**Supervised Learning of Universal Sentence**

**Representations from Natural Language Inference Data**

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**Abstract**

Many modern NLP systems rely on word embeddings, previously trained in an un- supervised manner on large corpora, as base features. Efforts to obtain embed- dings for larger chunks of text, such as sentences, have however not been so successful. Several attempts at learning unsupervised representations of sentences have not reached satisfactory enough performance to be widely adopted. In this paper, we show how universal sentence representations trained using the supervised data of the Stanford Natural Language Inference datasets can consistently outperform unsupervised methods like SkipThought vectors (Kiros et al., 2015) on a wide range of transfer

tasks. Much like how computer vision uses ImageNet to obtain features, which can then be transferred to other tasks, our work tends to indicate the suitability of natural language inference for transfer learning to other NLP tasks. Our encoder is publicly available1 .

**摘要**

许多现代NLP系统依赖于先前在大型语料库上以非监督方式训练的词嵌入作为基本特征。然而，在更大的文本块（例如句子）获取嵌入的努力还并未如此成功。学习无监督的句子表示的一些尝试都没有达到令人满意的性能，无法被广泛采用。在本文中，我们展示了如何使用斯坦福自然语言推理数据集的监督数据训练的通用句子表示在多数迁移任务上始终优于SkipThought向量（Kiros等，2015）等无监督方法。就像计算机视觉如何使用ImageNet获取特征然后可以转移到其他任务一样，我们的工作表明了自然语言推理对于迁移学习与其他NLP任务的适用性，另（我们的编码器是公开的）。