University of Lethbridge

Faculty of Arts & Science

DEPARTMENT OF MATH AND COMPUTER SCIENCE SEMINAR

Speaker: Ian H. Witten (iCore Visiting Professor)

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C 674, 29 October 2004, 12:00–1:00

The Greenstone digital library software

Abstract: The Greenstone digital library software is a comprehensive, open-source system for constructing, presenting, and maintaining information collections. It is widely used internationally, and interfaces and collections exist in many of the world interface lets users gather together sets of documents, import or assign metadata, build them into a collection, and serve it from their web site. Such collections automatically include effective full-text searching and metadata-based browsing facilities that are attractive and easy to use.facilities that a collection provides, including the user interface for searching and browsing, can be customized at many different levels based on whatever document formats and metadata is available. Documents can be of many different formats, including multimedia formats. I will demonstrate the use of the librarian interface to build a multimedia collection about the Beatles, including discographies (.html), guitar tablature (.txt), album covers (jpeg), audio recordings (.mp3), midi versions (.midi), supplementary material (.doc and .pdf), and library records (in MARC format). I will also discuss some new developments in Greenstone, including an entirely new architecture that we are working on.

Bio: Ian H. Witten is Professor of Computer Science at the University of Waikato in New Zealand where he directs the New Zealand Digital Library research project; he is presently an iCORE visiting professor at the University of Lethbridge . His research interests include information retrieval, machine learning, text compression, and programming by demonstration. He has published widely in these areas, including six books, the most recent being *Managing Gigabytes* (1999), *Data Mining* (2000) and *How to build a digital library* (2003), all from Morgan Kaufmann. He received an MA in mathematics from Cambridge Unversity, England; an MSc in computer science from the University of Calgary, Canada; and a PhD in electrical engineering from Essex University, England. He is a fellow of the ACM and of the Royal Society of New Zealand, and received the 2004 IFIP Namur Award, a biennial honour accorded for outstanding contribution with international impact to the awareness of social implications of information and communication technology.