

Home | Computational Linguistics | List Article navigation of Issues | Volume 37, No. 3 | Dependency Parsing Schemata and Mildly Non-Projective Dependency Parsing



Quarterly (March, June, September, December) 160pp. per issue 6 3/4 x 10 Founded: 1974 2018 Impact Factor: 1.319

2018 Google Scholar h5-index: 32

ISSN: 0891-2017 E-ISSN: 1530-9312

Journal Resources

Editorial Info Abstracting and Indexing Release Schedule Advertising Info

Author Resources

Submission Guidelines Publication Agreement

Dependency Parsing Schemata and Mildly Non-Projective Dependency Parsing

Carlos Gómez-Rodríguez, John Carroll and David Weir

Posted Online August 26, 2011 https://doi.org/10.1162/COLI a 00060

© 2011 Association for Computational Linguistics

Computational Linguistics Volume 37 | Issue 3 | September 2011 p.541-586

Download Options

Abstract Authors

We introduce dependency parsing schemata, a formal framework based on Sikkel's parsing schemata for constituency parsers, which can be used to describe, analyze, and compare dependency parsing algorithms. We use this Reader Resources

Author Reprints

Rights and Permissions Most Read Most Cited

More About Computational Linguistics

framework to describe several well-known projective and non-projective dependency parsers, build correctness proofs, and establish formal relationships between them. We then use the framework to define new polynomial-time parsing algorithms for various mildly nonprojective dependency formalisms, including well-nested structures with their gap degree bounded by a constant k in time $O(n^{5+2k})$, and a new class that includes all gap degree k structures present in several natural language treebanks (which we call mildly ill-nested structures for gap degree k) in time $O(n^{4+3k})$. Finally, we illustrate how the parsing schema framework can be applied to Link Grammar, a dependency-related formalism.

Forthcoming

b Lexicon-Based

Sentiment Analysis

Maite Taboada et

Volume: 37, Issue: 2, pp.

Methods for

(14019 times)

Computational

Linguistics

267-307

Most Read

al.



Metrics

8 Total citations 3 Recent citations

2.44 Field Citation Ratio n/a Relative **Citation Ratio**

Open Access

Computational б Linguistics Computational Linguistics is **Open Access.** All content is freely available in electronic format (Full text HTML, PDF, and PDF Plus) to readers across the

Most Cited

b Lexicon-Based Methods for (436 times) Maite Taboada et al. Computational Linguistics Volume: 37, Issue: 2, pp. 267-307

b A Systematic Comparison of Sentiment Analysis Various Statistical **Alignment Models** (174 times) Franz Josef Och et al. Computational Linguistics Volume: 29, Issue: 1, pp. 19-51

opinion Word Expansion and Target Extraction through Double Propagation (147 times) Guang Qiu et al. Computational Linguistics Volume: 37, Issue: 1, pp. 9-27

b Near-Synonymy and Lexical Choice (3658 times) Philip Edmonds et al. Computational Linguistics Volume: 28, Issue: 2, pp.

105-144

See More

See More

(Note that the Most Read numbers are based on the number of full text downloads over the last 12 months.)

Volume: 41, Issue: 4, pp.

Computational

Linguistics and

Deep Learning

(10513 times)

Manning

Linguistics

701-707

Computational

Christopher D.

2018/11/24 Dependency Parsing Schemata and Mildly Non-Projective Dependency Parsing Computational Linguistics MIT Press Journal

globe. All

(Note that the Most Cited numbers are based on Crossref's Cited-by

One Rogers Street Suite 2, 1 Duchess F 🎔 G+ 🛞 🖸 🗈 Atypon Systems,

CrossRef Member

COUNTER Member The MIT Press colophon is registered in the U.S. Patent and Trademark Office.

Inc.

Site Help

articles are published	service	service and reflect citation information for the past 24 months.)			
under a CC BY-NC-ND 4.0 license.	Option	Sign up for			
For more information on allowed uses, please view the CC	Favorite Download Citation _↓	Alerts 📮 RSS TOC 🌈			
license. Support OA at MITP		Submit your article			
	Support OA at MITP	-			
	Journals	Terms & Conditions	Privacy Statement	Contact Us	
	Books				
	US	UK	Connect	© 2018 The MIT Press Technology Partner:	

Street London,

W1W 6AN, UK

Cambridge MA

02142-1209