March 1998 Volume 24, Number 1

Computational Linguistics

Special Issue on Word Sense Disambiguation

Introduction to the Special Issue on Word Sense Disambiguation: The State of the Art	Nancy Ide and Jean Véronis	1

Articles

Similarity-based Word Sense Disambiguation	Yael Karov and Shimon Edelman	41
Topical Clustering of MRD Senses Based on Information Retrieval Techniques	Jen Nan Chen and Jason S. Chang	61
Automatic Word Sense Discrimination	Hinrich Schütze	97
Disambiguating Highly Ambiguous Words	Geoffrey Towell and Ellen M. Voorhees	125
Using Corpus Statistics and WordNet Relations for Sense Identification	Claudia Leacock, Martin Chodorow, and George A. Miller	147

Book Reviews

Parsing with Principles and Classes of Information by Paola Merlo	*Reviewed by* Giorgio Satta	167
From Grammar to Science: New Foundations for General Linguistics by Victor H. Yngve	*Reviewed by* Geoffrey Sampson	173
Surface Structure and Interpretation by Mark Steedman	*Reviewed by* Norman Creaney	177
Publications Received		180

Published Quarterly by the MIT Press for the Association for Computational Linguistics

Computational Linguistics ISSN 0891-2017

Editor 1993–
Julia Hirschberg
AT&T Labs-Research
180 Park Avenue, A237
Florham Park, NJ 07932-0971
(+1 973) 360-8330
acl@research.att.com

Editorial Assistant
Ana Pereira
AT&T Labs-Research
Room A240
180 Park Avenue, P.O. Box 971
Florham Park, NJ 07932-0971
acl@research.att.com
fax: (973) 360-8970

Book Review Editor
Graeme Hirst
University of Toronto
Department of Computer Science
Toronto, CANADA M5S 3G4
(+1 416) 978-8747
gh@cs.toronto.edu

Squibs and Discussions Editor
Pierre Isabelle
RALI, DIRO
Université de Montréal
C. P. 6128, Succ. Centre-ville
Montreal, Quebec, CANADA H3C 3J7
(+1 514) 343-6161
isabelle@iro.umontreal.ca

Editorial Board Members

1996–98:
Eric Brill, *Johns Hopkins University*
Richard Crouch, *University of Nottingham*
David Johnson, *IBM/TJ Watson Research Center*
Julian Kupiec, *Xerox Palo Alto Research Center*
Hinrich Schütze, *Xerox Palo Alto Research Center*
Marilyn Walker, *AT&T Research*

1997–99:
David Carter, *SRI International, Cambridge*
Mark Ellison, *University of Edinburgh*
Clair Gardent, *Universität des Saarlandes*
Marcus Kracht, *Freie Universität Berlin*
Owen Rambow, *CoGenTeX, Inc.*
James Rogers, *University of Central Florida*
Andreas Stolcke, *SRI International, Menlo Park*
Gertjan van Noord, *University of Groningen*
David Yarowsky, *Johns Hopkins University*

1998–2000:
Steven Abney, *AT&T Labs-Research*
Chris Brew, *University of Edinburgh*
Jean Carletta, *University of Edinburgh*
Genichiro Kikui, *NTT Information and Communication Systems Labs*
Shalom Lappin, *University of London (SOAS)*
Christopher Manning, *University of Sidney*
Christine Nakatani, *AT&T Labs-Research*
Philip Resnik, *University of Maryland*
Giorgio Satta, *University of Padua*
Karen Sparck-Jones, *University of Cambridge*
Dekai Wu, *Hong Kong University of Science and Technology*

March 1998 Volume 24, Number 1

Computational Linguistics

Special Issue on Word Sense Disambiguation

Introduction to the Special Issue on Word Sense Disambiguation: The State of the Art	Nancy Ide and Jean Véronis	1

Articles

Similarity-based Word Sense Disambiguation	Yael Karov and Shimon Edelman	41
Topical Clustering of MRD Senses Based on Information Retrieval Techniques	Jen Nan Chen and Jason S. Chang	61
Automatic Word Sense Discrimination	Hinrich Schütze	97
Disambiguating Highly Ambiguous Words	Geoffrey Towell and Ellen M. Voorhees	125
Using Corpus Statistics and WordNet Relations for Sense Identification	Claudia Leacock, Martin Chodorow, and George A. Miller	147

Book Reviews

Parsing with Principles and Classes of Information by Paola Merlo	*Reviewed by* Giorgio Satta	167
From Grammar to Science: New Foundations for General Linguistics by Victor H. Yngve	*Reviewed by* Geoffrey Sampson	173
Surface Structure and Interpretation by Mark Steedman	*Reviewed by* Norman Creaney	177
Publications Received		180

Copyright ©1998 by the Association for Computational Linguistics. Permission to photocopy articles for internal or personal use, or the internal or personal use of specific clients, is granted by the copyright owner for users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the fee of $3.00 per article-copy is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. The fee code for users of the Transactional Reporting Service is 0891-2017/98 $3.00. For those organizations that have been granted a photocopy license with CCC, a separate system of payment has been arranged. Such permission requests and other permission inquiries should be addressed to the Managing Editor at the address given on the inside front cover of this issue.

Computational Linguistics is abstracted and/or indexed in the following publications: *Annual Review of Information Science and Technology, CompuMath Citation Index, Computer Abstracts, Computing Reviews, Current Contents: Social and Behavioral Sciences, Engineering Index, Knowledge Engineering Review, Language and Language Behavior Abstracts, Linguistic Abstracts, Linguistic Bibliography, Research Alert, Science Abstracts* (INSPEC Section C), *SciSearch, Social Sciences Citation Index*, and *Social SciSearch.*

Volume 14 and subsequent volumes of *Computational Linguistics* are available on microfilm through University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106, USA.

Send advertising and mailing list inquiries to Marketing Dept., MIT Press Journals, Five Cambridge Center, Cambridge, MA 02142; Phone: (617) 253-2866; fax: (617) 258-5028; e-mail: journals-info@mit.edu.

Individual Subscriptions to *Computational Linguistics* are available only with membership in the Association for Computational Linguistics (ACL). Annual Membership Dues are as follows: *regular*, $50.00; *student* — taking a full-time program of courses and not earning a regular income, $30.00; *retired*, $30.00; *joint* — for couples receiving one subscription, $60.00. A membership application together with an order form for back issues and conference proceedings is included at the end of this issue. Send membership applications and address changes to Priscilla Rasmussen, Association for Computational Linguistics (ACL), P.O. Box 6090, Somerset, NJ 08875, USA. However, note that it is also possible to pay by credit card (both by e-mail and by postal mail) and through banks in Switzerland and Japan.

Institutional Subscriptions are $110.00. Outside the U.S. and Canada add $16.00 postage handling. Canadian subscribers add 7% GST. Single copies of current and back issues are $28.00. Outside U.S. and Canada add $5.00 per issue for postage and handling. Canadians add 7% GST. Send institutional subscription orders and address changes to MIT Press Journals, Five Cambridge Center, Cambridge, MA 02142; phone: (617) 253-2889; fax: (617) 577-1545; e-mail: journals-orders@mit.edu. Claims for missing issues will be honored free of charge if made within three months after the publication date of the issue. Prices subject to change without notice. Institutions should order back issues before 1988 and all proceedings from the ACL at the address above.