

# **Workshop on Continuous Vector Space Models and their Compositionality 2013**

**Sofia, Bulgaria  
9 August 2013**

ISBN: 978-1-62993-006-0

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2013) by the Association for Computational Linguistics  
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the Association for Computational Linguistics  
at the address below.

Association for Computational Linguistics  
209 N. Eighth Street  
Stroudsburg, Pennsylvania 18360

Phone: 1-570-476-8006  
Fax: 1-570-476-0860

[acl@aclweb.org](mailto:acl@aclweb.org)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2634  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## Table of Contents

<i>Vector Space Semantic Parsing: A Framework for Compositional Vector Space Models</i> Jayant Krishnamurthy and Tom Mitchell .....	1
<i>Learning from errors: Using vector-based compositional semantics for parse reranking</i> Phong Le, Willem Zuidema and Remko Scha .....	11
<i>A Structured Distributional Semantic Model : Integrating Structure with Semantics</i> Kartik Goyal, Sujay Kumar Jauhar, Huiying Li, Mrinmaya Sachan, Shashank Srivastava and Eduard Hovy .....	20
<i>Letter N-Gram-based Input Encoding for Continuous Space Language Models</i> Henning Sperr, Jan Niehues and Alex Waibel .....	30
<i>Transducing Sentences to Syntactic Feature Vectors: an Alternative Way to "Parse"?</i> Fabio Massimo Zanzotto and Lorenzo Dell' Arciprete .....	40
<i>General estimation and evaluation of compositional distributional semantic models</i> Georgiana Dinu, Nghia The Pham and Marco Baroni .....	50
<i>Applicative structure in vector space models</i> Marton Makrai, David Mark Nemeskey and Andras Kornai .....	59
<i>Determining Compositionality of Expressions Using Various Word Space Models and Methods</i> Lubomír Krčmář, Karel Ježek and Pavel Pecina .....	64
<i>"Not not bad" is not "bad": A distributional account of negation</i> Karl Moritz Hermann, Edward Grefenstette and Phil Blunsom .....	74
<i>Towards Dynamic Word Sense Discrimination with Random Indexing</i> Hans Moen, Erwin Marsi and Björn Gambäck .....	83
<i>A Generative Model of Vector Space Semantics</i> Jacob Andreas and Zoubin Ghahramani .....	91
<i>Aggregating Continuous Word Embeddings for Information Retrieval</i> Stephane Clinchant and Florent Perronnin .....	100
<i>Answer Extraction by Recursive Parse Tree Descent</i> Christopher Malon and Bing Bai .....	110
<i>Recurrent Convolutional Neural Networks for Discourse Compositionality</i> Nal Kalchbrenner and Phil Blunsom .....	119