The Co-evolution of Digital Libraries and the WWW

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In 1993, Tim Berners-Lee and I both spoke on a panel, he on WWW and me on digital libraries. Nobody present seemed really interested in either topic. Yet these two areas of activity have evolved together over the last decade, leading to many global changes, expanding along with related technologies. This talk traces the recent evolution of digital libraries and the many interactions between practices in the two fields. We build upon the 5S framework - of streams, structures, spaces, scenarios, and societies - to show the potentials and limitations of these areas. We emphasize how all this relates to education, building upon our work with the Networked Digital Library of Theses and Dissertations and Computer Science Teaching Center.

CV: Edward A. Fox is a Professor of Computer Science at Virginia Tech, which he joined in 1983, after completing MS and PhD in Computer Science at Cornell University (following work in industry and BS from MIT in Electrical Engineering). He has worked on information storage and retrieval, electronic publishing, multimedia information systems, educational technology, computational linguistics, and other fields. In the area of digital libraries, Fox has led efforts on 4 books (Sourcebook on Digital Libraries, Dec. 1993; Proceedings for DL'96 and DL'99; and Sourcebook on Electronic Theses and Dissertations, in preparation). In this area, he has co-authored 16 refereed conference papers plus 22 journal/magazine articles, serving as lead editor for special sections on digital libraries in Communications of the ACM for April 1995 and 1998 plus May 2001 as well as three other journals. He has written two overview book chapters and is working on others (including for ARIST). In fall 1997 and 2000 he prepared a graduate and an undergraduate course on digital libraries. Fox has given hundreds of talks on digital libraries, including tutorials completed or planned for Canada, Costa Rica, Croatia, Singapore, South Africa, South Korea, and the USA. Fox directs the Networked Digital Library of Theses and Dissertations, manages the digital library for both the Computer Science Teaching Center and Curriculum Resources in Interactive Multimedia, and directs the Digital Library Research Laboratory as well as the Internet Technology Innovation Center at Virginia Tech.