

CSU ARCHITECTURAL VIRTUAL LIBRARY: COMMUNITY DEVELOPMENT THROUGH THE USE OF ADVANCED TECHNOLOGY

Macy Turner
CHHS Junior

Dr. Maria Delgado, Assistant
Professor at Auburn University
Hannah Kersting, County Director
and Agriculture Agent
Todd Ballard, Area Extension
Specialist

PROJECT INTRODUCTION

Colorado State University's Extension Program provides educational and experiential resources to various communities. The Architectural Virtual Library through Colorado State University and Extension, prioritizes educating the general public on historical architectural buildings. Colorado State University Architectural Virtual Library (CSU-AVL) is an online webpage that provides various forms of content intended to promote community engagement and education. Part of the content that CSU-AVL provides is documented historical buildings through the use of advanced technology. Historical buildings across Colorado are documented and researched to provide informational and educational content for all ages.

The goal of this project is to document eight historic buildings in Lake City, Colorado to create virtual tours using advanced technology. These tours will include embedded research that consists of architectural and historical information as well as, published articles, videos, and photos. My goal is to highlight architectural history and educate the public through the virtual tours of all eight historic buildings in Lake City.

BACKGROUND INFORMATION

As a research intern for CSU-AVL, I was assigned to document and research eight historic buildings located in Lake City, Colorado. Lake City is a small mountain town in Southwestern Colorado with a deep history. The population in this town is approximately 465 people (DATAUSA, 2022). Lake City is a National Historic District as it is home to numerous historic buildings dating back to 1870's. Settlement for this town began in the 1870's during the mining era (National Archives Catalog, 2013-2017).

Lake City is home to many notable historic buildings, however most of those buildings have minimal documentation of their significance. Therefore, creating virtual 360 tours with embedded research will highlight both the architecture and historical significance of each building. The residents in Lake City take pride in their local history and these 360 tours will encourage more community engagement and appreciation of architectural history.

INTERNSHIP GOALS

- Locate & identify 8 historic buildings in Lake City.
- Use the Matterport camera to scan and capture each historic building to create 360 virtual tours.
- Research historic buildings through various sources and add Mattertags to each tour with said research.
- Work with licensed Colorado teachers to create educational activities for students k-12, relating to the virtual tours of the historic Lake City buildings.
- Create an informative poster to share with the community and other stakeholders.

WHAT YOU DID

Community Outreach:

- I found and contacted all 8 building owners and organizations. Each building owner and I communicated and set up dates and times for me to come scan their historic building. Once I had a date to scan all 8 buildings, I planned my trip out to Lake City.

Scan Historic Buildings:

- During my visit to Lake City, I visited and scanned all 8 buildings at the date and times previously planned. I was also able to meet almost all of the building owners/organizations that I had communicated with. I scanned each building using the Matterport 360 camera and app software, which consisted of me using an Ipad with the Matterport app to control and manipulate where and what to scan. I scanned both the interior and exterior of each historic building.

Research Historic Buildings:

- I collected research on all 8 historic buildings from various different online sources. I was also able to talk with the building owners in Lake City, and collect their input and any information they knew about their building. I organized this research by separating architectural information, historical information, floor plans, published articles, and pictures/videos.

Matterport Tagging:

- Once the 360 tours were uploaded (footage from scanned buildings), I began adding in the research I found into the 360 tours by tags. I added multiple Mattertags to each virtual tour with all of the specific research. All together, this resulted in a 360 tour with embedded research for all 8 historic buildings.

Curriculum Development:

- I worked with 4 teachers to co-create educational activities relating to a specific historic building and educational state standard. These activities were designed for 4th graders, 6th graders, and high school students. Each teacher selected a building and created an assignment based off of the 360 tour of that building. The teachers are able to use this assignment as an additional learning experience for their students to get insight about architectural history.

WHAT YOU LEARNED

During my internship, I learned...

- How to professionally communicate and connect with a small mountain community.
- How to use the Matterport 360 camera to create virtual tours.
- How to embed research into the 360 tours using the Matterport and Mattertag software.
- How to create educational experiences through the use of advanced technology.
- About architectural history in Lake City, Colorado.

IMAGES

Figure 1 [Top]

Floor plan of building with embedded tags

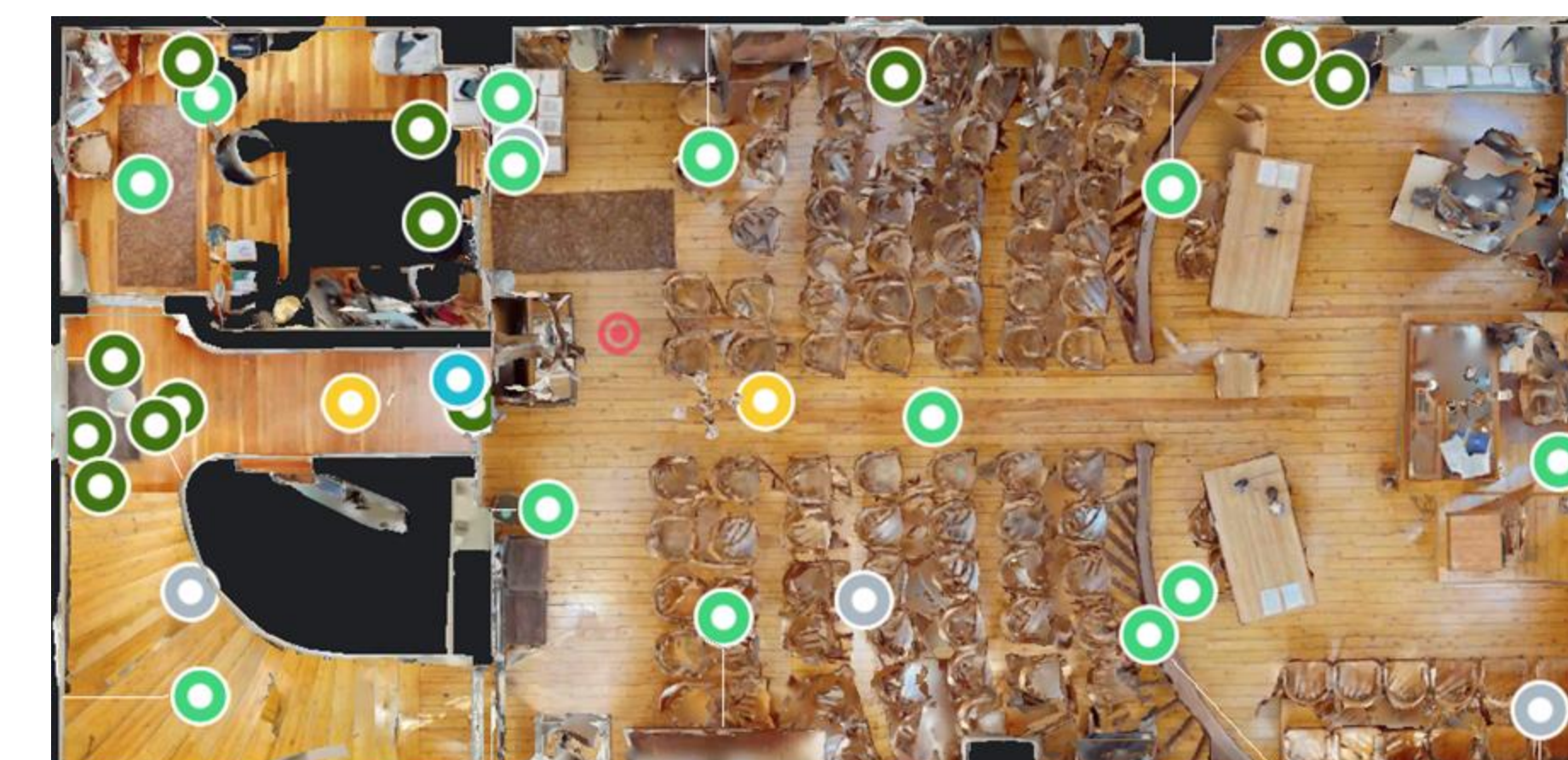


Figure 2 [Bottom right]

Hinsdale County Courthouse Building



Figure 3 [Bottom left]

Macy Turner in front of Hinsdale County Courthouse Building

HOW DOES THIS APPLY TO YOUR EDUCATION

As a student studying Interior Architecture & Design, this internship will help me advance my educational skills as well as act as a resource for me in my future endeavors. Due to my major, I learn various different kinds of software such as SketchUp, AutoCAD, and more; having learned how to use the Matterport camera and software will be another great skill to have and apply to my coursework. This internship has also expanded my knowledge on architectural history which directly relates to my studies and coursework. This learned knowledge and appreciation of architectural history will be beneficial to me because, as an aspiring interior designer, I find it important to value the architecture and create spaces that are not only beautiful but safe and inclusive to all.

REFERENCES

DATA USA. (2022). Lake City, CO. Datausa. <https://datausa.io/profile/geo/lake-city-co>.

National Archives Catalog. (2013-2017). Colorado MPS Lake City Historic District. National Register of Historic Places and National Historic Landmarks Program Records. <https://catalog.archives.gov/id/84126663>.

View the Colorado State University Architectural Virtual Library website to see other 360 tours of historic buildings in Fort Collins, Central City, Sterling, and more. [CSU-AVL website](#).