Preface

The Third Louhi workshop followed Louhi 2008, held in Turku, Finland, and Louhi 2010 co-located with the 11th North American Computational Linguistics conference (NAACL) held in Los Angeles.

The program committee invited contributions within the areas of text processing of clinical documents, as well as intelligent re-use of clinical documents and experience reports.

The increased use of electronic health records makes obvious the mismatch between the effort invested in producing health text and ability to reuse content for other purposes. Yet for the most part, the continuous and worldwide effort towards standardizing content, coding and structure of health documentation has little support in clinical practice. In clinical work, the record is mainly regarded as a support for information handover in specific situations. Researchers, administrators and the increasingly quality-aware patients and general public would love to have an information model for healthcare, it is not realistic in the short term: free text narratives are efficient and necessary for the clinicians.

Within the area of text processing, few data repositories are so hard to interpret and re-represent as clinical texts. Essentially, there are two points of attack for improving the further use of health record content: during text production and during retrieval or use. Towards attacking the problem of improving text production, we wanted to attract workshop contributions related to the clinical user interface. In particular, we sought research on interactive interfaces using knowledge about discourse, processes, terminology, pragmatics, referents, immediate disambiguation, tracking, coding, and structuring. The second point of attack covers both use and retrieval. Clinical use includes such topics as language generation, mixed source integration, information retrieval and search, summarization, entailment and disambiguation. Secondary use/retrieval additionally includes areas like sentiment analysis, machine learning and text mining, referent management, removal of sensitive and identifying information, anonymization, event detection and eScience support.

Lastly, we were interested in specific cases of record content use with new functionality for the clinician and patient, for example machine translation, guideline lookup, decision support, reasoning, publication lookup and case comparison.

The Louhi workshops have travelled between different host conferences, and that reflects on the contributions. Last year's ACL-affiliation may have spurred a predominance of linguist/NLP-oriented papers, while the 2011-edition may be a bit more on an AI-focused application and clinical side. This year's workshop had 12 submissions. Each submission was reviewed by at least 2 members of the committee, some by 3 members in two rounds.

The committee decided to accept 9 papers. The program also includes an invited keynote by Mor Peleg from the University of Haifa on "Futuristic Usage of EHR Content by Clinical Guideline-based Decision-support Systems".

The actual papers of the Louhi 2011 Workshop span a fairly wide scope and cover differing approaches. We hope that future workshops will continue to be an

important arena for exchange of ideas. Our goal is to use language technology to improve re-use and overall usefulness of health record systems for diverse languages and for different types of users. Health texts are too important to be archived, they are the backbone of future patient-centered and high-quality healthcare services.

We would like to give a thank to EasyChair (www.easychair.org) for letting us use their online conference managing system. We would also like to thank CEUR Workshop Proceedings (CEUR-WS.org) for letting us publish these proceedings at their servers.

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