## REFERENCES

ABBYY. 2018. *PDF Software with Text Recognition - ABBYY FineReader 14*. https://www.abbyy.com/en-eu/finereader/, Accessed on July 22, 2019.

Alom, M. Z. et al. 2018. 'The History Began from AlexNet: A Comprehensive Survey on Deep Learning Approaches', arXiv preprint arXiv:1803.01164.

 Asano, S., Maruyama, T. and Yamaguchi, Y. 2009. 'Comparing TensorFlow Deep Learning Performance Using CPUs, GPUs, Local PCs and Cloud', in 2009 International Conference on Field Programmable Logic and Applications, pp. 126–131. doi: 10.1109/FPL.2009.5272532.

Basarkar, A. 2017. Document Classification Using Machine Learning.

Brownlee, J. 2018. *Deep Learning for Computer Vision*. PYIMAGESEARCH.

Choi, S. and Yeung, D. 2009. 'Hill-climbing SMT processor resource distribution', ACM Transactions on Computer Systems, 27(1), pp. 1–47. doi: 10.1145/1482619.1482620.

Contemporary Communications, I. 2000. *High Resolution Images VS. Low Resolution Images: A Short Primer for Beginners*. https://ccideas.com/chatter/high-resolution-images-vs-low-resolution-images-a-short-primer-for-beginners/, Accessed on November 27, 2018.

## Dahms, C. 2018. GitHub -

MicrocontrollersAndMore/TensorFlow\_Tut\_2\_Classification\_Walk-through: TensorFlow Tutorial 2: Image Classification Walk-through.

https://github.com/MicrocontrollersAndMore/TensorFlow\_Tut\_2\_Classification \_Walk-through, Accessed on March 3, 2019.

- Deeplearning.ai. 2018. *Train / Dev / Test sets*. https://www.coursera.org/lecture/deepneural-network/train-dev-test-sets-cxG1s, Accessed on July 29, 2019.
- Domingos, P. 2012. 'A Few Useful Things to Know about Machine Learning', Commun. acm, 55, pp. 78--87.
- Esker. 2016. Best OCR Software OCR Text & Handwriting Recognition. https://www.esker.com/cloud-technologies/OCR/, Accessed on July 22, 2019.
- FKI: Research Group on Computer Vision and Artificial Intelligence IAM, U. of B.
  2019. IAM Handwriting Database Computer Vision and Artificial

*Intelligence*. http://www.iam.unibe.ch/fki/databases/iam-handwriting-database, Accessed on July 22, 2019.

Gannon, D. 2016. 'TensorFlow Meets Microsoft's CNTK'.

- Hamad, K. and Kaya, M. 2016. 'A Detailed Analysis of Optical Character Recognition Technology', International Journal of Applied Mathematics, Electronics and Computers. International Journal of Applied Mathematics, Electronics and Computers, 4(Special Issue-1), pp. 244–244. doi: 10.18100/ijamec.270374.
- Hoffmann, J. et al. 2017. 'A Survey on CNN and RNN Implementations', Pesaro 2017, (c), pp. 33–39.
- Huang, F. J. and LeCun, Y. 2006. 'Large-scale learning with SVM and convolutional nets for generic object categorization', in Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition, pp. 284–291. doi: 10.1109/CVPR.2006.164.
- Jabbar, H. K. and Khan, R. Z. 2015. 'Methods to Avoid Over-Fitting and Under-Fitting in Supervised Machine Learning (Comparative Study)', Computer Science, Communication and Instrumentation Devices. Research Publishing Services, pp. 163–172. doi: 10.3850/978-981-09-5247-1\_017.
- Kaur, M. 2016. 'A Technique for Classification of Printed & Handwritten text', Int. J. Eng. Sci, 21, pp. 123--128.

Kochura, Y. et al. 2018. 'Performance analysis of open source machine learning frameworks for various parameters in single-threaded and multi-threaded modes', Advances in Intelligent Systems and Computing.

- Kotsiantis, S. B. 2007. 'Supervised machine learning: A review of classification techniques', Informatica (Ljubljana), 31(3), pp. 249–268. doi: 10.31449/inf.v31i3.148.
- Krizhevsky, A. and Hinton, G. E. 2012. 'ImageNet Classification with Deep Convolutional Neural Networks', in Advances in neural information processing systems.
- Kumari, R. and Kr., S. 2017. 'Machine Learning: A Review on Binary Classification', International Journal of Computer Applications.
- Lisa Lab. 2008. *Theano*. http://deeplearning.net/software/theano/, Accessed on November 28, 2019.

- Lyu, W. et al. 2018. 'Performance evaluation of channel decoding with deep neural networks', in IEEE International Conference on Communications. doi: 10.1109/ICC.2018.8422289.
- Neal, K. 2010. *Why is OCR at 300 dpi a Standard?* https://scansnapworld.com/whyis-ocr-at-300-dpi-a-standard-2/, Accessed on November 27, 2018.
- Nur, N., Amir, B. and Hamid, A. 2017. 'Handwritten Recognition Using SVM, KNN and Neural Network', arXiv preprint arXiv:1702.00723.
- Patel, C., Patel, A. and Patel, D. 2012. 'Optical Character Recognition by Open source OCR Tool Tesseract: A Case Study', International Journal of Computer Applications. doi: 10.5120/8794-2784.
- Sebastiani, F. 2002. 'Machine learning in automated text categorization', ACM Computing Surveys. Association for Computing Machinery (ACM), 34(1), pp. 1–47. doi: 10.1145/505282.505283.
- Shatnawi, A. et al. 2018. 'A comparative study of open source deep learning frameworks', in 2018 9th International Conference on Information and Communication Systems, ICICS 2018. Institute of Electrical and Electronics Engineers Inc., pp. 72–77. doi: 10.1109/IACS.2018.8355444.
- Shirdhonkar, M. S. and Manesh B., K. 2010. 'Discrimination between Printed and Handwritten Text in Documents', IJCA Special Issue on.

Taneja, S. and Gupta, P. R. 2014. 'Python as a Tool for Web Server Application Development', International Journal of Information, Communication and

*Computing Technology*, 2(1), pp. 2347–7202.

- Tensorflow.org. 2017a. *About TensorFlow*. https://www.tensorflow.org/, Accessed on July 22, 2019.
- Tensorflow.org. 2017b. *Tensorboard*. https://www.tensorflow.org/tensorboard, Accessed on November 27, 2018.
- Uhliarik, I. 2013. Handwritten Character Recognition Using Machine Learning Methods.

VISMA. 2013. On-premises vs. Cloud. https://www.visma.net/globalassets/global/visma.net/projects/whatsnew/2013/02 14\_guide\_onprem\_vs\_cloud\_eng.pdf.

Wang, B. and Gong, N. Z. 2018. 'Stealing Hyperparameters in Machine Learning', in Proceedings - IEEE Symposium on Security and Privacy. Institute of Electrical and Electronics Engineers Inc., pp. 36–52. doi: 10.1109/SP.2018.00038.

Zagoris, K. et al. 2014. 'Distinction between handwritten and machine-printed text based on the bag of visual words model', in Pattern Recognition, pp. 1051–1062. doi: 10.1016/j.patcog.2013.09.005.

Zeiler, M. D. 2012. 'ADADELTA: An Adaptive Learning Rate Method', arXiv preprint arXiv:1212.5701.

