

CAMBRIDGE

## Fantastic Titles from Cambridge!

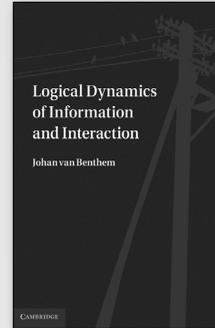
### Logical Dynamics of Information and Interaction

Johan van Benthem

**Contents:**

Preface; 1. Logical dynamics, agency, and intelligent interaction; 2. Epistemic logic and semantic information; 3. Dynamic logic of public observation; 4. Multi-agent dynamic-epistemic logic; 5. Dynamics of inference and awareness; 6. Questions and issue management; 7. Soft information, correction, and belief change; 8. An encounter with probability; 9. Preference statics and dynamics; 10. Decisions, actions, and games; 11. Processes over time; 12. Epistemic group structure and collective agency; 13. Logical dynamics in philosophy; 14. Computation as conversation; 15. Rational dynamics in game theory; 16. Meeting cognitive realities; 17. Conclusion; Bibliography.

\$95.00: Hardback: 978-0-521-76579-4: 384 pp.

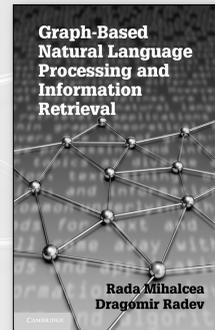


### Graph-based Natural Language Processing and Information Retrieval

Rada F. Mihalcea, Dragomir R. Radev

This book extensively covers the use of graph-based algorithms for natural language processing and information retrieval. Readers will come away with a firm understanding of the major methods and applications of these topics that rely on graph-based representations and algorithms.

\$65.00: Hardback: 978-0-521-89613-9: 224 pp.

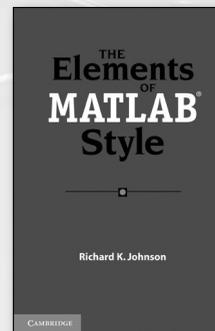


### The Elements of MATLAB Style

Richard K. Johnson

*The Elements of MATLAB Style* is a guide for both new and experienced MATLAB programmers that offers a collection of standards and guidelines for creating solid MATLAB code that will be easy to understand, enhance, and maintain. This is the only book devoted to MATLAB style and best programming practices.

\$19.99: Paperback: 978-0-521-73258-1: 184 pp.



Prices subject to change.

[www.cambridge.org/us/computerscience](http://www.cambridge.org/us/computerscience)  
800.872.7423



CAMBRIDGE  
UNIVERSITY PRESS

# ReCALL

Published for EUROCALL (European Association for Computer-Assisted Language Learning)



## Editors

June Thompson, *University of Hull, UK*

Françoise Blin, *Dublin City University, Ireland*

The primary focus of *ReCALL* is the use of technologies for language learning and teaching, including all relevant aspects of research and development. Typical subjects for submissions include theoretical debate on language learning strategies and their influence on courseware design; practical applications at developmental stage; evaluative studies of courseware used in the teaching and learning process; exploitation and assessment of the potential of technological advances in the delivery of language learning materials; discussions of policy and strategy at institutional and discipline levels.

## Price information

is available at: <http://journals.cambridge.org/rec>

## Free email alerts

Keep up-to-date with new material – sign up at  
<http://journals.cambridge.org/alerts>

## ReCALL

is available online at:

<http://journals.cambridge.org/rec>

## To subscribe contact Customer Services

### in Cambridge:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email [journals@cambridge.org](mailto:journals@cambridge.org)

### in New York:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

[subscriptions\\_newyork@cambridge.org](mailto:subscriptions_newyork@cambridge.org)

For free online content visit:  
<http://journals.cambridge.org/rec>



**CAMBRIDGE**  
UNIVERSITY PRESS

## Instructions for Contributors

### Aims and Scope

*Natural Language Engineering* encourages original papers reporting research with a clear potential for practical application. The journal also invites surveys presenting the state of the art in important areas of Natural Language Engineering and Natural Language Processing as well as squibs discussing specific problems. Book reviews and reports on industrial applications are welcomed, as are conference reports, comparative discussions of Natural Language Engineering products and policy-orientated papers examining, for example, funding programmes or market opportunities. All contributions are peer reviewed.

### General

Submission of a paper to *Natural Language Engineering* is held to imply that the contribution has not been previously published and is not being considered elsewhere. Authors of articles published in the journal assign copyright to Cambridge University Press (with certain rights reserved) and will receive a copyright assignment form for signature on acceptance of their papers.

Electronic submissions are required. A pdf submission is preferred for review, but a separate copy of the abstract should be submitted in an editable format (Word, rtf or ASCII). Up to five keywords should also be supplied to help with assignment of reviewers. Papers should be preceded by an abstract of approximately 300 words.

All submissions from authors worldwide should preferably be emailed to the Executive Editor of the journal:

Prof. Ruslan Mitkov  
Research Institute of Information and Language Processing  
University of Wolverhampton, United Kingdom  
email: R.Mitkov@wlv.ac.uk

with a copy to NLE@wlv.ac.uk

For detailed instructions on submitting files see: [journals.cambridge.org/nle](http://journals.cambridge.org/nle)

### Manuscript requirements

1. Manuscripts should be **double spaced throughout**, with wide margins. Sheets should be numbered consecutively.
2. The first page of the manuscript should give the title, the name(s) and full mailing address(es) of the author(s), together with e-mail address(es).

### Conventions

Authors must consult the full list of conventions for *Natural Language Engineering* available in the Instructions for Contributors at [journals.cambridge.org/NLE](http://journals.cambridge.org/NLE)

### First View publishing and DOIs

In order to make articles which have been accepted for publication in *Natural Language Engineering* available as quickly as possible, they are now published as First View online (at Cambridge Journals Online: [journals.cambridge.org](http://journals.cambridge.org)) The online version is available as soon as author corrections have been completed and before the article appears in a printed issue. A reference is added to the first page of the article in the journal catchline. This is the DOI - Digital Object Identifier. This is a global publishers' standard. A unique DOI number is created for each published item. It can be used for citation purposes instead of volume, issue and page numbers. It therefore suits the early citation of articles which are published as First View on the web before they have appeared in a printed issue. See [journals.cambridge.org/nle](http://journals.cambridge.org/nle)

### Proofreading

Proofs will be supplied as pdfs to your nominated email address. These may be read and corrected by contributors provided that they can guarantee to return the corrected proofs within four days of receipt. Contributors should correct printers' errors but not introduce new or different material at this stage. The publisher reserves the right to charge authors for correction of non-typographical errors.

### Offprints

No paper offprints are provided, but a pdf of the published article will be sent to the corresponding author.

Printed in the United Kingdom by the University Press, Cambridge

Cambridge University Press  
The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, United Kingdom  
32 Avenue of the Americas, New York, NY 10013-2473, USA  
477 Williamstown Road, Port Melbourne, VIC 3207, Australia  
Ruiz de Alarcón 13, 28014 Madrid, Spain  
Dock House, The Waterfront, Cape Town 8001, South Africa

# NATURAL LANGUAGE ENGINEERING

Volume 17 Part 2 April 2011

## CONTENTS

### ARTICLES

- Finite-state methods and models in natural language processing *page* 141  
*Anssi Yli-Jyrä, András Kornai and Jacques Sakarovitch*
- Syntactic error detection and correction in date expressions using  
finite-state transducers 145  
*Arantza Díaz de Ilarraza, Koldo Gojenola, Maite Oronoz and Iñaki Alegria*
- Regular relations for temporal propositions 163  
*Tim Fernando*
- Using regular tree grammars to enhance sentence realisation 185  
*Claire Gardent, Benjamin Gottesman and Laura Perez-Beltrachini*
- A randomised inference algorithm for regular tree languages 203  
*Johanna Högberg*
- An alternative to synchronous tree substitution grammars 221  
*Andreas Maletti*
- Finite-state models for speech-based search on mobile devices 243  
*Taniya Mishra and Srinivas Bangalore*
- Efficiently generating correction suggestions for garbled tokens  
of historical language 265  
*Ulrich Reffle*

*Printed in the United Kingdom by the University Press, Cambridge*

The cover illustration is computer generated from an engraving of the Tower of Babel in an eighteenth-century bible

#### Cambridge Journals Online

For further information about this journal  
please go to the journal website at:  
[journals.cambridge.org/nle](http://journals.cambridge.org/nle)



#### Mixed Sources

Product group from well-managed  
forests and other controlled sources  
[www.fsc.org](http://www.fsc.org) Cert no. SA-COC-1527  
© 1996 Forest Stewardship Council

**CAMBRIDGE**  
UNIVERSITY PRESS