NDSR Project: Managing Time-Based Media/Digital Art at (an appropriate) Scale

Summary

The Minneapolis Institute of Art's (Mia's) current collection of time-based media/digital art numbers a modest twenty-one (21) objects. However, the museum is poised to dramatically add to that number and we are not as prepared as we would like to be for this inevitability. The NDSR Art Resident will take a lead role in helping Mia enhance our capacity to acquire, manage, preserve and provide access to our digital art collections over time; recommend technical solutions for management and preservation; and oversee the initial implementation of the new policies, procedures and systems, using our existing collections as a test-bed. They will build on the work of leaders in the field (Matters in Media Art, the Smithsonian Time-Based Media Art Working Group), ensuring all solutions are appropriate to Mia's scale. In the final stage of their residency, the Resident will train Mia staff to carry forward what they have helped put in place.

By developing Mia's capabilities to preserve and manage its digital collections, the residency's outputs will facilitate our users' exploration of these complex artworks, addressing the expectations of today's audiences to engage with rich digital content and the latest artistic creations. The foundational framework created during the residency will also ensure the preservation and viability of these art works into the future.

Specific Objectives

Mia's NDSR Art Resident will serve as co-lead for Mia's New Media Task Force (along with Frances Lloyd-Baynes, Host Mentor) and will focus on four of the six stages of digital preservation identified by the Library of Congress Digital Preservation Outreach and Education (DPOE) program: Store, Protect, Manage and Provide. The Resident will

STORAGE and PROTECTION:
- guide Mia in determining and agreeing on the systems, structures and processes needed to achieve long-term archival viability of our time-based media/digital art collections.
- review Mia's existing infrastructure for managing digital assets (systems and software).
- recommend both storage solutions and adjustments to the 'Mia Core' metadata structure required to accommodate digital artworks, guided by work done by other organizations/projects and scaled to Mia's needs.

MANAGING:
- take the lead in formulating new processes and workflows to meet the specific needs of time-based media/digital art, addressing the differences in approach required by works acquired by Mia and those only loaned to the museum.
- propose roles, responsibilities, and workflows for the activities of time-based media/digital art collections management.

- document the agreed policies, procedures and workflows.
- plan and initiate the training of Mia staff in these new ways of working.

PROVIDING:
- pay particular attention to the needs around providing ongoing access to and display of Mia's digital art.
- develop recommendations on how to address technological changes and the impact of those changes on both the artworks and the organization, e.g. budgeting for change and working proactively rather than reactively to address it.
- undertake testing/proof of concept for the systems, structures and processes that Mia implements based on their recommendations.
- apply the new approaches to Mia's existing time-based media/digital artworks.

Mia is committed to providing a collaborative work environment in which staff work together toward common goals that align with our strategic plan. The museum accomplishes its goals by working in Cross Functional Teams that bring together staff with a variety of perspectives to take responsibility for completing a specific initiative. Team members work toward a specified goal, without regard to official job title or hierarchical level. These teams generally consist of a Core Team with an Executive Sponsor and Team Lead, an Extended Team, and a group of key project Stakeholders.

Throughout the project year, the Resident will work closely and collaboratively with the project Core and Extended Teams, especially members of the New Media Task Force, whose members include representatives from curatorial, registration, visual resources, and media and technology departments. They will have open access to all of their colleagues in the Media and Technology Division and across the museum. They will

+ learn Mia's digital ecosystem,
+ investigate how time-based media/digital art exists in this ecosystem (or not),
+ build on the products of the ECM project (see below), and
+ push the boundaries of our digital tool sets.

The Resident will develop a specific work plan for the residency in agreement with their Mia Mentor and apply Agile/Scrum methodologies for scheduling and delivering objectives.

Our expectation is not that the Resident will come to us with all the answers, but that they will work with Mia to explore our needs, develop solutions, continue learning with us throughout the residency and share the results. Their work will provide the foundations and framework for Mia's ongoing time-based media/digital art management. We aim for our efforts with the Resident to be an exemplar for other cultural institutions with moderately-sized digital collections facing the challenges inherent in acquiring and preserving them and will actively disseminate the residency's outcomes via conferences, GitHub, and other appropriate outlets. The Resident will also have opportunities to host their fellow NDSR Art residents and local ARLIS/NA colleagues at Mia.

Timeframe & Deliverables	One year: July 2017 – July 2018

The Resident will begin by learning Mia's technical ecosystem (TMS/The Museum System; MediaBin; ResourceSpace; MetaMia), existing workflows around collections management, and the Agile/Scrum methodology. Training will be delivered by Mia staff.

Project deliverables will be scheduled for completion on a broadly quarterly basis. Working with an Agile/Scrum methodology will involve setting regular (e.g. bi-weekly) 'sprints' to define the specific tasks for that time-period with daily check-in opportunities. Deliverable dates will be negotiated between the Resident, Host Mentor and Mia's Digital Program Manager as work progresses. The very nature of Agile/Scrum is to work iteratively and to make any necessary course adjustments on an ongoing basis - this will allow the plan that is outlined below to be flexible and responsive to feedback or changing needs over time. The Resident will begin regular meetings with the core project team and Task Force from the start of the residency period and review Mia's efforts to date as the initial step towards developing the following deliverables.

Project outputs:

1st Quarter: Evaluation and Review

- Review and evaluate current Mia systems and practices for managing time-based media/digital art
- Review and evaluate software tools available for digital art storage and access
- Research and make recommendations for digital collections object metadata (for use within systems designated for storage/archiving of digital artwork)
- Analyze requirements for loan and permanent collection time-based media/digital art processes / treatment

2nd Quarter: Recommendations and Draft Framework

- Draft policies and procedures for digital collections acquisition (based on those works already in Mia's collections)
- Recommend improved digital art storage solutions/technology and ongoing management at current scale and allowing for growth
- Investigate and collect any support documentation that is currently missing for existing time-based media/digital art objects at Mia (e.g. from artists, galleries, etc.)

3rd Quarter: Proof of Concept and Implementation

- Test proofs of concept for reformatting, migration, and/or emulation of complex digital objects
- Define, test and agree upon workflows for intake, documentation, management and preservation storage of digital collections and their supporting materials

4th Quarter: Documentation and Dissemination

- Deliver a final, documented framework for time-based media/digital art management appropriate for moderately scaled collections/budgets, documented and shared with the cultural sector
- Apply new standards, process and procedures to (21) existing Mia time-based media and digital art objects
- Train Mia staff on digital stewardship and processes (e.g. Curatorial; Registration; Media & Technology)
- Deliver ARLIS/NA paper and conference presentation

Context   The mission of the Minneapolis institute of Art (Mia) is to enrich the community by collecting, preserving, and making accessible outstanding works of art from the world's diverse cultures. With over 89,000 artworks, Mia's collection includes art from six continents, spanning about 20,000 years. Here you will find world-famous artworks that embody the highest levels of artistic achievement and speak to the enduring power of human creativity to shape our world. And increasingly, these artworks are born digital.

The nature of digital art creates new challenges for museums in terms of care, preservation and access that are vastly different from those of more traditional media art such as paintings, works on paper or ceramics. New processes and skills are required to steward our born digital creations successfully. We (museums) need to think outside our traditional 'boxes' and can benefit hugely from tapping into the knowledge and experience of other fields, such as library science. The National Digital Stewardship Residency (NDSR) Art residency will support the museum's efforts to make its collections accessible by enhancing its capacity to share time-based media/digital artworks with users inside and outside the building while safeguarding the art for future generations.

We are looking to leaders in the field for guidance on time-based media/digital art management, particularly (1) the Matters in Media Art project, a collaboration between the New Art Trust, the Museum of Modern Art (MoMA), Tate, and the San Francisco Museum of Modern Art (SFMoMA), and (2) the Smithsonian's Time Based Media and Digital Art (TBMA) Working Group, with members from the Smithsonian American Art Museum, Hirshhorn Museum and Sculpture Garden, and National Portrait Gallery. But Mia requires solutions that fit our more moderate scale of digital content and annual budget expenditures. MoMA, for example, numbers its time-based media and digital art collections in the tens of thousands. Over 2000 object records for 'video' alone are available via their online collection website. The solutions Mia puts into practice must solve our comparatively modest near-term needs while simultaneously positioning the museum for ongoing collection growth. What works for MoMA may prove unachievable and even unnecessary for Mia, but exactly where and how our approaches should diverge is an open question.

The NDSR Art residency offers a natural extension to Mia's recent Enterprise Content Management (ECM) Project. This IMLS-funded project allowed Mia to create an ecosystem of integrated, predominantly open-source tools (an extensive API; Elasticsearch indexing; a new 'Mia Core' metadata structure), systems (two digital asset management systems: MediaBin and ResourceSpace), and a browser-based interface

for working with collections-related digital content across all our platforms (MetaMia). With this ecosystem in place, the Resident, along with the existing New Media Task Force, will lead Mia on the next steps towards true digital preservation and the creation of an infrastructure to support it.

The New Media Task Force came together in late 2014 to address the needs of time-based media/digital art collections at the museum. To date, Mia's digital collections have been treated like all other collections, i.e. as physical objects (e.g. a DVD physically-numbered and placed in a storage cabinet alongside other collections objects). Their unique digital nature and requirements for ongoing access and preservation have not been addressed. As the software, hardware and multi-media presentation equipment required for the display and expression of this art ages, it becomes increasingly important that we address these needs or we will not be able to ensure the viability of these artworks into the future.

During 2016, two new curators/department heads—Gabriel Ritter, Contemporary and Yasufumi Nakamori, Photography & New Media—arrived at Mia to fill staffing gaps that had left the Task Force undermanned and unable to pursue its work for a year. Upon their arrival both joined the Task Force, breathing new life into its efforts. Mr Ritter and Mr Nakamori are contributing their experience working with digital art in museums with more preservation-minded systems already in place. Both curators are increasing the numbers of digital artworks acquired as they expand Mia's contemporary art collections, thus collection growth is imminent and the need for improved processes and systems is becoming more urgent.

The Task Force is currently assessing the situation of existing time-based media/digital artworks. It has undertaken an inventory of works and supporting documentation (with the help of an intern) and is developing an understanding of the issues facing long-term preservation of digital content. However, it remains difficult for the group to make progress given other work pressures. The leadership and contributions of the NDSR Art Resident will enable Mia to succeed in creating the necessary framework and systems for stewarding its digital art collections.

Required Resources	• Host Mentor & Project Lead (Frances Lloyd-Baynes, Content Database Specialist) and ARLIS/NA Mentors at Mia (Meg Black, Asst. Librarian [primary] and Janice Lurie, Librarian [secondary]); Resident

- Training on all associated systems and workflows
    - MediaBin and 'Mia Core' metadata (Joshua Lynn, Digital Media Specialist)
    - TMS, MetaMia and ResourceSpace systems (Frances Lloyd-Baynes)
    - Registrarial procedures (Leslie Ory Lewellen, Assoc. Registrar for Acquisitions)
    - Curatorial processes (Mia Curatorial Division staff)
    - Multi-media display and equipment management (Ryan Lee, Media Production Lead)
- Ability to work using Agile/Scrum methodology - training and ongoing coaching will be provided by Meaghan Tongen, Mia's Digital Program Manager

	• Working space, laptop, network and Internet access provided in the Media & Technology Division offices
Required Knowledge & Skills	• Awareness of current and emerging best practices, tools, principles and standards in digital asset management and digital preservation • An understanding of descriptive, technical and preservation metadata standard application and use • Background in library science /digital archive management and technology • Ability to work independently and as part of a team • Experience using personal computers • An ability to employ logic and analytical thinking • Great attention to detail • An interest in museum collections- and data-management
Preferred Knowledge or Experience	• Experience developing and documenting policies, procedures and workflows • Experience managing and/or preserving born-digital artwork • Work with digital asset management systems • Experience developing and delivering training
Who You Are	You are a self-starter and creative problem solver able to work well individually and with a team in a dynamic environment. You have a positive attitude with superior communication skills. You enjoy motivating others to achieve goals and are committed to excellence.
You're good at and enjoy…	• Communicating effectively with multiple stakeholders across various levels. • Networking with industry peers. • Setting challenging goals and achieving them. • Paying attention to detail.
Mia Culture	The Minneapolis Institute of Art is an audience-focused workplace where everyone strives to provide excellent service and cultivate honest and positive relationships. Generosity, agility, emotional intelligence, positive energy, and driving results are the core values that define Mia's culture. Successful employment at Mia includes full embrace and demonstrable indicators of these values by all team members.