Understanding the Yarowsky Algorithm

Steven Abney

Posted Online March 13, 2006
https://doi.org/10.1162/0891201041850876

Computational Linguistics
Volume 30 | Issue 3 | September 2004
p.365-395

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

Abstract Authors

Many problems in computational linguistics are well suited for bootstrapping (semisupervised learning) techniques. The Yarowsky algorithm is a well-known bootstrapping algorithm, but it is not mathematically well understood. This article analyzes it as optimizing an objective function. More specifically, a number of variants of the Yarowsky algorithm (though not the original algorithm itself) are shown to optimize either likelihood or a closely related objective function K.

Author Resources

Submission Guidelines
Publication Agreement
Author Reprints

Reader Resources

Rights and Permissions
Most Read
Most Cited

More About Computational Linguistics

Metrics

48 Total citations

6 Recent citations

10 Field Citation Ratio

n/a Relative Citation Ratio

Open Access

Computational Linguistics Computational Linguistics is Open Access. All content is freely available in

Most Read

See More

Lexicon-Based Methods for Sentiment Analysis (14087 times)
Maite Taboada et al.
Computational Linguistics
Volume: 37, Issue: 2, pp. 267-307

Computational Linguistics and Deep Learning (10542 times)
Christopher D. Manning
Computational Linguistics
Volume: 41, Issue: 4, pp. 701-707

Near-Synonymy and Lexical Choice (3675 times)
Philip Edmonds et al.
Computational Linguistics
Volume: 28, Issue: 2, pp. 105-144

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

Most Cited

See More

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

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

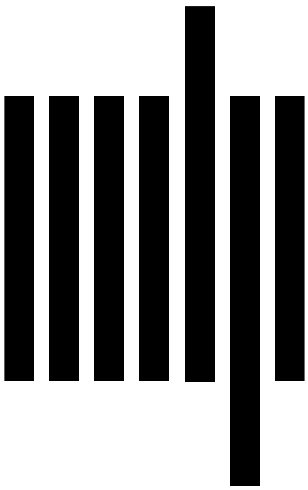
Opinion Word Expansion and Target Extraction through Double Propagation (147 times)
Guang Qiu et al.
Computational Linguistics
Volume: 37, Issue: 1, pp. 9-27

(Note that the Most Cited numbers are based on Crossref's Cited-by service and reflect citation information for the past 24 months.)

Download Options

Favorite
Sign up for Alerts
Download Citation
RSS TOC
RSS Citation
Submit your article

Support OA at MITP



US
One Rogers Street
Cambridge MA
02142-1209

UK
Suite 2, 1 Duchess Street London,
W1W 6AN, UK