ERRATUM: "ABCNN: Attention-Based Convolutional Neural Network for Modeling Sentence Pairs"

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Abstract

In this erratum, we correct the lack of proper attribution of two quotations.

A quotation of three sentences from (Yih et al., 2013) was not properly attributed. We sincerely apologize to Wen-tau Yih, Ming-Wei Chang, Christopher Meek and Andrzej Pastusiak for this mistake. We correct the first paragraph of Section 2, Related Work, as follows. Unchanged parts are in italics.

Non-DL on Sentence Pair Modeling. *Sentence pair modeling has attracted lots of attention in the past decades. Many tasks can be reduced to a semantic text matching problem.* In this paper, we adopt the arguments by Yih et al. (2013) who argue against shallow approaches as well as against semantic text matching approaches that can be computationally expensive:

> Due to the variety of word choices and inherent ambiguities in natural language, bag-of-word approaches with simple surface-form word matching tend to produce brittle results with poor prediction accuracy (Bilotti et al., 2007). As a result, researchers put more emphasis on exploiting syntactic and semantic structure. Representative examples include methods based on deeper semantic analysis (Shen and Lapata, 2007; Moldovan et al., 2007), tree edit-distance (Punyakanok et al., 2004; Heilman and Smith, 2010) and quasi-synchronous grammars (Wang et al., 2007) that match the dependency parse trees of the two sentences.

Instead of focusing on the high-level semantic representation, Yih et al. (2013) turn their attention to improving the shallow semantic component, lexical semantics, by performing semantic matching based on a latent word-alignment structure (cf. Chang et al. (2010)). Lai and Hockenmaier (2014) explore finer-grained word overlap and alignment between two sentences using negation, hypernym, synonym and antonym relations. Yao et al. (2013) extend word-to-word alignment to phrase-to-phrase alignment by a semi-Markov CRF. However, such approaches often require more computational resources. In addition, employing syntactic or semantic parsers – which produce errors on many sentences – to find the best match between the structured representations of two sentences is not trivial.

The first sentence of the penultimate paragraph of Section 2, Related Work, cites Mnih et al. (2014), but omits quotation marks. We correct it as follows, inserting opening and closing quotation marks. Unchanged parts are in italics.

Mnih et al. (2014) apply attention in recurrent neural networks (RNNs) to extract "information from an image or video by adaptively selecting a sequence of regions or locations and only processing the selected regions at high resolution."

References

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