

Access To Distributed Clinical Digital Libraries

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1. Position Statement

As medical informatics emerges to be one of the most important digital library application areas, in 1996, the HL7 SGML initiative evolved as a SIG of HL7 SGML/XML. And ever since that time, vigorous researches have been carried out in coordinating the development of a document architecture for healthcare; in developing, coordinating, and maintaining a framework for the interoperability of healthcare documents; and in many other related fields. While in XML sides, many researches have already been established as concrete theoretical results, which await to be beta tested for a realistic application domain. We are currently interested in development and application of a query model for Health Level 7 (HL7) Document Patient Record Architecture. Through this, we hope to be able to create, exchange, and process structured as well as semi-structured clinical data within inter and intra-hospital environment. More specifically, instead of independently developing yet another querying paradigm, we would like to utilize already theoretically-proven technology, with some flavors added if necessary, for efficient retrieval and exchange of XML-based medical documents. Through this workshop, we hope to find our counterpart who shares the same research interests and has a willingness to co-work with us in theoretical research as well as in practical prototype implementations. Yet, there are still some technical issues left to be resolved collaboratively, such as mapping between a standard DTD versus a non-standard DTD, importing external data into a document, and accessing the information by using the wireless information appliance as it becomes indispensable part of so-called a "point-of-care" system. As there is a large demand for such technologies in Korea as well as in the USA, successful collaboration in this field would be beneficial for both countries.

2. Biographical Information

Jonghoon Chun is an Associate Professor in the Division of Computer Science and Engineering at Myongji University, Korea. Before returning to Korea, he has taught in the Department of

Computing Science at University of Central Oklahoma for three years. His research interests include deductive database, digital library, medical informatics, and an on-going research interest is development of query processing model for XML-based documents. He serves as a technical auditor for several Internet-related companies in Korea such as BestBuyers, Ark Technology, NetLaw, and EhealthConsulting. He is on management boards for CERIC (Civil Engineering Research Information Center) which is a Web-based digital library that provides Civil Engineering research-oriented contents. He received a Ph.D. and a M.S. in Computer Science, both from Northwestern University (1992, 1988), and a B.S. from University of Denver, also in Computer Science (1992).