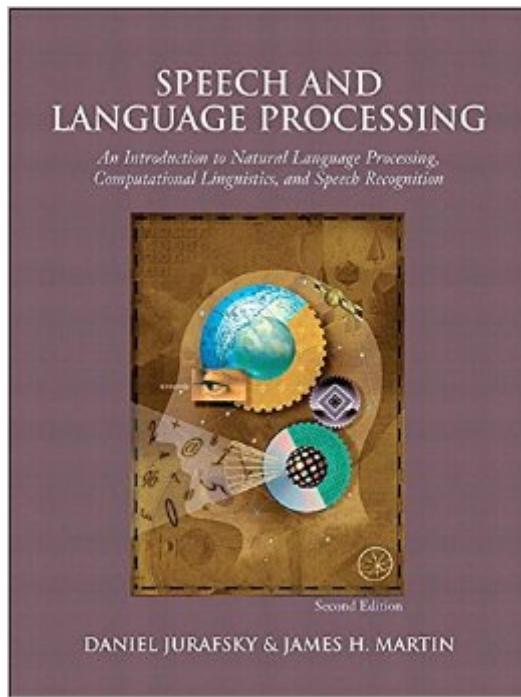


The book was found

Speech And Language Processing



Synopsis

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. For undergraduate or advanced undergraduate courses in Classical Natural Language Processing, Statistical Natural Language Processing, Speech Recognition, Computational Linguistics, and Human Language Processing. An explosion of Web-based language techniques, merging of distinct fields, availability of phone-based dialogue systems, and much more make this an exciting time in speech and language processing. The first of its kind to thoroughly cover language technology at all levels and with all modern technologies this text takes an empirical approach to the subject, based on applying statistical and other machine-learning algorithms to large corporations. The authors cover areas that traditionally are taught in different courses, to describe a unified vision of speech and language processing. Emphasis is on practical applications and scientific evaluation. An accompanying Website contains teaching materials for instructors, with pointers to language processing resources on the Web. The Second Edition offers a significant amount of new and extended material.

Supplements: Click on the "Resources" tab to View Downloadable Files: Solutions Power Point Lecture Slides - Chapters 1-5, 8-10, 12-13 and 24 Now Available! For additional resources visit the author website: <http://www.cs.colorado.edu/~martin/slp.html>

Book Information

File Size: 25466 KB

Print Length: 1024 pages

Simultaneous Device Usage: Up to 2 simultaneous devices, per publisher limits

Publisher: Pearson; 2 edition (December 30, 2014)

Publication Date: December 30, 2014

Sold by: Digital Services LLC

Language: English

ASIN: B00XIGSJQK

Text-to-Speech: Not enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #353,049 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #10

in Books > Computers & Technology > Software > Voice Recognition #42 in Books > Computers & Technology > Computer Science > AI & Machine Learning > Natural Language Processing #83 in Books > Computers & Technology > Computer Science > AI & Machine Learning > Computer Vision & Pattern Recognition

Customer Reviews

The authors have the challenge of covering a vast area, and they do a good job of highlighting the hard problems within individual sub-fields, such as machine translation. The availability of an accompanying Web site is a strong plus, as is the extensive bibliography, which also includes links to freely available software and resources. Now for the negatives. While I would still buy and recommend this book, you will need to supplement it with other material; in addition to the accurate "broad and shallow" comment made by another reviewer, I would add that much of the material, as presented, is aimed at the comprehension level of a computer-science PhD and doesn't really meet the definition of a textbook for either undergraduate or graduate students. It is not that the material is intrinsically difficult: one recurring problem in the book is the vast number of forward references, where a topic is introduced very briefly but not explained until 20-50 pages later. In most cases, if you don't understand a passage in the text, I would advise that you keep skimming ahead - you may be rewarded because in several cases, the book covers a particular approach for 2-3 pages before telling you that its underlying assumptions are flawed, and that modern methods for addressing the problem use alternative approaches. In other cases, the authors try to explain topics that might deserve entire chapters in about ten lines - a poster child is the explanation on page 736 of how Support Vector Machines can be used for multiclass problems. To someone who is familiar with SVMs, this material is unnecessary, while those who are not will not be enlightened by knowing that SVMs are "binary approaches based on the discovery of separating hyperplanes".

I give J&M five stars and they deserve it, and here's why. If you want learn to write natural language software, no other single book is as good as at least I've not found it. In fact, I bet they invented the genre. Pulling this together is not easy, and they do a creditable job. I know a lot more than I did before I read this book, and I've been writing linguistic software for over 30 years. As a linguist writing software (as opposed to the other way around), one can feel just a tad under siege these days. Google advertises that they don't have a single linguist on staff, and MS is ubiquitously quoted for saying that the quality of their software decreases for every linguist they hire. J&M, I'm happy to say, are above the fray. (What is a ^supervised machine learning?

Oh yeah, thatâ™s where your input was created by a linguist. Supervised or not, youâ™re just playing number games on the foundation of a theoretical framework invented by linguists.) They provide a balanced account with historical perspective. I like them. Theyâ™re cool. So on to picking nits... which is way more fun. What I really wanted is to read this book and then be able to sit down and write my own Python implementation of the forward/backward algorithm to train an HMM. I bobbed along through the book, perhaps experiencing a little bit of fuzziness around those probabilities, and came full stop at â™not quite ksiâ™ right smack in the middle of my HMM forward/backward section. Iâ™d done a practice run by training a neural net in Andrew Ngâ™s machine learning course with Coursera. But I stared pretty hard for 3-4 hours at pages 189 and 190. And I mean I get it basicallyâ™ Alpha and beta represent the accumulated wisdom coming from the front and from the backâ™ And then you take a kind of average to go from not quite ksi to ksi.

Daniel Jurafsky and James Martin have assembled an incredible mass of information about natural language processing. The authors note that speech and language processing have largely non-overlapping histories that have relatively recently began to grow together. They have written this book to meet the need for a well-integrated discussion, historical and technical, of both fields. In twenty-five chapters, the book covers the breadth of computational linguistics with an overall logical organization. Five chapter groupings organize material on Words, Speech, Syntax, Semantics and Pragmatics, and Applications. The four Applications chapters address Information Extraction, Question Answering and Summarization, Dialogue and Conversational Agents, and Machine Translation. The book covers a lot of ground, and a fifty-page bibliography directs readers to vast expanses beyond the book's horizon. The aging content problem present in all such books is addressed through the book's web site and numerous links to other sites, tools, and demonstrations. There is a lot of stuff. While it is an achievement to assemble such a collection of relevant information, the book could be more useful than it is. An experienced editor could rearrange content into a more readable flow of information and increase the clarity of some of the authors' examples and explanations. As is, the book is a useful reference for researchers and practitioners already working in the field. A more clear presentation would lower the experience requirement and make its store of information available to students and non-specialists as well.

[Download to continue reading...](#)

Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics and Speech Recognition Deep Learning: Natural Language Processing in Python with Word2Vec: Word2Vec and Word Embeddings in Python and Theano (Deep Learning and Natural

Language Processing Book 1) Deep Learning: Natural Language Processing in Python with GLoVe: From Word2Vec to GLoVe in Python and Theano (Deep Learning and Natural Language Processing) Deep Learning: Natural Language Processing in Python with Recursive Neural Networks: Recursive Neural (Tensor) Networks in Theano (Deep Learning and Natural Language Processing Book 3) An Introduction to Text-to-Speech Synthesis (Text, Speech and Language Technology) Speech and Language Processing Bayesian Speech and Language Processing Making the Bride's Father's Speech: Know What to Say and When to Say It - Be Positive, Humorous and Sensitive - Deliver the Memorable Speech (Essentials) The Complete Book of Speech Communication: A Workbook of Ideas and Activities for Students of Speech and Theatre Windows Speech Recognition Programming: With Visual Basic and ActiveX Voice Controls (Speech Software Technical Professionals) Speech Science Primer: Physiology, Acoustics, and Perception of Speech Using Speech Recognition Software: Dragon NaturallySpeaking and Windows Speech Recognition, Second Edition Pro Microsoft Speech Server 2007: Developing Speech Enabled Applications with .NET (Expert's Voice in .NET) Clinical Measurement of Speech & Voice (Speech Science) Digital Coding of Waveforms: Principles and Applications to Speech and Video (Prentice-Hall Signal Processing Series) Voice and Speech Processing (Mcgraw Hill Series in Electrical and Computer Engineering) Theory and Applications of Digital Speech Processing Information Processing with Evolutionary Algorithms: From Industrial Applications to Academic Speculations (Advanced Information and Knowledge Processing) Natural Language Processing for Social Media (Synthesis Lectures on Human Language Technologies) Applied Anatomy and Physiology for Speech-Language Pathology and Audiology

[Dmca](#)