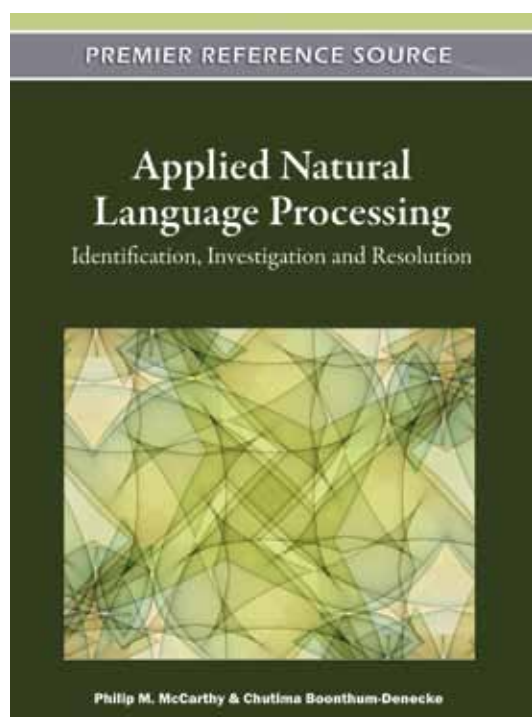


An Excellent Addition to Your Library!

Released: October 2011

Applied Natural Language Processing: Identification, Investigation and Resolution



Philip M. McCarthy (The University of Memphis, USA)
and Chutima Boonthum-Denecke (Hampton University, USA)

The amount of information that humans have gathered and made available to other humans is phenomenal, yet however large this repository of knowledge is, by this time tomorrow, it will be larger still.

Applied Natural Language Processing: Identification, Investigation and Resolution is a volume dedicated to the successful application of processing tools to this information. The majority of this knowledge is expressed through textual media, which requires these tools to utilize the research in the field of Applied Natural Language Processing. This book contains state-of-the-art Applied Natural Language Processing techniques as well as their applications. The descriptions and studies are the product of established researchers in fields relating to ANLP, and this work is relevant to teachers, students, and materials developers in fields spanning computer science, linguistics, and cognitive science.

Topics Covered:

- Content Analysis and ANLP
- Discourse Analysis
- Information Extraction
- Probabilistic approaches to ANLP
- Programming for ANLP
- Question Answering and Asking
- Teaching ANLP
- Text Classification/Clustering
- Text Mining
- Tokenization, Regular Expression, Morphology, and Stemming

ISBN: 9781609607418; © 2012; 659 pp.

Print: US \$195.00 | Perpetual: US \$295.00 | Print + Perpetual: US \$390.00

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Philip M. McCarthy is an Assistant Professor at The University of Memphis. He is also a member of the Institute for Intelligent Systems. His research is in the field of Applied Natural Language Processing (ANLP). His primary interest is devising algorithms for contrastive corpus analyses, particularly where such algorithms can be informative of the relationship between language, the mind, and the world.



www.igi-global.com

Publishing Academic Excellence
at the Pace of Technology Since 1988

Section 1: Foundations: The Role of NLP

Chapter 1

Question Answering and Generation

Graesser Arthur C. (The University of Memphis, USA)
Rus Vasile (The University of Memphis, USA)
Cai Zhiqiang (The University of Memphis, USA)
Hu Xiangen (The University of Memphis, USA)

Chapter 2

Portable Text Summarization

Hassel Martin (Stockholm University, Sweden)
Dalianis Hercules (Stockholm University, Sweden)

Chapter 3

Discourse Analysis and ANLP

Kent Alexandra (Loughborough University, UK)
McCarthy Philip M. (The University of Memphis, USA)

Chapter 4

NLP for Search

Hempelman Christian F. (RiverGlass Inc., USA & Purdue University, USA)

Chapter 5

Data Mining

Atzmüller Martin (University of Kassel, Germany)

Chapter 6

Dialogue Acts and Dialogue Structure

Midgley T. Daniel (University of Western Australia, Australia)

Chapter 7

Text-to-Text Similarity of Sentences

Rus Vasile (The University of Memphis, USA)
Linteau Mihai (The University of Memphis, USA)
Graesser Arthur C. (The University of Memphis, USA)
McNamara Danielle S. (Arizona State University, USA)

Chapter 8

Practical Programming for NLP

Jeuniaux Patrick (Université Laval, Canada)
Olney Andrew (The University of Memphis, USA)
D'Mello Sidney (The University of Memphis, USA)

Section 2: Successful ANLP Applications or Systems

Chapter 9

LSA in the Classroom

Kintsch Walter (University of Colorado, USA)
Kintsch Eileen (University of Colorado, USA)

Chapter 10

AutoTutor

Graesser Arthur (The University of Memphis, USA)
D'Mello Sidney (The University of Memphis, USA)
Hu Xiangen (The University of Memphis, USA)
Cai Zhiqiang (The University of Memphis, USA)
Olney Andrew (The University of Memphis, USA)
Morgan Brent (The University of Memphis, USA)

Chapter 11

Col-Matrix:

McNamara Danielle S. (Arizona State University, USA)
Graesser Arthur C. (The University of Memphis, USA)

Chapter 12

Linguistic Inquiry and Word Count (LIWC):

Chung Cindy K. (The University of Texas at Austin, USA)
Pennebaker James W. (The University of Texas at Austin, USA)

Chapter 13

HiDEx:

Shaoul Cyrus (University of Alberta, Canada)
Westbury Chris (University of Alberta, Canada)

Chapter 14

Computational Aspects of the Intelligent Tutoring System MetaTutor

Linteau Mihai (The University of Memphis, USA)
Rus Vasile (The University of Memphis, USA)
Cai Zhiqiang (The University of Memphis, USA)
Witherspoon-Johnson Amy (Arizona State University, USA)
Graesser Arthur C. (The University of Memphis, USA)
Azevedo Roger (McGill University, Canada)

Chapter 15

Applying NLP Metrics to Students' Self-Explanations

Jackson G. Tanner (Arizona State University, USA)
McNamara Danielle S. (Arizona State University, USA)

Chapter 16

Computer-Aided Rhetorical Analysis

Ishizaki Suguru (Carnegie Mellon University, USA)
Kaufman David (Carnegie Mellon University, USA)

Section 3: New Research in ANLP

Chapter 17

The Writing-Pak:

McNamara Danielle S. (Arizona State University, USA)
Raine Roxanne (The University of Memphis, USA)
Roscoe Rod (Arizona State University, USA)
Crossley Scott A. (Georgia State University, USA)
Jackson G. Tanner (Arizona State University, USA)
Dai Jianmin (Arizona State University, USA)
Cai Zhiqiang (The University of Memphis, USA)
Renner Adam (The University of Memphis, USA)
Brandon Russell (Arizona State University, USA)
Weston Jennifer L. (Arizona State University, USA)
Dempsey Kyle (Mississippi University for Women, USA)
Carney Diana (The University of Memphis, USA)
Sullivan Susan (The University of Memphis, USA)
Kim Loel (The University of Memphis, USA)
Rus Vasile (The University of Memphis, USA)
Floyd Randy (The University of Memphis, USA)
McCarthy Philip M. (The University of Memphis, USA)
Graesser Arthur C. (The University of Memphis, USA)

Chapter 18

The Gramulator:

McCarthy Philip M. (The University of Memphis, USA)
Watanabe Shinobu (The University of Memphis, USA)
Lamkin Travis A. (The University of Memphis, USA)

Chapter 19

The Role of Textual Graph Patterns in Discovering Event Causality

Rink Bryan (University of Texas at Dallas, USA)
Bejan Cosmin Adrian (University of Southern California, USA)
Harabagiu Sanda (University of Texas at Dallas, USA)

Chapter 20

Play-by-Play Learning for Textual User Interfaces

Blaylock Nate (Florida Institute for Human and Machine Cognition, USA)
de Beaumont William (Florida Institute for Human and Machine Cognition, USA)
Galescu Lucian (Florida Institute for Human and Machine Cognition, USA)
Jung Hyuckchul (Florida Institute for Human and Machine Cognition, USA)
Allen James (University of Rochester, USA)
Ferguson George (University of Rochester, USA)
Swift Mary (University of Rochester, USA)

Chapter 21

Computationally Assessing Expert Judgments of Freewriting Quality

Weston Jennifer L. (Arizona State University, USA)
Crossley Scott A. (Georgia State University, USA)
McNamara Danielle S. (Arizona State University, USA)

Chapter 22

Morphological Analysis of Ill-Formed Arabic Verbs for Second Language Learners

Shaalan Khaled (The British University in Dubai, UAE)

Magdy Marwa (Cairo University, Egypt)

Fahmy Aly (Cairo University, Egypt)

Chapter 23

Dynamic Effects of Repeating a Timed Writing Task in Two EFL University Courses:

Baba Kyoko (Kinjo Gakuin University, Japan)

Nitta Ryo (Nagoya Gakuin University, Japan)

Chapter 24

A Comparative Study of an Unsupervised Word Sense Disambiguation Approach

Xiong Wei (New Jersey Institute of Technology, USA)

Song Min (New Jersey Institute of Technology, USA)

deVersterre Lori Watrous (New Jersey Institute of Technology, USA)

Chapter 25

Interlanguage Talk:

Crossley Scott A. (Georgia State University, USA)

McNamara Danielle S. (Arizona State University, USA)

Chapter 26

Maximizing ANLP Evaluation:

Renner Adam M. (The University of Memphis, USA)

McCarthy Philip M. (The University of Memphis, USA)

Boonthum-Denecke Chutima (Hampton University, USA)

McNamara Danielle S. (Arizona State University, USA)

Chapter 27

Newness and Givenness of Information:

McCarthy Philip M. (The University of Memphis, USA)

Duffy David (The Australian Bureau of Statistics, Australia)

Hempelmann Christian F. (Purdue University, USA)

Cai Zhiqiang (The University of Memphis, USA)

McNamara Danielle S. (Arizona State University, USA)

Graesser Arthur C. (The University of Memphis, USA)

Chapter 28

Semantic Methods for Textual Entailment

Neel Andrew J. (The University of Memphis, USA)

Garzon Max H. (The University of Memphis, USA)

Chapter 29

Mining and Visualizing the Narration Tree of Hadiths (Prophetic Traditions)

Azmi Aqil (King Saud University, Saudi Arabia)

Al Badia Nawaf (General Organization for Social Insurance, Saudi Arabia)

Chapter 30

Using Event Semantics for Toponym Disambiguation

Roberts Kirk (University of Texas at Dallas, USA)

Bejan Cosmin Adrian (University of Southern California, USA)

Harabagiu Sanda (University of Texas at Dallas, USA)

Chapter 31

Evaluation of Narrative and Expository Text Summaries Using Latent Semantic Analysis

Venegas René (Pontificia Universidad Católica de Valparaíso, Chile)

Chapter 32

Using LIWC and Coh-Metrix to Investigate Gender Differences in Linguistic Styles

Bell Courtney M. (Northwest Community College, USA)

McCarthy Philip M. (The University of Memphis, USA)

McNamara Danielle S. (Arizona State University, USA)

Order Your Copy Today!

Name: _____

Organization: _____

Address: _____

City, State, Zip: _____

Country: _____

Tel: _____

Fax: _____

E-mail: _____

☐ Enclosed is check payable to IGI Global in
US Dollars, drawn on a US-based bank

☐ Credit Card ☐ Mastercard ☐ Visa ☐ Am. Express

3 or 4 Digit Security Code: _____

Name on Card: _____

Account #: _____

Expiration Date: _____