

A latent variable model approach to pmi-based **word** embeddings

S Arora, Y Li, Y Liang, T Ma, A Risteski - Transactions of the Association ..., 2016 - MIT Press

... as a random walk on words, which are assumed to be embedded as **vectors** in a ... interpretation and has proven useful in subsequent work, eg understand- ing structure of **word** embeddings for ... Also our work clarifies some weighting and **bias** terms in the training objec- tives of ...

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Adam: A method for stochastic optimization

DP Kingma, J Ba - arXiv preprint arXiv:1412.6980, 2014 - arxiv.org

... Good default settings for the tested machine learning problems are $\alpha = 0.002$, $\beta_1 = 0.9$ and $\beta_2 = 0.999$. With β_1 we denote β_1 to the power t . Here, $(\alpha/(1 - \beta_1 t))$ is the learning rate with the **bias**-correction term for the first moment. All operations on **vectors** are element-wise ...

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Distributional **vectors** encode referential attributes

A Gupta, G Boleda, M Baroni, S Padó - Proceedings of the 2015 ..., 2015 - aclweb.org

... is present in text, these representations are able to capture many aspects of **word** meaning ... We show that a simple supervised algo- rithm applied to **vectors** can retrieve them so ... of the conceptual nature of the knowledge encoded in dis- tributional data, that **bias** their predictions ...

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A unified learning framework of skip-grams and global **vectors**

J Suzuki, M Nagata - Proceedings of the 53rd Annual Meeting of the ..., 2015 - aclweb.org

... A comparison with the results of the second row, finds no mean- ingful benefit to using the **bias** terms. In contrast, obviously, the elapsed time for model learning is consistently shorter since we can discard the **bias** term update ... Glove: Global **vectors** for **word** representation ...

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Distributed **word** representation learning for cross-lingual dependency parsing

M Xiao, Y Guo - Proceedings of the Eighteenth Conference on ..., 2014 - aclweb.org

... $J(D) = \frac{1}{N} \sum_{i=1}^N \max(0, 1 - s(x_i) + s(x_i))$ (5) We perform a random initialization over the look-up table and weight model parameters, and set all the **bias** model parameters to zeros ... training effort. The dimension k of the embedding **word vectors** in R is set as 200 ...

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Deep visual-semantic alignments for generating image descriptions

A Karpathy, L Fei-Fei - Proceedings of the IEEE conference on ..., 2015 - cv-foundation.org

... We condition the RNN's predictions on the image informa- tion (bv) via **bias** interactions on the first step ... Since we use dif- ferent **word vectors**, dropout for regularization and different cross-validation ranges and larger embedding sizes, we re- implemented their loss for a fair ...

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Adaptive decision directed speech recognition **bias** equalization method and apparatus

BH Juang, D Mansour, JG Wilpon - US Patent 5,812,972, 1998 - Google Patents

... sequence or most likely HMM for the sequence of feature **vectors**. Each most likely state sequence preferably represents a **word** model. The recognizer 220 employs a novel segmentation technique that includes adaptive equalization to compensate for signal **bias** caused by ...

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Sparse overcomplete **word** vector representations

M Faruqui, Y Tsvetkov, D Yogatama, C Dyer... - arXiv preprint arXiv ..., 2015 - arxiv.org

... Our work builds on recent explorations of spar- sity as a useful form of inductive **bias** in NLP and machine learning more broadly ... di- mensions has been shown to improve dimension interpretability (Murphy et al., 2012; Fyshe et al., 2014) and usability of **word vectors** as features ...

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Ask, attend and answer: Exploring question-guided spatial attention for visual question answering

H Xu, K Saenko - European Conference on Computer Vision, 2016 - Springer

... 30]. Specifically, we compute
$$Q = W_Q \cdot V + b_Q$$

(4). where $(W_Q \in \mathbb{R}^{T \times T})$ represents the BOW weights for **word vectors**

V , and $(b_Q \in \mathbb{R}^N)$ is the **bias** term. The ...

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Evaluating **word** embeddings using a representative suite of practical tasks

N Nayak, G Angeli, CD Manning - [Proceedings of the 1st Workshop on ...](#), 2016 - [aclweb.org](#)

... 7.2 Avoiding **bias** Since this method of evaluation involves training a number of neural network models, there is a significant danger of overfitting to the embeddings used to find the hyperparameters ... 2014. Community evaluation and exchange of **word vectors** at **word- vectors** ...

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