

AMY NEUSTEIN (Ed.)

TEXT MINING OF WEB-BASED MEDICAL CONTENT

Series in Speech Technology and Text Mining in Medicine and Health Care (Edited by Amy Neustein)

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, and 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. In this anthology 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 in interacting with healthcare professionals, and how to improve access to online health information.

Topics in this book include:

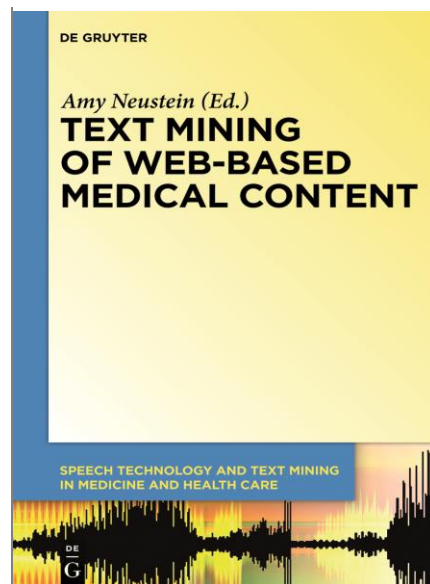
- Mining Biomedical Literature and Clinical Narratives
- Medication Information Extraction
- Machine Learning Techniques for Mining Medical Search Queries
- Detecting the Level of Personal Health Information Revealed in Social Media
- Curating Layperson's Personal Experiences with Health Care from Social 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

From the contents

Application of text mining to biomedical knowledge extraction | Unlocking information in electronic health records using natural language processing | Online health information semantic search and exploration | Predicting dengue incidence in Thailand from online search queries that include weather and climatic variables | A study of personal health information posted online | Twitter for health | An empirical study of user satisfaction with a health dialogue system designed for the Nigerian low-literate, computer-illiterate, and visually impaired | DVX – the descriptive video exchange project | Information extraction from medical images | Helping patients in performing online video search



Amy Neustein, Ph.D., is Founder and CEO of Linguistic Technology Systems, located in Fort Lee, New Jersey. She has published over 40 scholarly articles and many books. Dr. Neustein is a member of De Gruyter's STM Editorial Advisory Board, and Editor of their new series, *Speech Technology and Text Mining in Medicine and Health Care*.



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