
Subject Bibliography of Artificial Intelligence

Top 20 highly cited articles:

- Bengio, Y., Courville, A., & Vincent, P. (2013). Representation learning: A review and new perspectives. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 35(8), 1798-1828. doi:10.1109/TPAMI.2013.50
- Canny, J. (1986). A computational approach to edge detection. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, PAMI-8(6), 679-698. doi:10.1109/TPAMI.1986.4767851
- Chawla, N. V., Bowyer, K. W., Hall, L. O., & Kegelmeyer, W. P. (2002). SMOTE: Synthetic minority over-sampling technique. *Journal of Artificial Intelligence Research*, 16, 321-357. doi:10.1613/jair.953
- Chen, T., & Guestrin, C. (2016). XGBoost: A scalable tree boosting system. Paper presented at the *Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, , 13-17-August-2016 785-794. doi:10.1145/2939672.2939785
- Eberhart, R., & Kennedy, J. (1995). New optimizer using particle swarm theory. Paper presented at the *Proceedings of the International Symposium on Micro Machine and Human Science*, 39-43.
- Felzenszwalb, P. F., Girshick, R. B., McAllester, D., & Ramanan, D. (2010). Object detection with discriminatively trained part-based models. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 32(9), 1627-1645. doi:10.1109/TPAMI.2009.167
- Glorot, X., & Bengio, Y. (2010). Understanding the difficulty of training deep feedforward neural networks. *Journal of Machine Learning Research*, 9, 249-256.

- Ioffe, S., & Szegedy, C. (2015). Batch normalization: Accelerating deep network training by reducing internal covariate shift. Paper presented at the *32nd International Conference on Machine Learning, ICML 2015*, , 1 448-456.
- Lecun, Y., Bengio, Y., & Hinton, G. (2015). Deep learning. *Nature*, *521*(7553), 436-444.
doi:10.1038/nature14539
- Mitola III, J., & Maguire Jr., G. Q. (1999). Cognitive radio: Making software radios more personal. *IEEE Personal Communications*, *6*(4), 13-18. doi:10.1109/98.788210
- Mnih, V., Kavukcuoglu, K., Silver, D., Rusu, A. A., Veness, J., Bellemare, M. G., . . . Hassabis, D. (2015). Human-level control through deep reinforcement learning. *Nature*, *518*(7540), 529-533. doi:10.1038/nature14236
- Pawlak, Z. (1982). Rough sets. *International Journal of Computer & Information Sciences*, *11*(5), 341-356. doi:10.1007/BF01001956
- Peng, H., Long, F., & Ding, C. (2005). Feature selection based on mutual information: Criteria of max-dependency, max-relevance, and min-redundancy. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *27*(8), 1226-1238. doi:10.1109/TPAMI.2005.159
- Roweis, S. T., & Saul, L. K. (2000). Nonlinear dimensionality reduction by locally linear embedding. *Science*, *290*(5500), 2323-2326. doi:10.1126/science.290.5500.2323
- Schmidhuber, J. (2015). Deep learning in neural networks: An overview. *Neural Networks*, *61*, 85-117. doi:10.1016/j.neunet.2014.09.003
- Silver, D., Huang, A., Maddison, C. J., Guez, A., Sifre, L., Van Den Driessche, G., . . . Hassabis, D. (2016). Mastering the game of go with deep neural networks and tree search. *Nature*, *529*(7587), 484-489. doi:10.1038/nature16961
- Tenenbaum, J. B., De Silva, V., & Langford, J. C. (2000). A global geometric framework for nonlinear dimensionality reduction. *Science*, *290*(5500), 2319-2323.
doi:10.1126/science.290.5500.2319

Wright, J., Yang, A. Y., Ganesh, A., Sastry, S. S., & Ma, Y. (2009). Robust face recognition via sparse representation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 31(2), 210-227. doi:10.1109/TPAMI.2008.79

Zadeh, L. A. (1975). The concept of a linguistic variable and its application to approximate reasoning-I. *Information Sciences*, 8(3), 199-249. doi:10.1016/0020-0255(75)90036-5

Zeiler, M. D., & Fergus, R. (2014). *Visualizing and understanding convolutional networks* doi:10.1007/978-3-319-10590-1_53

Top 20 highly cited gold open access articles:

Adadi, A., & Berrada, M. (2018). Peeking inside the black-box: A survey on explainable artificial intelligence (XAI). *IEEE Access*, 6, 52138-52160. doi:10.1109/ACCESS.2018.2870052

Akhtar, N., & Mian, A. (2018). Threat of adversarial attacks on deep learning in computer vision: A survey. *IEEE Access*, 6, 14410-14430. doi:10.1109/ACCESS.2018.2807385

Bach, S., Binder, A., Montavon, G., Klauschen, F., Müller, K. -, & Samek, W. (2015). On pixel-wise explanations for non-linear classifier decisions by layer-wise relevance propagation. *PLoS ONE*, 10(7) doi:10.1371/journal.pone.0130140

Capriotti, E., Fariselli, P., & Casadio, R. (2005). I-Mutant2.0: Predicting stability changes upon mutation from the protein sequence or structure. *Nucleic Acids Research*, 33(SUPPL. 2), W306-W310. doi:10.1093/nar/gki375

Carmena, J. M., Lebedev, M. A., Crist, R. E., O'Doherty, J. E., Santucci, D. M., Dimitrov, D. F., . . . Nicolelis, M. A. L. (2003). Learning to control a brain-machine interface for reaching and grasping by primates. *PLoS Biology*, 1(2) doi:10.1371/journal.pbio.0000042

Chen, X. -, & Lin, X. (2014). Big data deep learning: Challenges and perspectives. *IEEE Access*, 2, 514-525. doi:10.1109/ACCESS.2014.2325029

- Cruz, J. A., & Wishart, D. S. (2006). Applications of machine learning in cancer prediction and prognosis. *Cancer Informatics*, 2, 59-77. doi:10.1177/117693510600200030
- Gupta, S., Kapoor, P., Chaudhary, K., Gautam, A., Kumar, R., & Raghava, G. P. S. (2013). In silico approach for predicting toxicity of peptides and proteins. *PLoS ONE*, 8(9) doi:10.1371/journal.pone.0073957
- Hua, Q., Sun, J., Liu, H., Bao, R., Yu, R., Zhai, J., . . . Wang, Z. L. (2018). Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. *Nature Communications*, 9(1) doi:10.1038/s41467-017-02685-9
- Jiang, F., Jiang, Y., Zhi, H., Dong, Y., Li, H., Ma, S., . . . Wang, Y. (2017). Artificial intelligence in healthcare: Past, present and future. *Stroke and Vascular Neurology*, 2(4), 230-243. doi:10.1136/svn-2017-000101
- Ker, J., Wang, L., Rao, J., & Lim, T. (2017). Deep learning applications in medical image analysis. *IEEE Access*, 6, 9375-9379. doi:10.1109/ACCESS.2017.2788044
- Liakos, K. G., Busato, P., Moshou, D., Pearson, S., & Bochtis, D. (2018). Machine learning in agriculture: A review. *Sensors (Switzerland)*, 18(8) doi:10.3390/s18082674
- Moriya, Y., Itoh, M., Okuda, S., Yoshizawa, A. C., & Kanehisa, M. (2007). KAAS: An automatic genome annotation and pathway reconstruction server. *Nucleic Acids Research*, 35(SUPPL.2), W182-W185. doi:10.1093/nar/gkm321
- Ordóñez, F. J., & Roggen, D. (2016). Deep convolutional and LSTM recurrent neural networks for multimodal wearable activity recognition. *Sensors (Switzerland)*, 16(1) doi:10.3390/s16010115
- Slater, G. S. C., & Birney, E. (2005). Automated generation of heuristics for biological sequence comparison. *BMC Bioinformatics*, 6 doi:10.1186/1471-2105-6-31
- Varma, S., & Simon, R. (2006). Bias in error estimation when using cross-validation for model selection. *BMC Bioinformatics*, 7 doi:10.1186/1471-2105-7-91

Wu, C., Orozco, C., Boyer, J., Leglise, M., Goodale, J., Batalov, S., . . . Su, A. I. (2009). BioGPS: An extensible and customizable portal for querying and organizing gene annotation resources. *Genome Biology*, 10(11) doi:10.1186/gb-2009-10-11-r130

Wu, Z., Ramsundar, B., Feinberg, E. N., Gomes, J., Geniesse, C., Pappu, A. S., . . . Pande, V. (2018). MoleculeNet: A benchmark for molecular machine learning. *Chemical Science*, 9(2), 513-530. doi:10.1039/c7sc02664a

Yang, Z., Zeng, Z., Wang, K., Wong, S. -, Liang, W., Zanin, M., . . . He, J. (2020). Modified SEIR and AI prediction of the epidemics trend of COVID-19 in china under public health interventions. *Journal of Thoracic Disease*, 12(3), 165-174. doi:10.21037/jtd.2020.02.64

Yin, C., Zhu, Y., Fei, J., & He, X. (2017). A deep learning approach for intrusion detection using recurrent neural networks. *IEEE Access*, 5, 21954-21961. doi:10.1109/ACCESS.2017.2762418

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Standards for Medical Decision Making. Vol. 16;16.; Morgan & Claypool Publishers, 2021

Ye, Jong Chul, and Springerlink (Online Service). Geometry of Deep Learning: A Signal Processing
Perspective. Vol. 37, Springer Singapore, 2022