Toward Controlled Generation of Text: Supplementary Materials

A Model structure configurations

The discriminators for attributes are implemented as convolutional neural networks Kim (2014) that contain a convolutional layer on top of word vectors of a given sentence, followed by a max-over-time pooling layer and then a fully-connected layer with softmax output activation. A convolution operation is to apply a filter to word windows. Multiple filters with varying window sizes are used to obtain multiple features. The sentiment discriminator and the tense discriminator share the same network structure, where the convolutional layer includes (window size, kernel numbers) of (3,100), (4,100), and (5,100).

The sentiment classifier "Std" used in section.4.2 has the same structure with the sentiment discriminator.

References

Kim, Y. (2014). Convolutional neural networks for sentence classification. *arXiv preprint arXiv:1408.5882*.