

# **Re-Inventing Scholarly Information Dissemination and Use**

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## **Abstract**

Our practice of disseminating, accessing and using information, especially scholarly information, is still largely informed by the nature of pre-electronic media. For example, journals still exist in their traditional forms partly because of the value of the peer review process, which thus far has not yielded to decentralized, distributed and timely alternatives. Similarly, information access is still largely text-based, with other data types relegated to second class citizenship.

The UC Berkeley Digital Library project is developing technologies aimed at addressing these impediments, and hence allowing the development of new, more efficient mechanisms of information dissemination and use. In particular, we are developing a new "Multivalent" document browser, which we hope will convince you to throw away your current, limited web browser, for "collaborative quality filtering", which provides the value of peer review without deference to prior established authorities, such as journals, and for "collection management services", which bring to individual information users services previously available to libraries. Taken together, such mechanisms may provide the benefits of modern communications without sacrificing traditional academic values.

In addition, we have been developing techniques for image retrieval based on image content. Recent progress on learning the semantics of image databases using text and pictures suggests that new forms of image-lated web services may be possible, including automatic image captioning and automatic illustration, among others.

## **Biography of the speaker**

Robert Wilensky received his B.A. and his Ph.D. from Yale University. In 1978, he joined the faculty of the University of California at Berkeley, where he is now Professor in the Division of Computer Science, and in the School of Information Management and Systems. He has served as Chair of the Computer Science Division, the director of BAIR, the Berkeley Artificial Intelligence Research Project, and the director of Berkeley Cognitive Science Program.

Professor Wilensky has published numerous articles and books in the area of artificial intelligence, planning, knowledge representation, natural language processing, and digital information systems. He is a Fellow of the American Association for Artificial Intelligence, and an ACM Fellow. He is currently Principal Investigator of UC Berkeley's Digital Library Project.