ABSTRACT

Medical information is accessible from diverse sources including the general web, social media, journal articles, and hospital records; information searchers can be patients and their families, researchers, practitioners and clinicians. Challenges in medical information retrieval include: diversity of users and user knowledge and expertise; variations in the format, reliability, and quality of biomedical and medical information; the multi-modal nature of much of the data; and the need for accuracy and reliability of medical information. The aim of the workshop is to bring together researchers interested in medical information search with the goal of identifying specific challenges that need to be addressed to advance the state-of-the-art.

Categories and Subject Descriptors

H.3.4 [Information Storage and Retrieval]: Systems and Software—

Keywords

Medical information retrieval

1. OVERVIEW

Medical information is now accessible from many sources including the general web, social media, journal articles, and hospital records, and is of interest to a wide variety of users such as patients and their families, researchers, practitioners, and clinicians. Medical information retrieval poses many challenges, including: diversity of users (varying categories of information needs, varying levels of medical knowledge, and varying language skills); variations in the format, reliability, and quality of biomedical and medical information; the multimodal nature of data (for example, health records with clinical notes and images); the need for retrieval of accurate and reliable information; and the means to evaluate medical search tools.

The objective of the workshop is to provide a forum to enable the progression of research in medical information retrieval in order to create enhanced search services for all users with interests in medical information search. The workshop brings together researchers interested in medical information search with the aim of identifying specific research challenges that need to be addressed to advance the state-of-the-art, and of fostering collaborations towards the meeting of these challenges. To enable this, we encourage participation from researchers in all fields related to medical information search including mainstream information retrieval, but also natural language processing, multilingual text processing, and medical image analysis.

The workshop topics include, but are not limited to:

- Users and information needs
- Semantics and NLP for medical IR
- Reliability and trust in medical IR
- Personalised search
- Evaluation of medical IR
- Multilingual issues in medical IR
- Multimedia technologies in medical IR
- The role of social media in medical IR

The workshop programme includes invited presentation by Karin Verspoor, and short research and position papers describing approaches or challenges on the topics of the workshop. The programme aims to encourage interaction and discussion to develop a shared understanding of the research challenges facing the area of medical information retrieval. The workshop will seek to identify specific actions necessary to advance this field, and to hopefully foster further collaborations between the participants.

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