Advancing Open Access through Library Digital Services

Tyler Walters
May 18, 2010
1,622 Open Repositories Worldwide

23% US, 11% UK.
27% – 6 Germany, Japan, Australia, Spain, France, Canada
39% – 84 other countries
Ulrich's:  
27,135 active and refereed journal titles  
19,296 active, online, and refereed journal titles (71%)  

DOAJ:  
4,993 peer-reviewed OA journals, up 1,734 titles since 2007, up 979 since 2009  

STM Report (Mark Ware Consulting):  
96% STM  
87% Arts, Humanities, Soc. Sci.  
...are available electronically since 2008!
Open Access: Institutional Goals

- Provide stewardship for digital scholarship and research content
- Identify, assess, collect, preserve, provide access, and make university intellectual output more valuable through digital information technologies, whether “born-digital” or convertible to digital formats
- Support the research and educational endeavors of your university
- Raise awareness of and advance changes in scholarly communication in your community
Example: Georgia Tech – Background

- Electronic theses and dissertations 2003
- SMARTech (Scholarly Materials And Research at Tech) institutional repository services 2004
- EPAGE@Tech (Electronic Publishing At Georgia Tech) publishing services 2006
- Integrated scholarly communication outreach and digital service program 2007
Technology

- DSpace 1.6/Manakin theme forthcoming
- Light code-base customizations
- 3 Systems Analysts (Systems)
  - Upgrades, system administration and software development
  - User interface design and development
  - Batch loading
- Network Support Specialist (Systems)
- DSpace and AWstats server log analyzer for statistics
SMARTEch

Content Management

- Repository Manager/ETD Coordinator (SCDS)
- 2 Metadata Specialists (SCDS)
- Digital Projects Coordinator (SCDS)
- Digital Collections Archivist (Archives)
- 4–5 students each semester on average (SCDS)
- Cross-departmental oversight committee: DigiTech
- 2 Catalogers supply LCSH for ETDs and sponsored research reports (CAM)
# Statistics

<table>
<thead>
<tr>
<th></th>
<th>FY 08–09</th>
<th>FY 07–08</th>
<th>FY 06–07</th>
</tr>
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<tbody>
<tr>
<td>Item record views</td>
<td>2,122,684</td>
<td>1,837,736</td>
<td>1,407,041</td>
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<tr>
<td>Bitstream views</td>
<td>10,643,556</td>
<td>4,987,403</td>
<td>1,698,792</td>
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<tr>
<td>Searches</td>
<td>587,652</td>
<td>480,926</td>
<td>261,464</td>
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</tbody>
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- 30,000+ items
- 14,800+ theses and dissertations
- 350 full-text research articles
- Highest traffic during January–March and on Mondays
- Majority of visitors are from the US, with the top 5 international visitors UK, Ukraine, Brazil, India, and China in 2009
Statistics

http://roar.eprints.org/cgi/export/575/ROAR::Activity/roar-eprint-575.png
Content

- Accreditation documents (250)
- Annual Reports (100)
- Articles (350)
- Book chapters (4)
- Books (64)
- Conference proceedings (928)
- Dissertations (7939)
- Fact Sheets (157)
- Handbooks (10)
- Images (1561)
- Learning Objects
- Lectures (273)
- Masters projects (32)
- Minutes (123)
- Newsletters (1981)
- Papers (443)
- Performances (2)
- Plan or blueprint (1)

- Poem (2)
- Posters (45)
- Pre–Prints/Post–Prints (157)
- Presentation (1042)
- Programs (14)
- Project Reports (1529)
- Recordings (136)
- Research Reports (10)
- Specifications (3)
- Speeches (691)
- Strategic plans (10)
- Technical Papers (959)
- Technical Reports (1065)
- Theses (6943)
- Undergraduate Theses (74)
- Video (145) (485 total)
- Web Pages (6)
- Working Papers (100)
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Submission Workflows

- **Library submission service**
  - Batch load converted archival materials/campus publications/institutional reports
  - Batch load born-digital collections of more than 100 items
  - Manual submission of converted and born-digital scholarly materials and campus publications

- **Self-submission with mediated deposit**
  - Faculty members (ChBE, AE)
  - Staff member (Math)
  - Alumni Association (convert and upload *Blueprint* yearbook)

- **Self-submission w/o mediated deposit**
  - Faculty member (Management)
  - Library faculty members
Adopters
Adopters

Bio
Karen Feigh is an Assistant Professor in the Daniel Guggenheim School of Aerospace Engineering, and the acting director of the Human Factors Laboratory in the Bren riches Center for Air and Space. She holds a B.S. in Aerospace Engineering from Georgia Tech, a MPhil in Aeronautics from Cranfield University, UK, and a Ph.D. in Human Factors from Georgia Tech. Karen has previously worked on fast-time air traffic simulation, conducted ethnographic studies of control centers, and designed expert systems for air traffic control towers. Her doctoral work was conducted at Georgia Tech, where she used cognitive engineering methods to improve support system design methods to more closely match the dynamic nature of air traffic control. Her research interests include the design of cognitive work support systems for individuals and teams in dynamic environments, particularly those requiring coordination and collaboration, such as air traffic control, airlines, and manufacturing. Her research interests include adaptive automation design, the measurement and evaluation of human performance, and the design for different cognitive states.

CV
Publications
- Master's Thesis: An Airspace Simulator for Air Traffic Management Research
- Contextual Inquiry of a 100 Aircraft Regional Airline Systems Operation Center
- Contextual Inquiry of a Major US Airline Systems Operation Center

Honors & Awards
- AIAA, Wilbur and Orville Wright Graduate Award 2006
- Zonta International, Amelia Earhart Fellowship, 2005
- National Science Foundation Graduate Research Fellow 2001-2006
Copyright

- Library staff adhere to the restrictions and/or conditions of publisher copyright policies
- Library staff help self-submitters research questions related to copyright
- Authors retain rights to research materials captured and/or archived in SMARTech
- Authors grant Georgia Tech a non-exclusive license to distribute and preserve materials for non-commercial, educational purposes
Digital Conversion

- Theses and Dissertations (11,000+)
- Office of Sponsored Programs final research reports
- *The Technique*
- General course catalogs
- Technical report series
- Conference proceedings
- Presidents papers
- Historical materials for Archives’ digital collections
- Government documents/technical reports
  - Environmental Impact Statements
  - NTIS reports
Collection Policy and Development

- **Priorities**
  - major areas of research of the Georgia Tech campus, especially Science and Engineering.
  - Concentrated effort on areas with national rankings and emerging significance.
  - Materials range from traditional scholarly publications through materials created in support of classroom teaching.

- **Considerations**
  - Enduring value
  - Library’s ability to commit to the preservation of the bitstream/digital item and the technical quality of the materials
  - The Library will research publishers’ restrictions and conditions for deposit of pre-/post-prints, conference proceedings, and other items and ensure there is evidence of clear ability under copyright for the depositor to post the material.
EPAGE@Tech

Electronic Publishing At Georgia Tech

About EPAGE@Tech
Services
- Archiving in SMARTech
- Electronic Journal Support
- Electronic Proceedings Support
- Electronic Theses and Dissertations
- Lecture Recording
- NIH Public Access Policy Support
Resources for Authors
Contact Us

EPAGE@Tech, a GT library-managed service, will provide a digital platform to disseminate GT-produced knowledge rapidly to information users at any time, in any Internet-ready location they reside, and will preserve that knowledge digitally for future learners to come.

Why is EPAGE@Tech important?
- Georgia Tech should manage and preserve its own intellectual output
- Research indicates increased citation impact for research available freely online
- Granting agencies increasingly tend to require open access archiving or long term posting of research outcomes (i.e. NSF, NIH)
- Hosted scholarly materials are easily discoverable through commercial search engines like Google Scholar and Scirus

Links to help you get started...
- Lecture Recording Request
- Lecture Recording Permission
- SMARTech Deposit Agreement
- EPAGE@Tech handout
- SMARTech handout

Endorsement:

"ITID is the first and only MIT Press journal to be published as Open Access and our collaboration with the Georgia Tech Library has been critical to the journal successfully managing this new publication model. The Library's support and leadership is ensuring that ITID will have more impact, a richer and more collaborative online environment, and will be better able to serve a world-wide epistemic community. The entire ITID team - including the editorial office, the MIT Press, and the Georgia Tech Library - will together help define the future of scholarly publication."

Dr. Michael Best
Sam Nunn School of International Affairs and the College of Computing
Co-founder and Co-Editor-in-Chief, Information Technologies and International Development
Digital Services

- Journal support services
- Conference proceedings support services
- Lecture recording services
- SMARTech archiving service
Journals & Conferences

- Library hosts digital journal/conf management software (OJS/OCS)
- Software creates website, manages abstract/paper submissions, peer-review, online publishing/indexing
- Library staff provide technical and workflow support, software training, and basic design services
Journals

- Information Technologies and International Development
- The Tower
- International Journal of Facility Management

http://itidjournal.org/itid
Conferences

- Architecture
- Applied Physiology
- Public Policy
- Physics
- Mathematics
- Mechanical Engineering
- Aerospace Engineering
- Interactive Media Technology Center
Lecture Recording Service

- Record video of campus scholarly events, such as symposia, lecture series, and speaker series
- Faculty, researchers, and students
- Archive video as well as any supplementary materials in SMARTech
- Lectures recorded and videos made accessible in SMARTech within 14 business days
Lecture Recording Service

- Create open standard MPEG-4 video files
  - MP4 video files are ready to stream and compatible with applications RealPlayer, iTunes, and QuickTime Player
  - Archive copy: MPEG-2 format from DV tape
- MP4 files are made available for download in SMARTech
- Streaming video files are hosted by campus OIT
Outreach, Marketing, and Advocacy

- Scholarly Communication web site
- Institute on Scholarly Communication 2006
- Scholarly Communication Summer Program with Subject Librarians and Library staff 2007

GA Tech Library Scholarly Communication Summer Program

- Copyright in the Digital Age: An Update
  - June 1st, Monday 12:30pm
  - This ALA sponsored webinar takes an in-depth look at copyright issues facing librarians and educators in the digital age.

- Joint Webcast on Author Rights
  - June 18th, Monday 1-3pm
  - Libraries can play a critical role in reducing the confusion authors often have around when and how they can use their own published work once they sign away many of their rights to publishers. Join us for this webinar exploring the basic issues and outreach strategies in regards to working with faculty on author rights.

- Department Assessment Tool
  - July 11th, Wednesday 1-3pm
  - Bonnie Tjelmeland & Julie Speer
  - Bonnie and Julie introduce the subject librarians to the JRL/ACRL Department Assessment Tool, which they'll be asked to complete as part of the Scholarly Communication Summer Program. The tool was developed by ISU instructions and has been adopted by several libraries to tailor outreach plans for individual academic units. They discuss the data that will be collected and why, their experience using the tool, and a time line for completion.

- Copyrights and Author Rights
  - July 10th, Thursday 1-3pm
  - Julie Speer & Elizabeth Winter
  - Julie and Elizabeth take a closer look at publisher copyright policies and recommend resources for authors negotiating rights with publishers and understanding copyright material in the classroom.

- Scholarly Communication Perspectives
  - July 19th, Thursday 1-3pm
  - Bonnie Tjelmeland & Michael Beut
  - Bonnie and Michael look at the changing worlds of scholarly communication from the perspectives of researchers, librarians, administrators and publishers.

- SMARTech and EPAGE
  - July 20th, Friday 1-3pm
  - Catherine Janik, Susan Parham & Julie Speer
  - Catherine, Susan and Julie discuss producible and e-publishing at academic libraries, demo the publishing and preservation systems used at Georgia Tech, describe the collection development methods employed by the department, and highlights some successful collaborations with researchers and subject librarians.
Outreach, Marketing, and Advocacy

- Dept. Assessment Tools
- Tailored presentations at departmental meetings
- Campus Bulletin on NIH Public Access Policy, VP for Research and Innovation
- NIH Public Access Policy brown bags/training
- Open Access Week 2009
NIH Brown Bags

- Co-sponsored by the Office of Sponsored Programs
- Instructors: Head of SCDS, Biosciences Librarian, OSP E-Commerce Officer
- Target audience: anyone funded by NIH (students, post docs, faculty, researchers, etc) and anyone submitting to PubMed Central on behalf of an author funded by NIH
- Review policy and required steps for compliance
- Hands-on training for submitting manuscripts to PMC and locating PMCID’s in PMC
- Library developed site to help comply with the regulation
- 2 brown bags via Office of Organizational Development
*Much of this slide presentation was developed by Julie Speer, Head, Scholarly Communication and Digital Services, Georgia Tech Library
Strategies – Engaging with Users

- Undergraduate Students
  - Partnerships with campus units
    - Undergraduate Research Opportunities Program
      - *The Tower*
      - Research Option Theses
      - Spring Symposium
    - Honors Program
  - Products of research presented/displayed in the LEC
    - presentations, performances, research and artwork
    - UROP Research Kaleidoscope
Strategies – Engaging with Users

- Graduate Students
  - Publishing tools
    - Southeast Society of Industrial and Applied Mathematics Student Conference
  - Partnership with the Office of Graduate Studies and Research
    - Electronic Theses and Dissertations
  - Georgia Tech Research and Innovation Conference
  - Archiving Masters’ Projects
    - School of Applied Physiology
      - Prosthetics and Orthotics
    - School of Literature Communication and Culture
      - Information Design and Technology
      - Digital Media
Strategies – Engaging with Users

- Faculty and Researchers
  - Publishing tools
  - Lecture recording service
  - Service model
    - CV research, web inventory project, submission service
  - Communications officers
  - Partnerships with campus units
    - Distance Learning and Professional Development
  - Subject librarians/department assessments
  - Tailored presentations at departmental meetings
    - AP, BC, ECE, HTS, INTA, Physics, Psychology, PTFE
  - Articles in Library faculty newsletter, campus faculty newspaper *The Whistle*
SMARTech: Formats

1. PDF
2. HTML – restricted items
3. Text (rtf, txt, xml, doc, wpd, sgml)
4. Images
5. Audio
6. Video

![Pie chart showing different file formats]

- Portable Document Format
- Hypertext Markup Language
- Portable Document Format - Archival
- IBM DisplayWrite Document
- Unknown
- Other