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The Heart in the Machine: University Libraries as DS/AI/ML Partner

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Preview

- **Why Librarians?**
- **Projects in Place**
- **R & D projects**
- **Q & A**



Why Librarians?

- OG Experience with “Big Data”
- Web Era // // //
- Technical Infrastructure, locally→ globally
- Enthusiastic Collaborators, Grant Partners
- Professional Code of Ethics→

ALA Code of Ethics:

Code of Ethics

As members of the American Library Association, we recognize the importance of codifying and making known to the profession and to the general public the ethical principles that guide the work of librarians, other professionals providing information services, library trustees and library staffs.

Ethical dilemmas occur when values are in conflict. The American Library Association Code of Ethics states the values to which we are committed, and embodies the ethical responsibilities of the profession in this changing information environment.

We significantly influence or control the selection, organization, preservation, and dissemination of information. In a political system grounded in an informed citizenry, we are members of a profession explicitly committed to intellectual freedom and the freedom of access to information. We have a special obligation to ensure the free flow of information and ideas to present and future generations.

The principles of this Code are expressed in broad statements to guide ethical decision making. These statements provide a framework; they cannot and do not dictate conduct to cover particular situations.

1. We provide the highest level of service to all library users through appropriate and usefully organized resources; equitable service policies; equitable access; and accurate, unbiased, and courteous responses to all requests.
2. We uphold the principles of intellectual freedom and resist all efforts to censor library resources.
3. We protect each library user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted.
4. We respect intellectual property rights and advocate balance between the interests of information users and rights holders.
5. We treat co-workers and other colleagues with respect, fairness, and good faith, and advocate conditions of employment that safeguard the rights and welfare of all employees of our institutions.
6. We do not advance private interests at the expense of library users, colleagues, or our employing institutions.
7. We distinguish between our personal convictions and professional duties and do not allow our personal beliefs to interfere with fair representation of the aims of our institutions or the provision of access to their information resources.
8. We strive for excellence in the profession by maintaining and enhancing our own knowledge and skills, by encouraging the professional development of co-workers, and by fostering the aspirations of potential members of the profession.

From ALA Code of Ethics:



3. We protect each library user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted.

Projects in Place

- “Scholars” Faculty Profiles Data
- Data Repositories
 - Dataverse
 - OAKTrust+

Scholars.library.tamu.edu

- TAMU Faculty profiles
- VIVO open source software
- API coming Summer 2019
- 2.6K profiles, and counting

Repositories Ecosystem

- DAME: Digital Asset Management Ecosystem
- + Dataverse at Texas Digital Library
- Example of interconnection (article+data) :
 - <http://hdl.handle.net/1969.1/169513>
 - (could be dissertation+data, etc.)

R & D Projects

- **DAMENAME: Named Entities URIs**
- **Pelican and NLP**
- **National Efforts:**
 - **LD4P**
 - **ai4lam**

DAMEname project (2018-)

- URIs for Named Entities
- Disambiguation → Version of Record
- Librarian term: “Authority Control”
- Goal: Integration across repositories

Pelican Project (~2014-16)

- Natural Language Processing (NLP) effort
- Goal: Pass text in, find strings/keywords
- Relate those to GeoNames, subject thesaurus

LD4P2 (2018-)

- “Linked Data for Production” (phase 2)
- Phase 1 incl. Stanford, Harvard, L. of Congress, *et al.*
- Goal: cloud framework using BIBFRAME ontology
- Wikidata collaboration
- Creating and reusing linked data from academic libraries

ai4lam (2018-)

- “AI for Libraries, Archives, & Museums”
- Slack channel born of list serves
- Goal: sharing thinking toward collaborative projects

Thanks!

→ Q & A

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Credits

- Adam Levine, Pedal to the Metal! Rainbow Ahead, CC0: <https://creativecommons.org/publicdomain/zero/1.0/>
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DAME Project Portfolio

This mural represents a decomposition of the larger DAME project into component parts.

Version 1.0: 25 January 2018

