.
83. Daniel Billsus and Michael J. Pazzani. The adaptive web. chapter Adaptive News Access, pages 550–570. Springer-Verlag, Berlin, Heidelberg, 2007.
84. Paul Resnick and Hal R. Varian. Recommender systems. *Commun. ACM*, 40(3):56–58, March 1997.
85. Danilar Asanov. Algorithms and methods in recommender systems. Berlin Institute of Technology, 2011.
86. Charu C. Aggrawal. *Recommender Systems: The Textbook*. Springer International Publishing Switzerland, 2016.
87. Eduard Hovy and Chin-Yew Lin. Automated text summarization and the summarist system. In *Proceedings of a Workshop on Held at Baltimore, Maryland: October 13-15, 1998*, TIPSTER '98, pages 197–214, Stroudsburg, PA, USA, 1998. Association for Computational Linguistics.
88. Liang Zhou and Eduard Hovy. Template-filtered headline summarization. In *In the Proceedings of the ACL workshop, Text Summarization Branches Out*, pages 56–60, 2004.
89. Amin Mantrach Carlos A. Colmenares, Marina Litvak and Fabrizio Silvestri. Heads: Headline generation as sequence prediction using an abstract feature-rich space. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 133–142, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
90. Daniele Pighin Enrique Alfonseca and Guillermo Garrido. Heady: News headline abstraction through event pattern clustering. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1243–1253, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.
91. Pierre-Etienne Genest and Guy Lapalme. Framework for abstractive summarization using text-to-text generation. In *Proceedings of the Workshop on Monolingual Text-To-Text Generation*, pages 64–73, Portland, Oregon, June 2011. Association for Computational Linguistics.
92. Shufeng Xiong and Donghong Ji. Query-focused multi-document summarization using hypergraph-based ranking. *Inf. Process. Manage.*, 52(4):670–681, July 2016.
93. David Zajic, Bonnie J. Dorr, and Richard Schwartz. Bbn/umd at duc-2004: Topiary. In *Proceedings of the North American Chapter of the Association for Computational Linguistics Workshop on Document Understanding*, pages 112–119, 2004.
94. Simone Teufel and Marc Moens. Argumentative classification of extracted sentences as a first step towards flexible abstracting. In *Advances in automatic Text Summarization*, pages 155–171. MIT Press, 1999.
95. Bonnie J. Dorr, David Zajic, and Richard Schwartz. Hedge trimmer: A parse-and-trim approach to headline generation. In Dragomir Radev and Simone Teufel, editors, *Proceedings of the HLT-NAACL 03 Text Summarization Workshop*, pages 1–8, 2003.
96. Jurij Leskovec, Natasa Milic-Frayling, and Marko Grobelnik. Extracting summary sentences based on the document semantic graph. *Microsoft Research*, 2005.

97. Jan Wira Gotama Putra. Rhetorical sentence classification for automatic title generation in scientific article. *TELKOMNIKA*, 15(2):656–664, 2017.
98. Jan Pedersen Julian Kupiec and Francine Chen. A trainable document summarizer. In *Proceedings of the 18th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, SIGIR '95, pages 68–73, New York, NY, USA, 1995. ACM.
99. Hans-Martin Ramsel Daraksha Parveen and Michael Strube. Topical coherence for graph-based extractive summarization. In *Conference on Empirical Methods in Natural Language Processing*, pages 1949–1954. The Association for Computational Linguistics, 2015.
100. Simone Teufel and Marc Moens. Summarizing scientific articles: Experiments with relevance and rhetorical status. *Comput. Linguist.*, 28(4):409–445, December 2002.
101. Diarmuid Ó Séaghdha and Simone Teufel. Unsupervised learning of rhetorical structure with un-topic models. In *Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers*, pages 2–13, Dublin, Ireland, August 2014. Dublin City University and Association for Computational Linguistics.
102. Vibhu O. Mittal Michele Banko and Michael J. Witbrock. Headline generation based on statistical translation. In *Proceedings of the 38th Annual Meeting on Association for Computational Linguistics*, ACL '00, pages 318–325, Stroudsburg, PA, USA, 2000. Association for Computational Linguistics.
103. Jianpeng Cheng and Mirella Lapata. Neural summarization by extracting sentences and words. *CoRR*, abs/1603.07252, 2016.
104. Christopher D. Manning. Part-of-speech tagging from 97% to 100%: Is it time for some linguistics? In *Proceedings of the 12th International Conference on Computational Linguistics and Intelligent Text Processing - Volume Part I*, CICLing'11, pages 171–189, Berlin, Heidelberg, 2011. Springer-Verlag.
105. Lev Ratinov and Dan Roth. Design challenges and misconceptions in named entity recognition. In *Proceedings of the Thirteenth Conference on Computational Natural Language Learning*, CoNLL '09, pages 147–155, Stroudsburg, PA, USA, 2009. Association for Computational Linguistics.
106. Jiwei Li and Dan Jurafsky. Neural net models of open-domain discourse coherence. In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*, pages 198–209, Copenhagen, Denmark, September 2017. Association for Computational Linguistics.





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## Biografi Penulis

Jan **Wira** Gotama Putra adalah mahasiswa pascasarjana di Computational Linguistics/Natural Language Processing group (Tokunaga-Fujii-lab), Artificial Intelligence Major, Department of Computer Science, Tokyo Institute of Technology. Sebelumnya, penulis mendapatkan gelar sarjana di jurusan Teknik Informatika, Institut Teknologi Bandung. Penulis memiliki pengalaman menulis makalah ilmiah pada bidang pemrosesan bahasa alami (termasuk yang menggunakan teknik pembelajaran mesin) dan menerapkan teknik pembelajaran mesin untuk perusahaan IT. Penulis pernah mendapat *best paper award* untuk publikasi ilmiahnya, menjuarai *data mining hackathon*, serta memiliki prestasi akademik lainnya. Penulis masih terus mempelajari teknik *machine learning*, buku ini adalah catatan yang ingin ia bagikan.

<https://wiragotama.github.io/>