第2阶段:用自然的代码表达

- [10] Hertz, Matthew, and Emery D. Berger. Quantifying the performance of garbage collection vs. explicit memory management[J]. Proceedings of the 20th annual ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications, 2005.
- [11] PyPI. Memory Profiler.
- [12] Python Document. contextlib.
- [13] Wikipedia. Test functions for optimization.
- [14] Christopher Olah. Neural Networks, Types, and Functional Programming.
- [15] Yann LeCun. Differentiable Programming.
- [16] PyTorch Document, TORCHSCRIPT.
- [17] Swift for TensorFlow.

第3阶段:实现高阶导数

- [18] Graphviz Graph Visualization Software.
- [19] Wikipedia, Rosenbrock function.
- [20] PyTorch Document, torch.optim.LBFGS.
- [21] Gulrajani, Ishaan, et al. Improved training of wasserstein gans[J]. Advances in neural information processing systems. 2017.
- [22] Finn, Chelsea, Pieter Abbeel, Sergey Levine. Model-agnostic metalearning for fast adaptation of deep networks[J]. JMLR, 2017.
- [23] Schulman, John, et al. Trust region policy optimization[J]. International conference on machine learning, 2015, 37: 1889–1897.

第4阶段: 创建神经网络

- [24] Seiya Tokui. Aggressive Buffer Release.
- [25] LeCun, Yann A., et al. Efficient backprop[J]. Neural networks: Tricks

- of the trade, 2012.
- [26] Pascanu, Razvan, Tomas Mikolov, and Yoshua Bengio. On the difficulty of training recurrent neural networks[J]. International conference on machine learning. 2013, 28:1310–1318.
- [27] Duchi, John, Elad Hazan, and Yoram Singer. Adaptive subgradient methods for online learning and stochastic optimization[J]. Journal of Machine Learning Research 2011, 12: 2121–2159.
- [28] Zeiler, Matthew D. ADADELTA: an adaptive learning rate method[J]. arXiv preprint arXiv:1212.5701, 2012.
- [29] Loshchilov, Ilya, and Frank Hutter. Fixing weight decay regularization in adam[J]. arXiv preprint arXiv:1711.05101, 2017.
- [30] Chainer MNIST Example.
- [31] PyTorch MNIST Example.
- [32] Chainer Document. Link and Chains.
- [33] TensorFlow API Document. Module: tf.keras.optimizers.

第5阶段: DeZero高级挑战

- [34] Srivastava, Nitish, et al. Dropout: a simple way to prevent neural networks from overfitting[J]. The journal of machine learning research 2014: 1929–1958.
- [35] Ioffe, Sergey, Christian Szegedy. Batch normalization: Accelerating deep network training by reducing internal covariate shift[J]. arXiv preprint arXiv:1502.03167, 2015.
- [36] Simonyan, Karen, Andrew Zisserman. Very deep convolutional networks for large-scale image recognition[J]. arXiv preprint arXiv:1409.1556, 2014.
- [37] He, Kaiming, et al. Deep residual learning for image recognition[R].

 Proceedings of the IEEE conference on computer vision and pattern

- recognition. 2016.
- [38] Iandola, Forrest N., et al. SqueezeNet: AlexNet-level accuracy with 50x fewer parameters and <0.5 MB model size[J]. arXiv preprint arXiv:1602.07360, 2016.
- [39] SPHINX documentation.
- [40] ONNX官网.
- [41] Goodfellow, Ian, et al. Generative adversarial nets[J]. Advances in neural information processing systems. 2014.
- [42] Kingma, Diederik P., Max Welling. Auto-encoding variational bayes[J]. arXiv preprint arXiv:1312.6114, 2013.
- [43] Gatys, Leon A., Alexander S. Ecker, and Matthias Bethge. Image style transfer using convolutional neural networks[R]. Proceedings of the IEEE conference on computer vision and pattern recognition. 2016.

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