The Series: Speech Technology and Text Mining in Medicine and Healthcare

This series demonstrates how the latest advances in speech technology and text mining positively affect patient healthcare and, in a much broader sense, public health at large. New developments in text mining methods have allowed health care providers to monitor a large population of patients at any time and from any location. Employing advanced summarization techniques, patient data can be readily extracted from extensive clinical documents in electronic health records and immediately made available to the physician. These same summarization techniques can also aid the healthcare provider in extracting from the large corpora of medical literature the relevant information for treating the patient. The series topics include the design and acceptance of speech-enabled robots that assist in the operating room, studies of signal processing and acoustic modeling for speech and communication disorders, advanced statistical speech enhancement methods for creating synthetic voice, and technologies for addressing speech and language impairments. Titles in the Series consist of both authored books and edited contributions. All authored books and contributed works are peer-reviewed. The Series is for speech scientists and speech engineers, machine learning experts, biomedical engineers, medical speech pathologists, linguists, and healthcare professionals.

Text Mining of Web-Based Medical Content examines web mining for extracting useful information that can be used for treating and monitoring the healthcare of patients. This work provides methodological approaches to designing mapping tools that exploit data found in social media postings. Specific linguistic features of medical postings are analyzed vis-a-vis available data extraction tools for culling useful information.