

1. Record Nr.	UNINA9910814899003321
Titolo	Text mining of web-based medical content // edited by Amy Neustein
Pubbl/distr/stampa	Berlin : , : Boston : , : De Gruyter, , [2014] ©2014
ISBN	1-61451-390-2 1-61451-976-5
Descrizione fisica	1 online resource (286 p.)
Collana	Speech technology and text mining in medicine and healthcare ; ; volume 1
Disciplina	610.285/6
Soggetti	Data mining Medicine - Research Internet Medical informatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Front matter -- Preface -- Contents -- List of authors -- Part I. Methods and techniques for mining biomedical literature and electronic health records -- 1. Application of text mining to biomedical knowledge extraction: analyzing clinical narratives and medical literature / Neustein, Amy / Imambi, S. Sagar / Rodrigues, Mário / Teixeira, António / Ferreira, Liliana -- 2. Unlocking information in electronic health records using natural language processing: a case study in medication information extraction / Xu, Hua / Joshua, C. Denny -- 3. Online health information semantic search and exploration: reporting on two prototypes for performing information extraction on both a hospital intranet and the world wide web / Teixeira, António / Ferreira, Liliana / Rodrigues, Mário -- Part II. Machine Learning Techniques for Mining Medical Search Queries and Health-Related Social Media Posts and Tweets -- 4. Predicting dengue incidence in Thailand from online search queries that include weather and climatic variables / Chartree, Jedsada / Angel, Bravo-Salgado / Jimenez, Tamara / Armin, R. Mikler -- 5. A study of personal health information posted online: using machine learning to validate the

importance of the terms detected by MedDRA and SNOMED in revealing health information in social media / Ghazinour, Kambiz / Sokolova, Marina / Matwin, Stan -- 6. Twitter for health - building a social media search engine to better understand and curate laypersons' personal experiences / Suominen, Hanna / Hanlen, Leif / Cécile, Paris -- Part III. Using speech and audio technologies for improving access to online content for the computer-illiterate and the visually impaired -- 7. An empirical study of user satisfaction with a health dialogue system designed for the Nigerian low-literate, computer-illiterate, and visually impaired / Oyelami, Olufemi -- 8. DVX - the descriptive video exchange project: using crowd-based audio clips to improve online video access for the blind and the visually impaired / Keith, M. Williams -- Part IV. Visual data: new methods and approaches to mining radiographic image data and video metadata -- 9. Information extraction from medical images: evaluating a novel automatic image annotation system using semantic-based visual information retrieval / Dumitru, Dan Burdescu / Stanescu, Liana / Brezovan, Marius -- 10. Helping patients in performing online video search: evaluating the importance of medical terminology extracted from MeSH and ICD-10 in health video title and description / Karlsen, Randi / Enrique, Jose / Morell, Borrás / Johan, Gustav Bellika / Vicente, Traver Salcedo -- Editor's biography

Sommario/riassunto

• Includes Text Mining and Natural Language Processing Methods for extracting information from electronic health records and biomedical literature. • Analyzes text analytic tools for new media such as online forums, social media posts, tweets and video sharing. • Demonstrates how to use speech and audio technologies for improving access to online content for the visually impaired. Text Mining of Web-Based Medical Content examines various approaches to deriving high quality information from online biomedical literature, electronic health records, query search terms, social media posts and tweets. Using some of the latest empirical methods of knowledge extraction, the authors show how online content, generated by both professionals and laypersons, can be mined for valuable information about disease processes, adverse drug reactions not captured during clinical trials, and tropical fever outbreaks. Additionally, the authors show how to perform information extraction on a hospital intranet, how to build a social media search engine to glean information about patients' own experiences interacting with healthcare professionals, and how to improve access to online health information. This volume provides a wealth of timely material for health informatic professionals and machine learning, data mining, and natural language researchers. Topics in this book include: • Clinical Documents in Electronic Health Records • Summarization Techniques for Online Health Data • Natural Language Processing for Text Mining • Query Expansion Techniques for Tweets • Online Video Data Retrieval of Health-Related Videos • Dengue Fever Outbreaks • Bioemergencies and Social Media Posts • Speech-based Disease Screening for Malaria, Yellow Fever, Typhoid, and Lassa Fever • Audio Access to Online Video Data for the Visually Impaired

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- Mining Biomedical Literature and Clinical Narratives
- Medication Information Extraction
- Machine Learning Techniques for Mining Medical Search Queries
- Detecting the Level of Personal Health Information Revealed in Social Media
- Curating Layperson's Personal Experiences with Health Care from Social Media and Twitter
- Health Dialogue Systems for Improving Access to Online Content
- Crowd-based Audio Clips to Improve Online Video Access for the Visually Impaired
- Semantic-based Visual Information Retrieval for Mining Radiographic Image Data
- Evaluating the Importance of Medical Terminology in YouTube Video Titles and Descriptions
