21st Century Special Collections for the 21st Century Research University

Executive Summary

The special collections at the Georgia Tech Library is a vital institutional asset that commemorates the evolution of science and technology, inspires new creations and innovations, and teaches student skills in acquiring and creating knowledge. As the managing unit, Georgia Tech Library's archives signify a leading technological research library and distinguish Georgia Tech from its peer organizations in the nation and around the world. Our directions are bold and ambitious yet achievable. We understand the importance of preserving the enduring values of our collections. We are also adaptable to new media types and stay in the forefront to make these collections visible and easily accessible. In the context of the Library Next transformation, we have begun to realize our vision. The future of special collections at Georgia Tech will focus on collecting, preserving, and showcasing information in digital formats. We have a long standing commitment in preserving historical, special, unique, and valuable information in paper and other traditional media types and have built a state-of-art facility to carry out that mission. We are inspired by the possibilities that technology has presented to us and feel compelled to explore these possibilities. As knowledge are being created and shared digitally, we must ensure proper work flows and infrastructure to select, acquire, process, and preserve this information. We also need contemporary information policy framework for information access and sharing. Our vision aligns with both the Institute's "business of creating the next – the next idea, the next technology, and the next legion of visionary leaders"[1] and the Library's vison to "define the technological research library of the 21st century." The road ahead is challenging yet full of opportunities.

Drivers of Change

Over the past few decades, exponential technology advancement and increased digitization have transformed how research libraries serve their communities and fulfill their missions. Special collections are at the center, if not the forefront, of this great transformation. As our colleague John Overholt at Harvard University forecasted in 2013, the future of special collections is distribution, openness, disintermediation, transformation, and advocacy.[2] In 2014, a National Colloquium on Library Special Collections was held in Cleveland, Ohio to explore some of the factors that governed the growth and use of special collections of the past, as well as current and emerging challenges for special collections in the future.[3] Subsequently in 2016, the American Library Association published "Forging the Future of Special Collections," drawing on the expertise of a world-class array of librarians and archivists. The book surveys the emerging requirements of today's knowledge ecosystem and charts a course for the future of special collection.[4]

Here at Georgia Tech, the Library has been undergoing a massive renewal process since early 2014. From the library buildings to the work processes, every aspect of the library

---

[1] http://www.gatech.edu/about/creating-next
[2] Overholt, John H. 2013. Five theses on the future of special collections. RBM: Journal of Rare Books, Manuscripts, and Cultural Heritage 14(1): 15-20.
[3] http://library.case.edu/ksl/collections/special/colloquium/
[4] http://www.ala.org/news/member-news/2016/05/forging-future-special-collections

functions are being reviewed, reimagined, and recalibrated.[5] As an integral part of the library functions, special collections can no longer be "treated as exclusive spaces for valuable but hidden and under-utilized material."[6] Rather, special collections should be Georgia Tech's unique and highly visible major institutional assets.

This transformation is concurrent with Georgia Tech's ongoing, coordinated effort to adopt new and innovative educational methodologies.[7] As the university finds its place in the global conversation about technology, society, and policy, the special collections are a means to inspire our campus community to engage with its history and envision the future.

Institutional Assets

To distinguish the Georgia Tech Library from its peer research libraries, our collections should reflect our commitment and support to Georgia Tech's mission of encouraging innovation, advancing knowledge, and serving the public interest. In other words, the special collections at Georgia Tech should be a vital institutional asset that commemorates the evolution of science and technology, inspires new creations and innovations, and teaches student skills in acquiring knowledge.[8] Georgia Tech prides itself on a reputation of educating the leaders of technical and industrial fields. The materials in the Georgia Tech Special Collections and Archives contain stories that support that reputation. The development process of the archival program's valuable collections demonstrates the Library's integral part of capturing the changing history and growth of the Institute.

With any STEM university, our rare books dealing with science and technology offer an opportunity for students and faculty to experience the mystique and magic of rare materials. The material record of scholarship presents research as a practice that connects to the world outside the university, with a history to which our faculty and students contribute. To promote interest in science and to support learning, we have one of the largest science fiction collections in the United States. Starting with the acquisition of Irving "Bud" Foote's donation of thousands of science fiction monographs and magazines in 1998, the Science Fiction Collection has since become a teaching tool for LMC faculty and Brittain Fellow's classes.

Moreover, classes from LMC, HTS, and College of Design have used the University Archives collection for orientation instruction and class projects, and Georgia Tech faculty use the Archives for scholarship and research. The archivists have also created scholarship and teaching tools from the archival collections such as the History Sleuth project.[9] The research value of these collections offers proof of institutional development and policies. This collecting area provides Georgia Tech faculty and students an opportunity to learn about the Institute's history in such ways as exhibits, class projects and digital collection.

---

[5] http://librarynext.gatech.edu/our-story
[6] http://www.ala.org/news/member-news/2016/05/forging-future-special-collections
[7] http://www.provost.gatech.edu/commission-creating-next-education
[8] Commemorate, educate and inspire is the Smithsonian's national air and space museum's mission.
[9] "de Catanzaro, Christine, Wendy Hagenmaier, Mandi Johnson, Jody Thompson. "History Sleuth Exercise." In Using Primary Sources: Hands-On Exercies. Santa Barbara, CA: ABC-CLIO, 2014, pp. 57-66.

Even though the current collections provide tremendous research values to the Institute and the community at large, none of the collections are named. This presents us a great opportunity to reach out to potential donors and to strengthen our community ties. Each of the collections offers a unique naming opportunity and could bring a sense of stewardship for individuals or entities.

Expanding Collections and Adaptive Workflows

Research libraries always hold a wide range of format types. Contemporary special collections often comprise printed material (books, manuscripts), electronic files (disks, hard drives, and web archives), and four-dimensional artifacts (textiles, art, furniture). With increased digitalization and technology enablement, more and more content is created digital only and distributed through new channels that have never existed before. For example, information distributed through websites and social media platforms increasingly represents the format of records and materials that are proper for special collections. The change from analog to digital formats affects all aspects of archival practice: acquisition, appraisal, arrangement and description, preservation, discovery and, in particular, access. The accelerating speed of technological evolution presents us with opportunities and challenges that cannot be predicated and understood as incremental changes in the status quo.

As we work towards the future, we are guided by some core principles in selecting and acquiring new collections. First, we are committed to open access and strive to make our content available to Georgia Tech patrons and individuals outside Georgia Tech without restrictions. Second, Georgia Tech has strong STEM programs and our collections should support teaching and learning. Third, we have a special charge to preserve content, both analog content and digital content that are either special or unique, for the future generation.

As a result, it is important and unavoidable for us have creative and nimble planning and development of tools, infrastructure, policies and workflows to make contemporary special collections discoverable and accessible to scholarly research. Our peers have launched initiatives that resonate with this strategy. For example, as part of their "bold new vision for the library as an open global platform" and their commitment to "building organizational capacity in archives and special collections," MIT's Digital Archives Program has developed reimagined workflows that capitalize on the self-describing affordances of the digital to maximize efficiency and user access.[10] Through high profile acquisitions such as the Salman Rushdie and Alice Walker collections, Emory's Digital Archives Program has inaugurated a new public perception of digital special collections as equally valuable, significant, transformative, and information-rich as physical special collections.[11]

In addition, Georgia Tech Library is incorporating a supply chain business model and redesigning its workflow processes and procedures that support the transition from print to digital resources and services. A supply chain business model capitalizes on flexibility and a

---

[10] https://libraries.mit.edu/digital-archives/were-hiring/ and https://libraries.mit.edu/digital-archives/imagining-access2bdcollections/

[11] http://rose.library.emory.edu/using/preparing-for-research/digital-archives-access.html

high level of efficiency. Aided by the centralized processing functions, librarians and archivists can focus more on developing and expanding collections to new areas and new formats.

Similar to librarians who continue adapting to the changing needs of their subject areas and constituencies, archivists actively seek collections that capture the unique perspective of Georgia Tech's campus life, academic prowess, and global pedigree. For example, great efforts have been made to diversify the collections through acquiring the records of student organizations such as the Georgia Tech Pride Alliance and Dramatech. The archival materials mirror the progression of Georgia Tech's story from a local to regional to national to global stage.

<u>Make the Hidden Visible and Accessible</u>

Preservation is pointless without usage. Leveraging technological advancement, we can make our special collections more visible and easily accessible. Through multiple programs within the Library Next Portfolio, accomplishing this goal has become both feasible and attainable.

- ➢ **State-of-the-art Reading Room** – This project gives patrons physical and virtual access to Georgia Tech historical records and its Special Collections materials. The exhibit window entices patrons towards a teaser display of subjects in its holdings. Public Services staff provide access guidelines and initial reference help. Archivists handle in depth research questions and consultation assistances.
- ➢ **Digital Archives Project** – In order to meet the increasing acquisition of digital collections and demand for digital access, this project develops a robust digital archives presence with the component of defining proactive collecting models and designing integrated, efficient teams. The implementation of this project generates workflows to manage rights and restrictions in the world of digital discovery and to preserve complex file formats, software, and databases. Other outcomes of the project are innovative discovery interfaces and a sustainable preservation system.
- ➢ **Vis Lab** – This project has a natural connection with Special Collections in ways for students to experiment with and create scholarship by using leading edge technologies while possibly featuring archival collections.
- ➢ **Exhibits and Showcasing** – This project will create greater access to and interest in archival collections; attract additional donor interest; facilitate the growth of Special Collections; and enhance collections access in both physical and digital environments.

<u>"It Takes A Village"</u>

Even being equipped with the best tools, we cannot make the hidden visible and accessible without the collaborative efforts between archivists and their colleagues within Georgia Tech and the community outside. One success story is the partnership between Georgia Tech Library and the Architecture and Design Center (ADC). Since 2014, multiple collaborations resulted from this partnership with organizations such as the American Institute of Architects (AIA), Atlanta and Georgia Chapters and Doug Allen Institute. The Archives will be assisting with future closure of the Architecture library and will acquire volumes from the rare book collection. This collaboration has already yielded insights for preserving and providing

access to architectural collections and positioned Georgia Tech as a key player at the cutting edge of research in the archival field. Additionally, we are expanding and broadening the collaborations between archivists and faculty within and outside the library through the following:

> Advancing current collecting areas and showcasing these materials demonstrates the ongoing need for partnerships between librarians and archivists as well as faculty on campus. The collaboration between the archivists and the Science Fiction Librarian has helped expand the donations of monographs to the Library's Circulating and Special Collections, as well as memorabilia related to science fiction. This group partnered with LMC faculty member Lisa Yaszek to work with the Atlanta science fiction community, ensuring materials are preserved and made available to researchers and Georgia Tech faculty and students. Also, the collaboration expanded to the creation of an exhibit featuring DragonCon artifacts.

> Scholarship is an area of collaboration between librarians and archivists. This collaboration is a valuable way to share expertise and effort when instructing first-year English students on research skills. It is also vital to orienting new faculty to library and archives resources for their scholarship and teaching, as well as encouraging students to value the library and special collections and archives resources and knowledge. An article written by Science Fiction Librarian and Access Archivist identifies common themes in library and archive instruction and key elements of engaging first-year faculty and their students in becoming long-term patrons, in the midst of Georgia Tech's Library Next initiative, a re-imagining of the twenty-first century library and a major renovation of physical spaces.[12]

> Fundraising for special events, such as the Peachtree Way exhibit that was created in 2015. It was a collaboration with Georgia Tech Library, Special Collections, ADC and AIA in conjunction with AIA's national convention, which took place in Atlanta. Also, due to the collaborations between Special Collections and the architecture community, several high-profile collection have been donated and made available to researchers.

> Dealing with the ever growing challenges of digital preservation, the Head of Special Collections is part of the Society of American Archivists' Design Records Section's CAD/BIM Task Force. This new team is investigating best preservation practices and acquisition and workflow models for born-digital architecture and design collections.

> retroTECH is a program for the campus community that creates the future by exploring the past. With the Lab, students, faculty, staff, alumni and partners outside Georgia Tech engage in hands-on research, DIY peer-to-peer digital archiving, experimental learning and outreach around the evolution of technology. Its unique offerings include a highly curated combination of vintage hardware and software and modern tools for digital archiving and emulation, all designed to be accessed and used. The future of archives demands proactive models of outreach, education, and collecting, and retroTECH empowers Georgia Tech Special Collections and Archives to create such a model. [13]

> Living Library for Learning (L^3) is being proposed as one of the exploratory efforts to expand and apply an already successful concept of the Human Library™ to the higher

---

[12] https://digitalcommons.du.edu/collaborativelibrarianship/vol9/iss4/6/

[13] https://www.alastore.ala.org/content/conceptualizing-21st-century-archives

education context. Through the L^3 portal, Georgia Tech students could obtain a very different learning experience by conversing with a "human book" in addition to reading traditional books. Not only can students learn perspective, depth, and context of knowledge, they can also experience authenticity of content and can build a connection with these human books, thus expanding their social capital. The goal of L3 is to establish and curate a collection of human subject matter experts who agree to be called upon when they are needed.

Furthermore, we are exploring new opportunities to promote the usage of our special collections. For example, establishing funds and offering stipends for researchers to come use our collections in exchange for researchers to share their reading experiences and findings through publications, presentations, and social media. We could also support the School of Literature, Media, and Communications by offering the special collections to be the study subjects and dissertation topics for their PhD programs.

Future of Special Collections

Special collections are "special" because their historical significance, research values, and uniqueness. More importantly, special collections are "special" as they signify who we are as a research library and distinguish Georgia Tech Library from other research libraries in the nation and around the world. These collections demonstrate the core institute values and strength the commitment Georgia Tech has made to improve human condition through advanced science and technology. Having these special collections are our unique contribution to the world of knowledge.[14]

With their obvious uniqueness and stature, the Georgia Tech Special Collections are well suited to donor opportunities such as financial support or personal collections that contain items from Georgia Tech alumni. The sentimental value of the collections endears the spirit of Georgia Tech from one graduating class to another, providing a sense of time and place to Georgia Tech through concrete forms.

---

[14] http://www.inthelibrarywiththeleadpipe.org/2009/its-the-collections-that-are-special/

Appendix A: Special Collections in Academic Libraries

Special collections refer to a collection of books, journal, pamphlets, manuscripts, maps, prints, medals and other artifacts or objects. Many of these items are primary sources of information. Libraries, especially research libraries, "preserve and provide such primary resources as part of their fundamental mission."[15] These collections are generally characterized as "special" due to their rarity, value, beauty, unusual content, form, or physical condition. Often times, items in the special collections are irreplaceable. As a result, special collections require the "best possible storage environment, specialized security, and highly trained staff."[16]

Special collections is and should be one of the critical identifiers of a research library.[17] "The rawest representations of human endeavor and the building blocks of new knowledge are the rare materials and primary sources in our special collections and archives. These collections are often developed around niche interests and grounded in localized expertise. They not only address the specific informational needs of their constituency, but also distinguish their institution in the larger research community." For example, University of California, Berkeley's Bancroft Library holds the papers of Mark Twain; MIT houses the first edition of Walt Whitman's Leaves of Grass and the digital collection of Aga Khan Visual Archive; and Penn State holds the Sir Edward Maufe architectural papers. These libraries stand out from their peers because of their particular collections. As Nicholas Barker remarks in his introduction to *Celebrating Research*, "To be unique in some definable way, however recondite, makes [a library] the object of an attention that it would not otherwise attract."[18]

---

[15] *ARL Task Force on Special Collections (2003), Special Collections Statement of Principles: Research Libraries and the Commitment to Special Collections (PDF), Washington, D.C.: Association of Research Libraries*http://www.arl.org/storage/documents/publications/special-collections-statement-of-principles-2003.pdf; https://www2.archivists.org/usingarchives/typesofarchives

[16] https://library.si.edu/departments/special-collections

[17] http://www.ala.org/acrl/standards/comp4specollect

[18] Quote from http://www.inthelibrarywiththeleadpipe.org/2009/its-the-collections-that-are-special/

Appendix B. Georgia Tech Current Curatorial Areas

To distinguish the Georgia Tech Library from its peer research libraries, the collections we have should reflect our commitment and support to Georgia Tech's mission *of* encouraging innovation, advancing knowledge, and serving the public interest. As the administrative entity for the Special Collections, Georgia Tech Archives develop, preserve, support, steward, and disseminate collections that are either special or unique in the sense that they support the Institute's mission. This support demonstrates the many values the Georgia Tech's Special Collections offers in outreach, research, teaching and learning.

Textile Industry Collections:

This is a substantial collection of textile mill industry materials in the southeast, which document the religious, social, and economic issues of nineteenth and twentieth mills, particularly in Atlanta. This collecting area illustrates the historical value the textile industry has to Georgia Tech with the development of the Textile Engineering program in 1897 to the current School of Materials Science Engineering. These collections hold the connection of the past and future in textiles with teaching, learning and research possibilities. The largest collections is Atlanta's Fulton Bag and Cotton Mills records, which contain over 600 linear feet of records, photographs, architectural drawings and artifacts that document the history of the mill dating back to the 1880s. Other collections within the Textile Industry Collections document other mills within Georgia such as the Chipman-Union Mill in Union Point and the Enterprise Manufacturing Company near Augusta.

Science Fiction

The Georgia Tech Science Fiction Collection is one of the largest science fiction collections in the United States. In 1998, Bud Foote donated his personal science fiction book and magazine collection to Georgia Tech Archives, which holds over 10,000 science fiction and fantasy novels, anthologies, and more than 1,000 magazines. Also, most recently, it has become a repository for Atlanta-focused science fiction conventions and movie festival collections. The rare and unique materials in this collection hold significant importance and connection to community engagement. It is the conduit for additional acquisitions of authors, papers, researching components and engagements with the local science fiction community in Atlanta.

Architecture Design Collection

Focusing on the design and development of the modern south, this rich collection consists of Georgia Tech alumni and faculty, such as Francis Palmer Smith and Joseph Amisano, and well-known architects as Neel Reid. The Archives' acquisition of the College of Design's Heffernan Design Archives in 2008, serves as the foundation for expanding the architectural collecting area to include locations outside Georgia Tech proper, especially focusing on the design and development of the modern South. The architectural work and personal documents of P.M. Heffernan comprise the nucleus of the Georgia Tech Design Archives collection, which contains a substantial body of faculty, student and alumni work.
Science and Technology Rare Books

Sir Isaac Newton's Philosophiae Naturalis Principia Mathematica (London, 1687), provides the cornerstone for the Georgia Tech rare book collection which focuses on the history of science and technology. With special strength in Newtoniana, the library owns a copy of each of the first three editions of the Principia Mathematica (1687, 1713, and 1726), all published during Newton's lifetime. Other Newtoniana include works by such contemporaries of Newton as John Keill, Henry Pemberton, and Colin MacLaurin. One of the library's most beautiful treasures is the nine-volume Dutch language edition of Joan Blaeu's Grooten Atlas (or Grand Atlas), published in the 1660s. Other collecting areas include mathematics, particularly probability, sciences, technology and architecture.

University Archives

The University Archives documents Georgia Tech's history dating back to its inception in 1885. The collections show the history and development of the Georgia Institute of Technology and its faculty, staff, students, and alumni. Collections in this archive make up the largest collecting area and contain the records of Georgia Tech's administrative offices, educational programs, standing bodies of the faculty and staff, extracurricular organizations, and more. Materials include student and university publications, visual materials, commencement records, meeting minutes, correspondence, and memorabilia that evidence the traditions and creative output of Georgia Tech. Web-Archiving is another resource for researchers. Archive-It is a subscription web archiving service from Internet Archive that gives researchers access to Georgia Tech's digital content such as websites and social media.