- Coates, A., Huval, B., Wang, T., Wu, D., Catanzaro, B., and Andrew, N. (2013). Deep learning with COTS HPC systems. In S. Dasgupta and D. McAllester, editors, *Proceedings of the 30th International Conference on Machine Learning (ICML-13)*, volume 28 (3), pages 1337–1345. JMLR Workshop and Conference Proceedings. 24, 27, 364, 447
- Cohen, N., Sharir, O., and Shashua, A. (2015). On the expressive power of deep learning: A tensor analysis. arXiv:1509.05009. 554
- Collobert, R. (2004). Large Scale Machine Learning. Ph.D. thesis, Université de Paris VI, LIP6. 197
- Collobert, R. (2011). Deep learning for efficient discriminative parsing. In AISTATS'2011. 101, 477
- Collobert, R. and Weston, J. (2008a). A unified architecture for natural language processing: Deep neural networks with multitask learning. In *ICML'2008*. 471, 477
- Collobert, R. and Weston, J. (2008b). A unified architecture for natural language processing: Deep neural networks with multitask learning. In *ICML'2008*. 535
- Collobert, R., Bengio, S., and Bengio, Y. (2001). A parallel mixture of SVMs for very large scale problems. Technical Report IDIAP-RR-01-12, IDIAP. 450
- Collobert, R., Bengio, S., and Bengio, Y. (2002). Parallel mixture of SVMs for very large scale problems. *Neural Computation*, **14**(5), 1105–1114. **450**
- Collobert, R., Weston, J., Bottou, L., Karlen, M., Kavukcuoglu, K., and Kuksa, P. (2011a).
 Natural language processing (almost) from scratch. The Journal of Machine Learning Research, 12, 2493–2537. 328, 477, 535, 536
- Collobert, R., Kavukcuoglu, K., and Farabet, C. (2011b). Torch7: A Matlab-like environment for machine learning. In *BigLearn*, *NIPS Workshop*. 25, 214, 446
- Comon, P. (1994). Independent component analysis a new concept? Signal Processing, **36**, 287–314. **491**
- Cortes, C. and Vapnik, V. (1995). Support vector networks. *Machine Learning*, **20**, 273–297. **18**, 141
- Couprie, C., Farabet, C., Najman, L., and LeCun, Y. (2013). Indoor semantic segmentation using depth information. In *International Conference on Learning Representations* (ICLR2013). 23, 201
- Courbariaux, M., Bengio, Y., and David, J.-P. (2015). Low precision arithmetic for deep learning. In *Arxiv:1412.7024*, *ICLR'2015 Workshop*. 452
- Courville, A., Bergstra, J., and Bengio, Y. (2011). Unsupervised models of images by spike-and-slab RBMs. In *ICML'11*. 561, 681