Using Network Effects to Produce More Useful Results: ARTstor Collaborative Filtering

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Finding useful search results is an ongoing challenge to users of large-scale digital libraries where a typical keyword search result can return thousands of records. Resource providers can help users to sift through Web-delivered content and build better result sets by drawing upon the collective preferences of other users. ARTstor recently released its ‘Associated Images’ feature which anonymously mines user preference data via collaborative filtering (CF). Users at over 1,100 institutions are making image groups – revealing preferences with each image that they include. Just as Amazon ‘recommends’ other books that are often purchased by the same people who purchased the book that you are buying, the collective choices of scholars who have compiled ARTstor image groups are now shared with other users across the ARTstor network. There are many ways to enhance search, ranging from personalization to filtering results by various criteria to the hard work of metadata enhancement.

The session will report on the choices made in the preparation and release of the Associated Images feature, and is intended to provoke discussion about other methods that can also be employed to provide users with particularly meaningful results in large complex datasets.

ARTstor Digital Library

From its early days as a simple concept – a digital version of the traditional slide library – ARTstor has gone from a ‘library of empty shelves’ to nearly one million images in a brief four-year period. Since we began this project, we have learned that the appetite for visual material is infinite. With academic discourse fanning out into ever more specialized areas of inquiry, our collections continue to grow and diversify. Whether you are an historian of art and architecture; a student or scholar in such fields as anthropology, archeology, classics, history, literature, music, or religion; engaged with area studies such as African-American, Middle Eastern, or Asian; or cultivating an interdisciplinary field such as Renaissance or women’s studies, ARTstor provides rich collections and easy-to-use software and tools that will facilitate the integration of digital images into your teaching and scholarship.

There are more than 100 collections in ARTstor covering a broad and diverse range of topics. ARTstor collections represent important works from world renowned archives and museums as well as rare and unique special collections; among them:

- Magnum Photos – 80,000 of the world’s most renowned photographs chronicling iconic events, people and issues
- American Institute of Indian Studies – 70,000 images of Indian art and architecture
- Metropolitan Museum of Art – 7,700 images from the encyclopedic permanent collection
- Museum of Modern Art – 18,000 installation photos and 6,900 images from the art & design collection
- Manuscripts and Early Printed Books – 24,500 images of Medieval, Renaissance, 19th-20th century illuminated leaves from the Bodleian Library, Oxford University
- African architecture & field photography – 2,000 QTVRs and images from Columbia University field expeditions
- Schlesinger History of Women in America – 36,000 unique photos documenting women’s history
• Art, Archaeology and Architecture (Erich Lessing Culture & Fine Arts Archive) – 13,000 images of key works and monuments
• Fine Arts Museums of San Francisco – 15,000 images of paintings, sculpture, works on paper, costume and decorative arts

For a full listing of ARTstor collections and descriptive information please consult:

Collections description page: http://www.artstor.org/what-is-artstor/w-html/collection-status.shtml