

Friday October 15, 2021

Chris Young

University of Toronto Mississauga Library



Schedule

Overview

About, Team, Focus

Showcase

Partnerships, Projects, Services, Skills, Spaces

The Pitfalls of Seeing the World in 3D

The Question, The Research, The Process

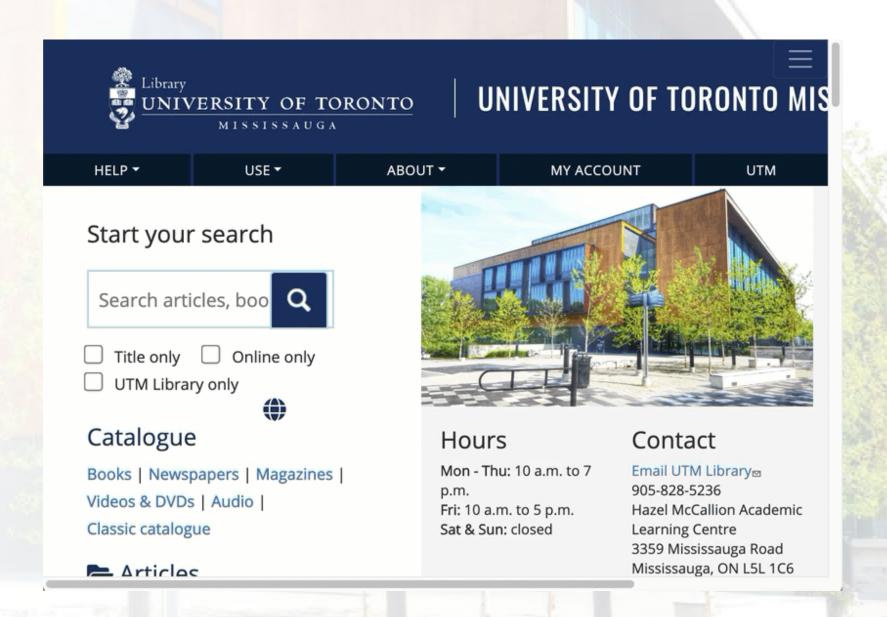
Questions





About

The mandate of the UTM Library's Digital Scholarship Unit is to develop and maintain digital projects for the Library by creating and using digital methods, theories, and tools to support curricula and research at the University of Toronto Mississauga.



Source: https://library.utm.utoronto.ca/



Team

Mary Beth Atkinson-Lu,
Digital Scholarship Technician
Nelly Cancilla, Digital
Scholarship & Liaison Librarian
Tomoko Shida, Archivist
Chris Young, Librarian &
Coordinator



Staff

Our team is involved in dozens of projects across the University of Toronto Mississauga (UTM) campus to support teaching and research. Building these digital collections is an enormous undertaking and every member of our team is involved in preserving, arranging, describing and providing accesss to our rare and unique materials. This can involve selecting materials for digitization that adheres to copyright and privacy rights, while ensuring high-quality digital

Source: https://collections.utm.utoronto.ca/staff



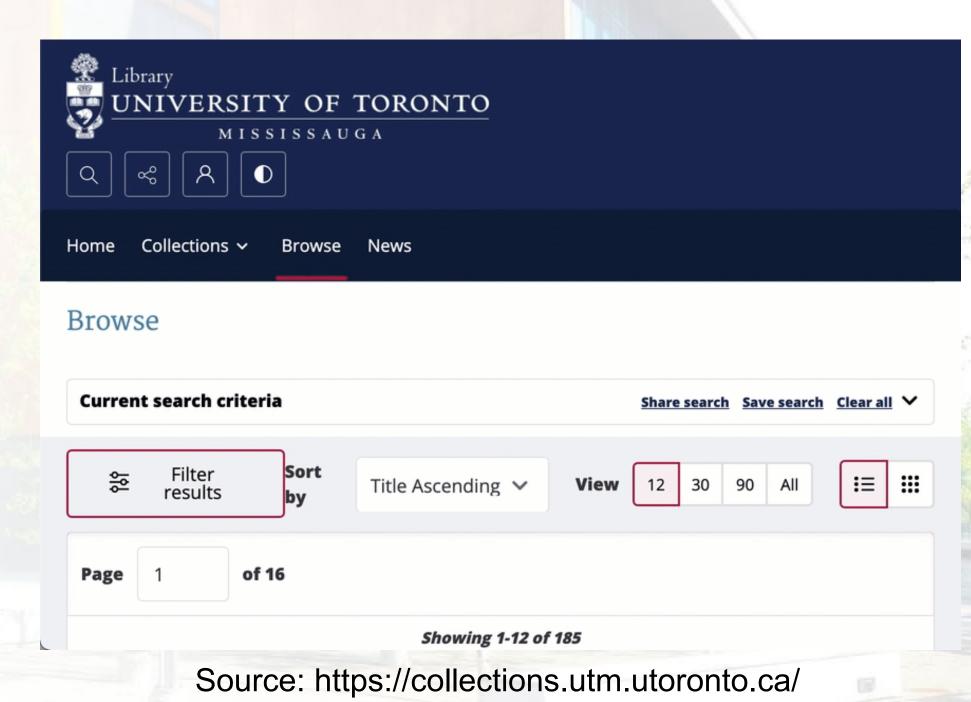
Focus

The current UTM landscape:

- Partnerships
- Projects
- Services
- Skills
- Spaces

Mixed in with technologies...

And lots and lots of consultation



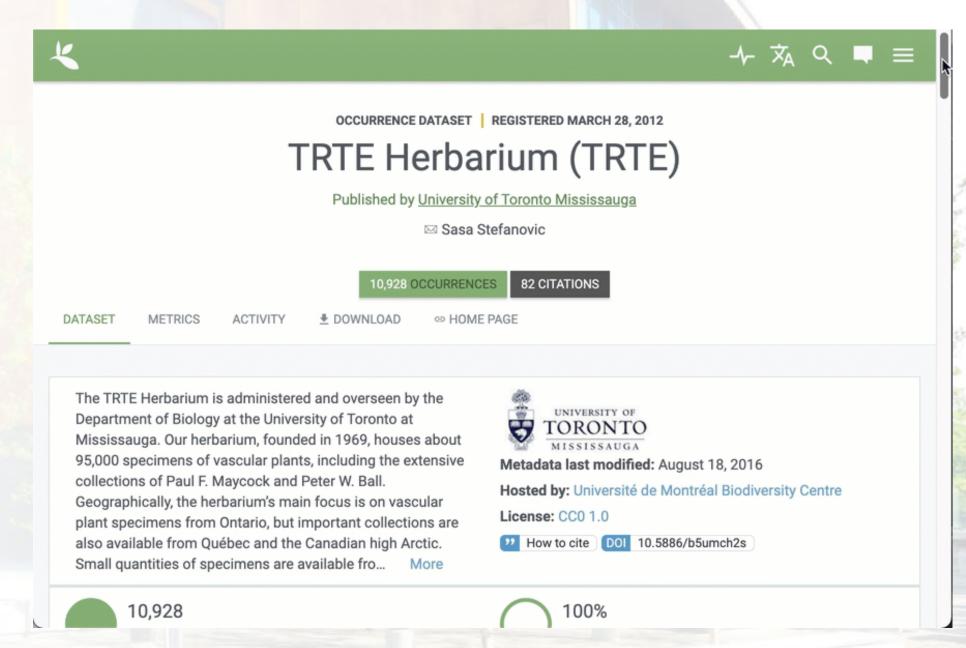
MISSISSAUGA



Partnership – Biology Department

Free and open access to biodiversity data.

- 95,000+ samples over 100+ years, 10,000+ scanned
- Valuable baseline for climate change studies
- Follow Darwin Core standards
- Harvested from Quartex to Canadensys & GBIF for international discoverability



Source: TRTE in GBIF



Project – Visualizing the Americas

Collaboration with faculty using collections, Quartex, and digitization.

- US imperialism told through the consumption of the banana
- Unique site connected to Collections Quartex site
- Includes essays, videos, timeline and other features to mobilize knowledge

VISUALIZING THE AMERICAS

About Themes Key Moments Archives Search

VISUALIZING

Wienalizing the Americas examines the history of canitalism through the

Sourve: Visualizing the Americas



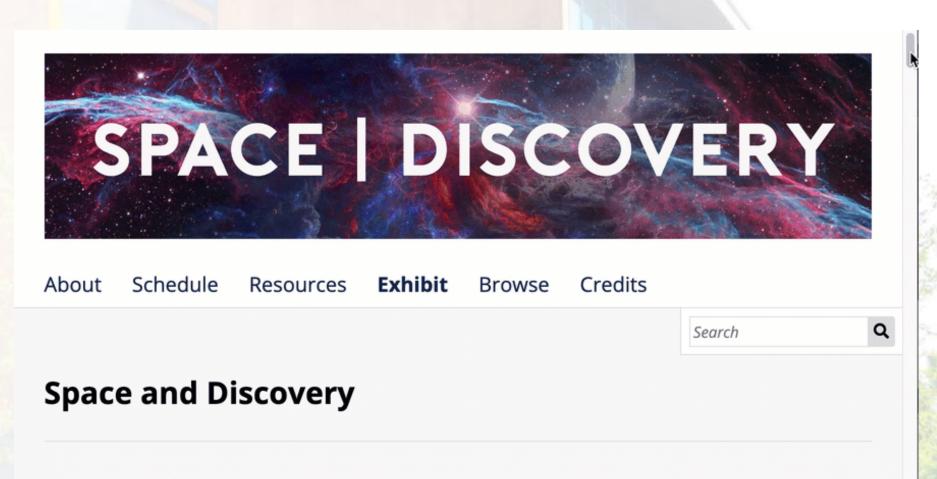
Services - Omeka S + Mukurtu

Technologies and tools for use in research and curriculum

- CMS for curation and digital storytelling
- Courses, knowledge mobilization

Use Cases

 Historical Studies, Italian Studies, Visual Studies



Introduction

Astronomy is one of the most wide-ranging and oldest of the natural sciences. It embraces such topics as the origin and evolution of the planets, stars, galaxies and the whole universe; the conditions for the origin of life on earth and elsewhere; the

Source: Space & Discovery exhibit



Skills – Workshops

Workshops on how to gather, analyze, and publish (GAP) research using tools & methods

- Use combination of open source + proprietary tools
- Current focus on gathering web and social media data
- Emphasis on technical and ethical challenges around data collection

Toolkit Workshops Contributors

Workshops

Table of Contents

- 1. Gather
- 1.1 Webpage Data with wget
- 1.2 Twitter Data with twarc
- 1.3 Instagram Data with instagram-scraper
- 2. Analyze
- 3. Publish
- 3.1 Game Design with Unity

1. Gather

1.1 Webpage Data with wget

wget is a free command line utility for non-interactive downloads of files from the web to retrieve online material. In this workshop, we only cover how you can download online digital files from public

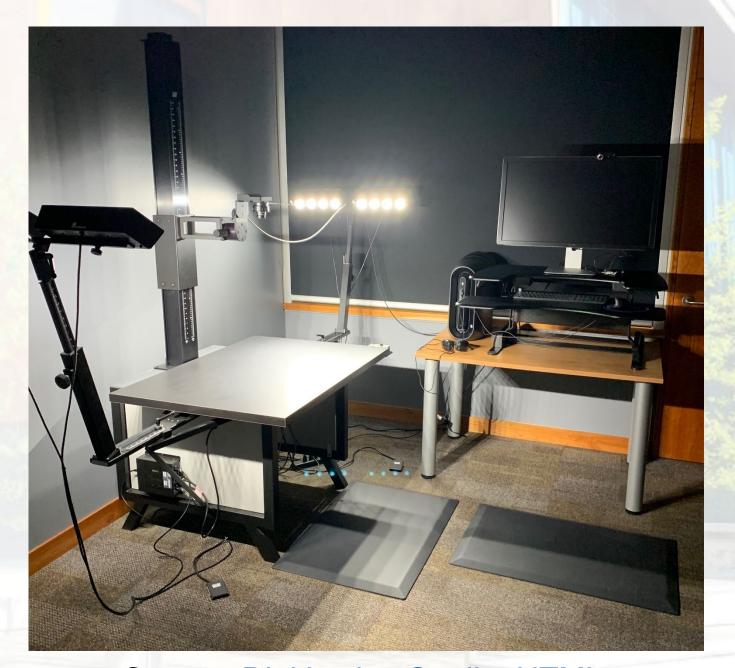
Source: <u>UTM Library Toolkit</u>



Spaces – Digitization Studio

Library as a center for collaborative partnerships

- Archives & Special Collections
- Post-Custodial projects with community
- Collaboration with campus collections, data, and faculty
- Training in standards and process to share labour and knowledge with partners



Source: Digitization Studio, UTML





The Question, The Research, The Current Process



The Question

How do we make our 3D assets available without using a commercial platform like SketchFab?

- Subscription model
- Privacy considerations
- User authentication
- Maybe a central repository platform?



Source: U of T News 3D scanning at UTM

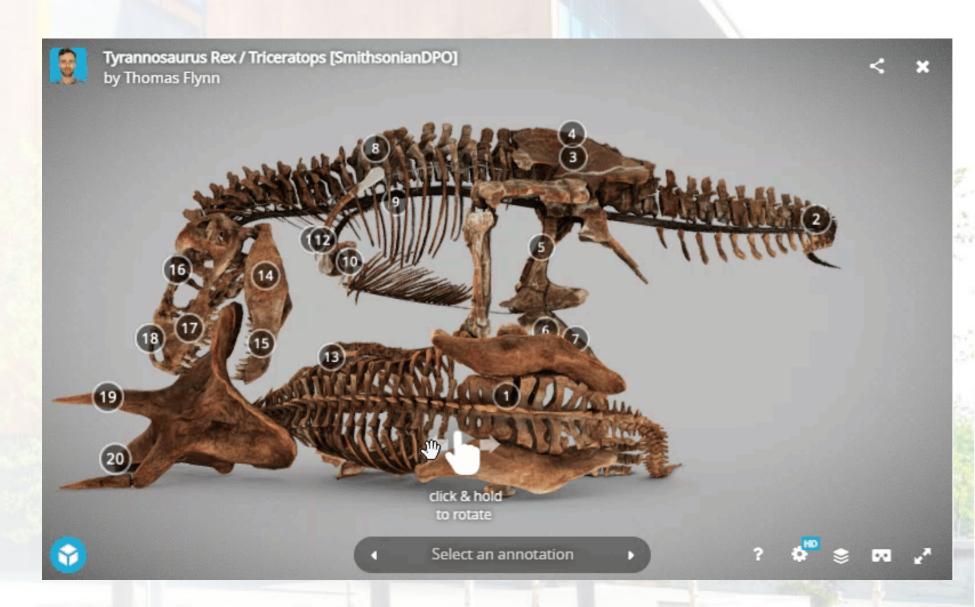


The Research

Almost everyone uses SketchFab...

But there are other options

- Supermedium's A-Frame
- Smithsonian's Voyager
- Visual Comp Lab's 3DHop
- Islandora Solution Pack for 3D
- Other in-house projects



Source: Smithsonian Magazine



The Process

Assuming you have prebuilt your 3D files ...

- Deploy 3DHop to your server
- Install NEXUS package on computer
- Convert .ply file and texture image to .nxs
- Setup viewer page with HTML, JavaScript + CSS
- Embed in Mukurtu website



Source: Capsella Samagher example at 3DHop





Special thanks to the librarians, staff, and students who work on the projects above:

Chris Alfonso, Mary Atkinson, Nelly Cancilla, Mike Serafin, Tomoko Shida, Brianna Tucker

