Ready for Launch: Building an Institutional Repository from the Ground Up

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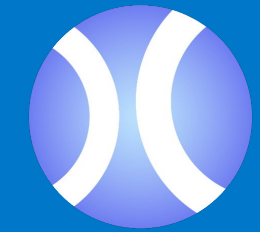
Southern Miss Institutional Repository Conference | April 29, 2022

What is the mission? Why do we need an IR?

One stop shopping for:

- Theses and dissertations
- Student research (honors capstones, RCEU posters, others)
- University historical publications (catalogs, fact books, newspapers)
- Faculty research
- University produced journals
- Local history journals
- University sponsored conferences
- UAH research reports

What vehicle will take us there?
Which IR is a match for our goals and abilities?



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Who are the members of the mission support team and what are their roles?

Library Director

Head of Technical Services

Head of Archives and Special Collections

Digital Archivist and Digital Archives Team

Institutional Repository Librarian

“The Right Stuff”

Selecting an IR is often a difficult decision

Make your choice on your individual circumstances.

- Cost
- Technical skill
- Design and functionality
- Intangibles

Current Mission Timeline

2016- Identify the problem

2017-2018- Build the team

2019-Select the IR

2020-Pandemic!

2021-Make the commitment to Digital Commons and Pre-Launch Checklist

2022-Launch!

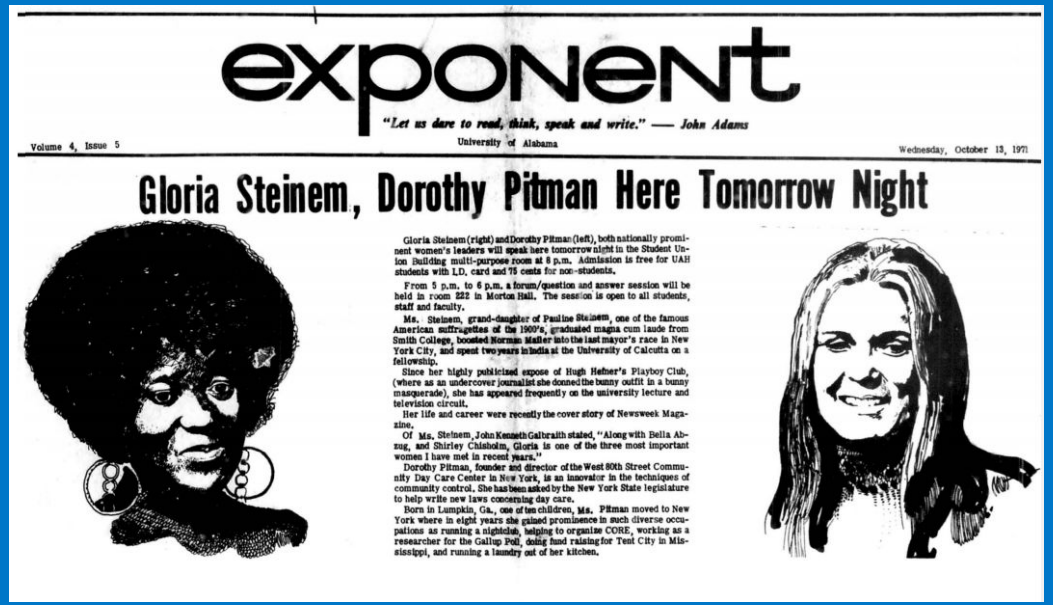
Mission Objective 1: Omeka to Digital Commons

What are we migrating?

- Yearbooks
- Student newspapers
- Course catalogs
- Other university publications

Why?

- Centralizing university publications
- Creating a record of the university's development over time
- Facilitating user access



exponent

"Let us dare to read, think, speak and write." — John Adams

Volume 4, Issue 5 | University of Alabama | Wednesday, October 13, 1971

Gloria Steinem, Dorothy Pitman Here Tomorrow Night

Gloria Steinem (right) and Dorothy Pitman (left), both nationally prominent women's leaders will speak here tomorrow night in the Student Union Building multi-purpose room at 8 p.m. Admission is free for UAH students with I.D. card and 75 cents for non-students.

From 5 p.m. to 6 p.m. a forum/question and answer session will be held in room 222 in Morton Hall. The session is open to all students, staff and faculty.

Ms. Steinem, grand-daughter of Pauline Steinem, one of the famous American suffragettes of the 1900's, graduated magna cum laude from Smith College, boosted Norman Mailer into the last mayor's race in New York City, and spent two years in India at the University of Calcutta on a fellowship.

Since her highly publicized expose of Hugh Hefner's Playboy Club, (where as an undercover journalist she donned the bunny outfit in a bunny masquerade), she has appeared frequently on the university lecture and television circuit.

Her life and career were recently the cover story of Newsweek Magazine.

Of Ms. Steinem, John Kenneth Galbraith stated, "Along with Bella Abzug, and Shirley Chisholm, Gloria is one of the three most important women I have met in recent years."

Dorothy Pitman, founder and director of the West 80th Street Community Day Care Center in New York, is an innovator in the techniques of community control. She has been asked by the New York State legislature to help write new laws concerning day care.

Born in Lumpkin, Ga., one of ten children, Ms. Pitman moved to New York where in eight years she gained prominence in such diverse occupations as running a nightclub, helping to organize CORE, working as a researcher for the Gallup Poll, doing fund raising for Tent City in Mississippi, and running a laundry out of her kitchen.

Exponent, vol. 4, no. 5, October 13, 1971

Mission Objective 1: Omeka to Digital Commons

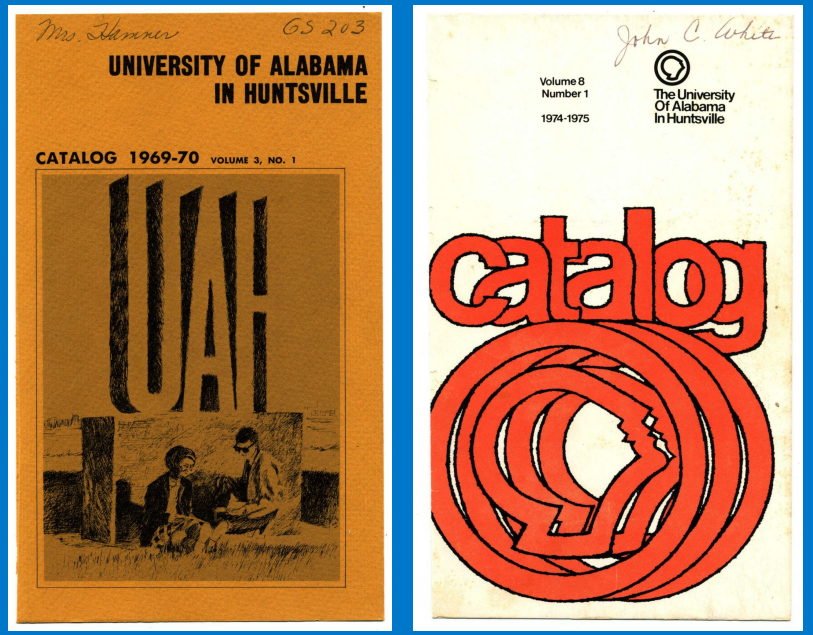
Keep our user groups in mind

Decide how to group and display materials

Decide which materials to exclude

Adapt metadata for Digital Commons

Ingest files: makeshift staging area vs. Batch File Upload Manager

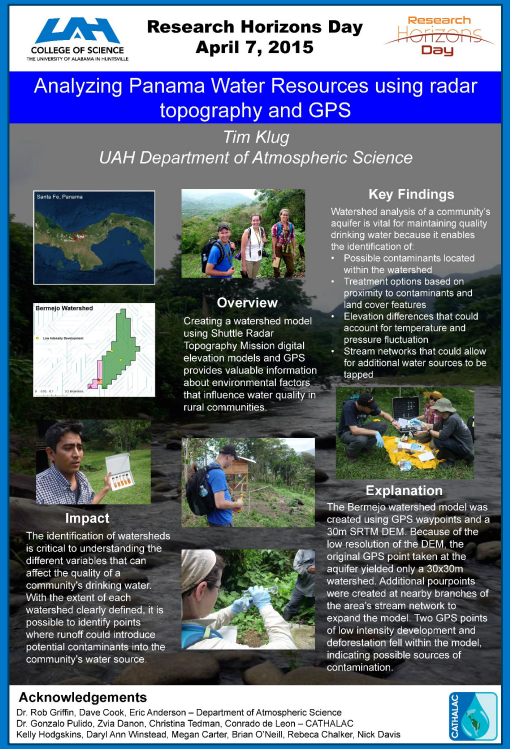


UAH course catalogs, 1969-70 (left) and 1974-75 (right)

Objective complete!

- 1,070 items in Historic University Publications to date
- 13 different publications represented, many more in the pipeline
- Providing essential information on the history of the university for UAH affiliates and the community

Mission Objective 2: CONTENTdm to Digital Commons



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Research Horizons Day
April 7, 2015

Research Horizons Day

Analyzing Panama Water Resources using radar topography and GPS

Tim Klug
UAH Department of Atmospheric Science

Santa Fe, Panama

Bermejo Watershed

Overview

Creating a watershed model using Shuttle Radar Topography Mission digital elevation models and GPS provides valuable information about environmental factors that influence water quality in rural communities.

Key Findings

Watershed analysis of a community's aquifer is vital for maintaining quality drinking water because it enables the identification of:

- Possible contaminants located within the watershed
- Treatment options based on proximity to contaminants and land cover features
- Elevation differences that could account for temperature and pressure fluctuation
- Stream networks that could allow for additional water sources to be tapped

Impact

The identification of watersheds is critical to understanding the different variables that can affect the quality of a community's drinking water. With the extent of each watershed clearly defined, it is possible to identify points where runoff could introduce potential contaminants into the community's water source.

Explanation

The Bermejo watershed model was created using GPS waypoints and a 30m SRTM DEM. Because of the low resolution of the DEM, the original GPS point taken at the aquifer yielded only a 30x30m watershed. Additional pourpoints were created at nearby branches of the area's stream network to expand the model. Two GPS points of low intensity development and deforestation fell within the model, indicating possible sources of contamination.

Acknowledgements
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CATHALAC

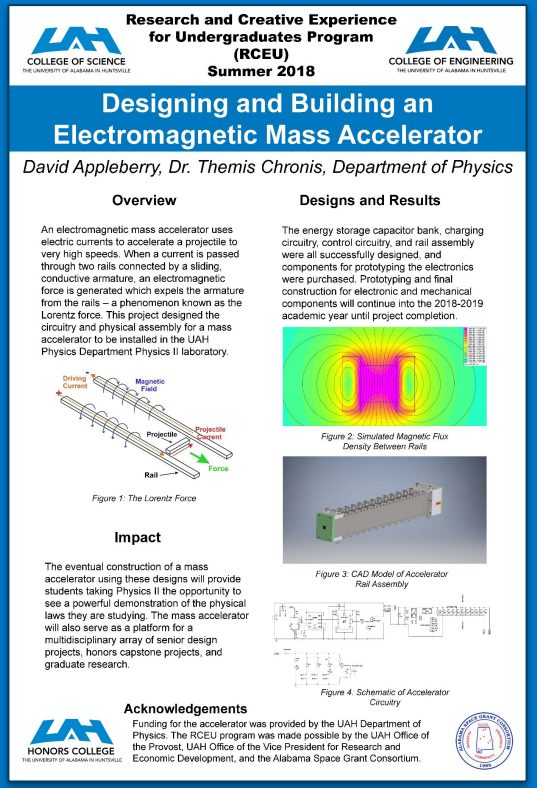
What are we migrating?

- Undergraduate Honors Capstone projects and theses
- Undergraduate research posters
- Conference papers

Why?

- Using a platform that meets our needs
- Centralizing university scholarship and creative output
- Streamlining and standardizing student submission processes, using peer review tools
- Building the library's relationships with other departments on campus

Mission Objective 2: CONTENTdm to Digital Commons



Research and Creative Experience for Undergraduates Program (RCEU)
Summer 2018

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COLLEGE OF ENGINEERING
THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

Designing and Building an Electromagnetic Mass Accelerator

David Appleberry, Dr. Themis Chronis, Department of Physics

Overview

An electromagnetic mass accelerator uses electric currents to accelerate a projectile to very high speeds. When a current is passed through two rails connected by a sliding, conductive armature, an electromagnetic force is generated which expels the armature from the rails – a phenomenon known as the Lorentz force. This project designed the circuitry and physical assembly for a mass accelerator to be installed in the UAH Physics Department Physics II laboratory.

Figure 1: The Lorentz Force

Impact

The eventual construction of a mass accelerator using these designs will provide students taking Physics II the opportunity to see a powerful demonstration of the physical laws they are studying. The mass accelerator will also serve as a platform for a multidisciplinary array of senior design projects, honors capstone projects, and graduate research.

Designs and Results

The energy storage capacitor bank, charging circuitry, control circuitry, and rail assembly were all successfully designed, and components for prototyping the electronics were purchased. Prototyping and final construction for electronic and mechanical components will continue into the 2018-2019 academic year until project completion.

Figure 2: Simulated Magnetic Flux Density Between Rails

Figure 3: CAD Model of Accelerator Rail Assembly

Figure 4: Schematic of Accelerator Circuitry

Acknowledgements

Funding for the accelerator was provided by the UAH Department of Physics. The RCEU program was made possible by the UAH Office of the Provost, UAH Office of the Vice President for Research and Economic Development, and the Alabama Space Grant Consortium.

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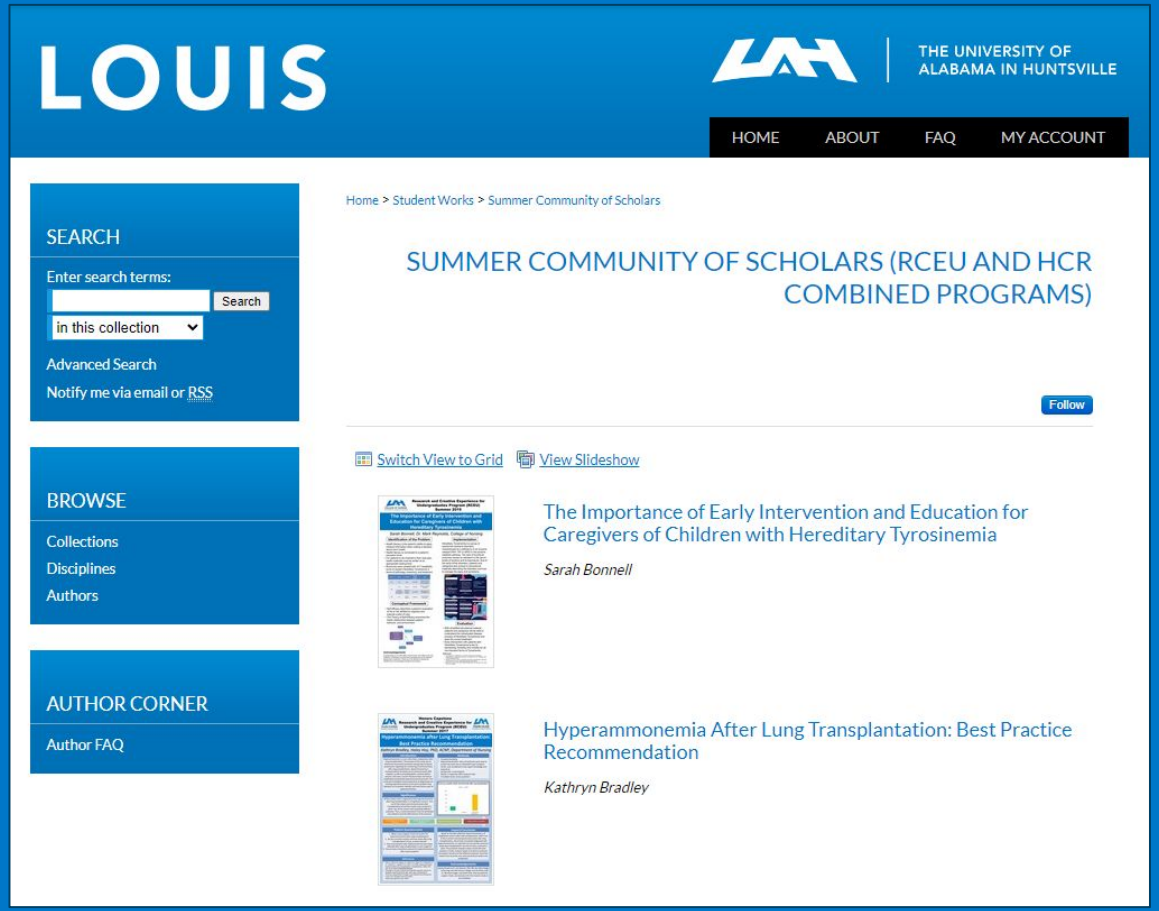
- Keep university stakeholders in mind
- Decide how to group and display the materials
- Choose a migration option
- Make the project manageable
- Deal with inconsistencies and find missing information
- Take lessons from the process

Objective complete!

- 23 conference papers
- 590 Honors Capstone projects
- 976 undergraduate research posters
- Building closer relationships with departments on campus
- Opening doors to receiving more materials that document university creative output and research



Conclusions

Choosing a IR is a decision which requires long term planning and adoption criteria are unique to each institution

Knowing the the strengths and weaknesses of your institution and your team is crucial in IR selection

Reach out to Institutional Partners and identify datasets before you select an IR

Take advantage of your Digital Commons consultant's knowledge

Questions?