

# Summer Internships 2024

HSPV





# Sallishah Ali

I returned to Walter B. Melvin Architects, where I spent two years prior to graduate school working on the façade restoration of early 19th-century mid-rise (12 to 15 stories) buildings in New York City. I returned for six weeks as Senior Restoration Staff where my time was split between fieldwork and construction document preparation. I attended weekly inspections/meetings for the ongoing roof replacement of Casa Italiana, at Columbia University (**Image 1**).

During my time on this job site, I documented the work progress by taking pictures and notes for the meeting minutes. I also worked on drawings for the layout of the pavers for the flat roof at the north and additional flashing details for the dormers as the copper cladding installation was underway. I prepared construction documents for the upcoming façade restoration for the Bayard-Condict Building. I helped compile and review the scope of work for the replacement and repair of the terra cotta. Based on what I reviewed from the condition survey notes and

photographs, I relied on the diagnostic thinking process I was exposed to in Building Pathology (HSPV 5510) and subsequently raised questions in meetings regarding what I deemed may require further investigation. For this project, I also assisted in verifying the existing stock of replacement cast stone units the client had in storage (**Image 2**). I prepared existing drawings of a flagpole apparatus for its potential reinstatement at One Union Square West, also known as the Lincoln Building. I went on-site to survey the existing conditions and prepare the "request for information," to receive pricing on servicing the flagpole to help determine its maintenance feasibility. Additional tasks between the projects with longer durations included surveying existing site conditions, waterproofing inspections, and monitoring a water infiltration test. Overall, the experience of returning to my former place of work was made worthwhile as my graduate school education allowed me to have a fresh perspective on condition surveying and construction document preparation.



*Image 1: Documentation of replacement clay tile installation progress at the west elevation of Casa Italiana.*



*Image 2: Verification of existing stock of replacement cast stone units the client had in storage.*

Walter B. Melvin Architects  
New York, NY  
**Senior Restoration Staff**

I was one of three students selected to complete an internship with The Center for Architectural Conservation (CAC) on a project in Malaysia. The project we worked on was part of the conservation, restoration, and rehabilitation efforts for Fort Cornwallis, a historical landmark in George Town, Penang that is being spearheaded by the partnership between The Aga Khan Trust for Culture (AKTC) and Think City (TC). During the internship, my fellow interns and I spent the majority of our time on-site at the fort where we worked alongside long-time professionals in the field of conservation and restoration, Francesco Siravo and Giovanni Santo from AKTC and an associate from TC.

In the first half of the internship, we worked on the documentation of the Ammunition Room, a building that was currently undocumented by the project team. We performed both historical research on the building itself and the associated typology as it existed in forts around the same period. We also determined the building's location on site by performing a land survey of the surrounding context. During this time, I was exposed to new surveying techniques such as using an auto level and a water level to determine the topographical levels of exterior building walls and retaining walls. I was tasked with recording the information from our survey and subsequently drafting the site plan. I gained experience in land surveying techniques where we had to confirm if the walls were rectilinear, by deploying a grid and measuring "rays" from origin points. The information gained from the system deployed was transferred to AutoCAD for drafting. Research skills and survey methodology I learned from the Documentation, Research, and Recoding I and II courses (HSPV 6000 and 6010) were tested and honed leading up to the final booklet we prepared.

The second half of the internship was focused on learning about new construction and building conservation techniques. This included learning about the mortar design from the start of the job and focusing more on the preparation of the plaster renders used at the moat reinstatement (**Images 3 and 4**). At the start of the practicum, we learned about the best practices when it came to calculating the working with the specific weight and volume of material and reviewing the properties of mortar specified for the project. We also had the opportunity to experiment with mixing the mortar formulations ourselves and comparing the hydraulic and aerated mortar properties. For these exercises, we reviewed information that we already had exposure to from the labs we conducted in our Introduction to Architectural Conservation course (HSPV 5550). For the application of techniques, we reviewed floor and wall mock-ups for the new food court and brick replacement repairs at the exterior walls of the fort. In addition to making weekly progress on the two main learning objectives, we also attended weekly site coordination meetings, gaining exposure to the various consultants and disciplines (engineering, landscape, archeology, etc.) it takes to realize a project as complicated as this. My biggest takeaway from this internship was being able to implement skills that I learned over the first year of study and apply them in a hot and humid environment. This confirmed that the application and use of the skills available in my developing preservation tool belt will allow me to become a more well-rounded architectural conservator.



*Image 3: Western moat reinstated with bridge and western moat wall (left) in progress.*



*Image 4: Southern moat reinstatement completed (background) with continued progress at the southwest (foreground).*

Center for Architectural Conservation, Aga Khan Trust  
for Culture, and Think City  
Penang, Malaysia  
**Fort Cornwallis Conservation Intern**



# Priyanka Amin-Patel

I spent this summer working on Pecos Pueblo, an Ancestral Puebloan site outside of Santa Fe, New Mexico, in Pecos National Historical Park.

At its height, Pecos Pueblo was a powerful economic hub for the indigenous Southwest. Starting in 1350 C.E., communities in the area began consolidating into a unified pueblo atop Pecos Mesa, constructing a two- to four-story structure of over six hundred rooms in a rectangular shape to surround a central courtyard. Situated on the easternmost frontier of the Ancestral Puebloan world, Pecos spawned trade networks spanning to the tribes of the Great Plains and served as a gateway through which goods could be transferred to other pueblos and communities in the Four Corners region.

Between 1915 and 1929, Alfred V. Kidder, a Harvard archaeologist credited with the introduction of context-based and stratigraphic study to the field of Americanist archaeology, pioneered this new form of cultural data recovery through extensive excavation of Pecos Pueblo. The six years of archaeological fieldwork performed at Pecos successfully shifted the field from a pastime for gentleman pothunters to a scientific discipline in its own right.

My work this summer focused on archival research on Kidder's excavation and other archaeological and conservation work conducted on the pueblo, as well as on creating a high-accuracy basemap of the standing architecture in Pecos Pueblo for conditions assessment.

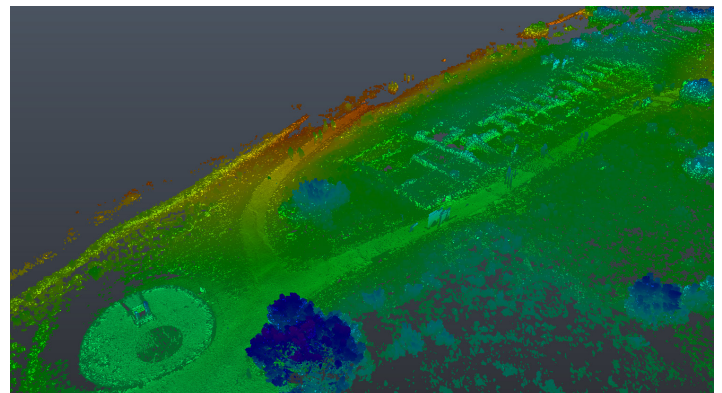
To assemble a comprehensive timeline of the stabilization history of Pecos, two archives were utilized: the Pecos National Historical Park archives and the Laboratory of Anthropology. Using these resources, we collected over five hundred historic documents and over two hundred historic photographs to aid in understanding the scope of the previous conservation work that had been performed on the architecture of the site. This documentation included Kidder's original field notes, maps, and photographs from his archaeological work in the region. These historic resources will be compiled into a database of archaeological and conservation events at the site, which will allow stewards to easily generate room-by-room stabilization histories to aid in future preservation decisions.

To create an architectural plan map, we used a Trimble X7 laser scanner to form a three-dimensional point cloud model of the standing architecture in Pecos Pueblo. Through this process, we experimented with methods and strategies for improving accuracy and efficiency in three-dimensional data collection. The raw data we produced from laser scanning the site totaled to five hundred gigabytes, so after fieldwork ended, I continued working with the point cloud to design effective methodologies for processing the data without exceeding computing limitations on file storage and processing power. The end result of this process is a high-accuracy and geolocated architectural plan map of the standing walls of the site that will be used to assess site conditions in the next phase of the project.



*Image 1 (left): Operating the Trimble X7 laser scanner to capture the northern exterior wall of Pecos Pueblo in the three-dimensional model of the site.*

*Image 2 (below) : An axonometric view of the point cloud model showing the northern portion of the Pecos South Pueblo and a kiva.*



Center for Architectural Conservation  
Pecos, NM  
**Research Assistant**



# Shailee Bhagat

During my internship, I had the opportunity to engage with the rich history of civil rights in Philadelphia, contributing to the ongoing efforts to document and preserve significant sites related to the African American Civil Rights Movement. The internship was structured around a series of key questions and deliverables, each designed to enhance my understanding of civil rights heritage and contribute towards the ongoing effort to populate the African American Civil Rights Network (AACRN) with key Civil Rights sites in Philadelphia and contribute towards the research and writing of nomination for two of the sites.

The internship began with foundational work focused on defining "civil rights" in the context of the northern United States and, more specifically, in Philadelphia. I was tasked with exploring the National Park Service Civil Rights framework and key readings such as *Up South: Civil Rights and Black Power in Philadelphia*. I conducted literature reviews and began building a comprehensive bibliography, engaging with primary and secondary sources to contextualize the civil rights movement within Philadelphia's unique historical landscape. In the third week, I shifted focus to identifying civil rights sites within Philadelphia. This involved analyzing the Society to Preserve Philadelphia African American Assets' list of potential sites and determining their eligibility for inclusion

in the AACRN. I, along with my fellow research intern, examined the accessibility and physical existence of AACRN sites, identifying those that are privately owned or no longer accessible to the public.

In the second month of my internship, I began the process of prioritizing civil rights sites for potential inclusion on the National Register of Historic Places or the AACRN. This involved developing a rubric for site prioritization and visiting key sites on the AACRN potential list. In the final weeks, I concentrated on completing and submitting AACRN applications for two selected sites. The two sites I chose to write the nomination for AACRN were the Church of the Advocate and Girard College. These submissions marked the culmination of the research and site assessment work completed throughout the internship.

This internship provided valuable experience in the intersection of historic preservation and civil rights history. I gained practical skills in research, site assessment, and application processes, all while contributing to the preservation of Philadelphia's rich civil rights heritage. The work not only deepened my understanding of civil rights but also equipped me with the tools necessary to advocate for the preservation of cultural heritage in future professional endeavors.

*Image 1 (below): Photographic documentation of Girard College*  
*Image 2 (right): CPCRS team*



Center for the Preservation of Civil Rights Sites  
Philadelphia, PA  
**Research Assistant**



# Donglin Chen

As a research assistant at the Center for Architectural Conservation, my work primarily focused on two projects: the Historic Pigment Collection and the Wharton Esherick Museum (WEM) Silo Stucco Analytical Project. These initiatives allowed me to delve deep into the conservation of historical materials and techniques, enhancing both my practical skills and academic understanding of the field.

Wharton Esherick, a pivotal figure in American modern design, is renowned for his work, which spans sculpture, furniture, interiors, and architectural forms. In 1966, he created a vibrant, colorful mural on a concrete silo, which became a focal point of my internship.

As a Summer Intern, my role was centered around a series of analytical projects crucial for preserving the historical integrity of Esherick's work. My role involved not only analyzing the existing stucco layers but also examining a collection of pigments found in the museum's garage, which might have been used by Esherick himself. Working closely with Prof. Andrew Fearon, I collected samples from the site, which we used to prepare cross-sectional samples. This practical application of skills I had learned in the previous semester's Architectural Finishes class allowed us to understand the composition and layering of the pigmented stucco used in the mural. Our research aimed to analyze the mural's original materials and construction techniques. Using a variety of analytical tools and methods, we identified the types of pigments used and their

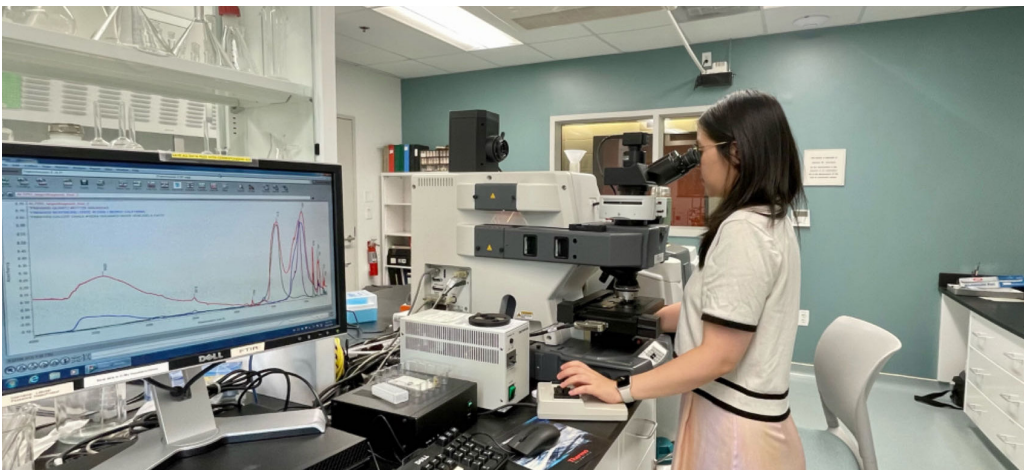
proportions within the composition, gaining insights into the historical context and informing future conservation treatments.

I was fortunate to work alongside conservation scientist Catherine Matsen at the Winterthur Museum's Scientific Research and Analysis Laboratory (SRAL). I developed first-hand experience with instrumental techniques such as FTIR, SEM-XRF, portable XRF, and Raman spectroscopy, essential for our detailed investigations into the pigmented stucco.

Another initiative I undertook involved establishing the Historic Pigment Collection database at Penn. The Architectural Conservation Lab houses a vast collection of historic pigments, which I digitized and inventoried. A key enhancement was integrating a "Fogg system ID" (an inventory system used by the Forbes Pigment Collection in Harvard Art Museum) for each pigment, simplifying external researchers' access to the collection and facilitating easier sample retrieval.

To deepen my understanding of these pigments, I prepared dispersion samples, which were analyzed using Polarized Light Microscopy (PLM). This technique enabled the identification of individual pigments by their optical and morphological characteristics. Furthermore, I utilized cross-section samples from previous student theses to study the interactions between paints, binders, and wood substrates. This analysis provided valuable insights into historic paint applications' chemical and physical dynamics.

*Image 1 (below): Using FTIR to analyze the pigment sample from Wharton Esherick Museum.  
Image 2 (right): Wharton Esherick Museum Silo.*



Center for Architectural Conservation  
Philadelphia, PA  
**Research Assistant**



# Ke-An Chiang

This summer, I had the privilege of interning with the Historic Resource Group (HRG) at Hennebery Eddy Architects, Portland office. The HRG handles a diverse array of projects—ranging from cultural and civic rehabilitation to providing condition assessments, treatment recommendations, and assisting with historic building nomination reports aimed at tax credits. Being part of HRG, I had the invaluable opportunity to learn from experienced principals, architects, and technical staffs.

During my ten-week internship, I primarily contributed to projects for the National Park Service and Oregon State Parks. One of my most significant involvements was with the historic barn project at Silver Falls State Park, Oregon, where I worked alongside a senior colleague on field measurements and site surveys. Additionally, I was responsible for creating digital model for the historic barn in Revit, which will be instrumental in future rehabilitation considerations. Several other NPS rehabilitation projects I worked on had progressed to the post-condition assessment and near-completion of construction drawings stages, where I assisted in completing architectural service reports and the 70% CD construction drawings set.

Two long-term tasks related to the company's professional development goals also occupied my time. First, I helped HRG establish a wood microscopic identification process by capturing microscopic images of various Pacific Northwest wood types to expand the identification database. Second, I researched a topic on [resilience, focusing on substitute materials for existing](#)


[and historic buildings under wildfire threats](#), aligning with the company's long-term environmental goals.

My work at the firm closely tied to my academic coursework at Penn, particularly HSPV 5550 Conservation Science and HSPV 5510 Building Pathology. Through this internship, I honed skills such as using microscopes for softwood section observation and paint analysis, and I gained a deeper understanding of how weathering affects masonry, concrete, and wood structures, along with the resulting conditions.

I thoroughly enjoyed my time at the firm. In addition to working closely with experts, the firm places a strong emphasis on professional growth, offering structured learning opportunities. One of the standout initiatives is the bi-weekly "Lunch and Learn" presentations, which provide a refreshing break and an opportunity to explore a variety of topics presented by both internal employees and external experts. I was also invited by an HRG principal to participate in Association for Preservation Technology (APT) webinars in a conference room setting, fostering a communal learning environment that enhances knowledge and camaraderie among the team.

In conclusion, I had the opportunity to work with some truly wonderful people who were always eager to answer my questions about work tasks, their career paths, and how I can further my career goals and interests. I am incredibly grateful for this experience.

**Hennebery Eddy**



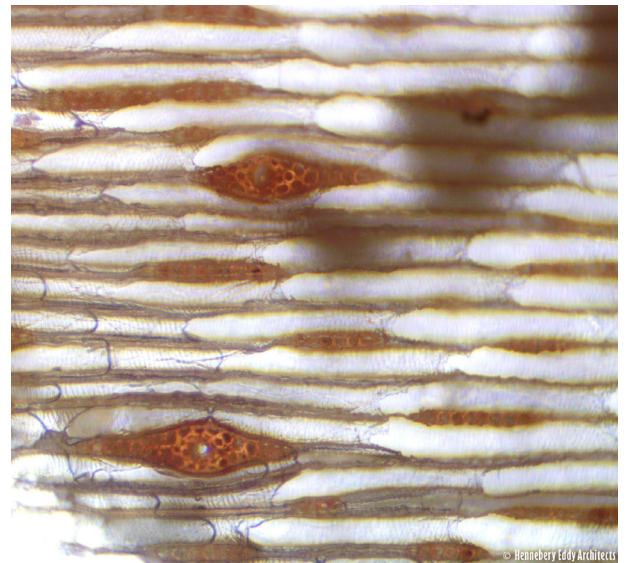
Point of View

**Wildfire Resilience for Existing and Historic Buildings**

By Ke-An Chiang, Historic Preservation Intern

Ke-An Chiang joined the Portland studio as an historic preservation summer intern, participating in the firm's robust internship program that includes conducting an in-depth research project. Currently pursuing a Master of ...

*Image 1 (left): Blog post  
Image 2 (right): Tangential  
microscopic photo of a  
Douglas Fir rafter sample from  
a historic barn project, taken in  
the Historic Lab at Hennebery  
Eddy Architects.*



Hennebery Eddy Architects  
Portland, OR  
**Historic Preservation Intern**



# Qingrou Dai

During my internship at the Center for Architectural Conservation (CAC), I had the privilege of working with the Philadelphia Magic Garden (PMG) and the CAC team. My work focused on the conservation of mosaics, the work of renowned artist Isaiah Zagar. Conservation includes on-site mosaic fabrication and restoration cleaning, as well as photo and documentation work.

One of my main tasks was to participate in the daily restoration work as part of the PMG conservation team. I learned a lot from how to identify and record deterioration, to understanding and participating in the restoration of a mosaic wall, to being hands-on in the entire process of making an entire mosaic wall. PMG has their own approach when it comes to restoring mosaic walls. They leave as many unique tiles as possible and clean the wall. The special tiles will be placed in their original positions during the restoration process, but the others are randomly replaced with new ones. Not exactly the same restoration, but keeping the same style as the original. And even more fortunately, we were also involved in making the new doily tile and the entire process of making the mosaic on Kater Street, the back wall of the PMG, from applying the tiles to plastering the cement.

In addition to the field conservation work, I also worked with team members to document the Zagar mosaics. We used a

painters' pole to take photos of mosaic wall. And then, Agisoft software was used to develop calibrated image and point cloud models to document the large mosaic walls. These models help to develop accurate conservation planning and a long-term monitoring system. We also carefully documented the mosaic tiles and attempted to organize them into a structured database that will serve as a resource for future restoration efforts. We also organize mosaic schedules and create visual timelines.

From in-class knowledge to practical application, I was able to utilize the skills I learned in my courses, especially Digital Media course. Throughout the internship, I increased my proficiency with digital tools such as Agisoft for creating 3D models and rectified images, as well as Timeline JS for visualizing different historical themes and project timelines. Additionally, the conservation of the Zagar mosaics, as a specific artistic context, brought a field understanding of the Theories course.

One of the most rewarding aspects of my internship was the opportunity to network with professionals in the field, especially artist Isaiah Zagar, who we were fortunate enough to speak with and receive guidance on the mosaic creation process. I also gained a better understanding of the art environment and the preservation of such sites from communicating with the PMG team, especially Emily Smith and Stacey Holder.



Image 1: Making new mosaic at Philadelphia Magic Gardens back wall with preservation team.



Image 2: Paridhee and I were glazing the tiles.

Center for Architectural Conservation  
Philadelphia, PA  
**Magic Gardens Intern**

# Chen Hong

I worked at the Yungang Grottoes, focusing on the daily protective maintenance of this significant World Cultural Heritage site and providing on-site explanations to visitors. My weekly routine included:

- Monday: Conducting site inspections during the closure, monitoring the condition of the cultural relics, and documenting any anomalies.
- Tuesday to Thursday: Leading scheduled tours for visitor groups, explaining the history and significance of the Yungang Grottoes.
- Friday: Attending meetings to analyze weekly visitor data and participating in training sessions to improve tour services.

During the second and third weeks, I participated in the protective restoration of Cave 17, focusing on documenting and repairing cracks in the cave walls. This project aimed to preserve the structural integrity of the grottoes while maintaining their historical authenticity.

I applied knowledge from my Building Pathology course, particularly in understanding how environmental factors like air, humidity, and temperature interact with the physical properties of cultural relics. This was crucial in analyzing the causes of cracks in the Yungang Grottoes' stone walls. Additionally, I used this knowledge to experiment with materials for repairing these cracks, ensuring that the chosen materials would not adversely affect the relics' appearance or integrity.

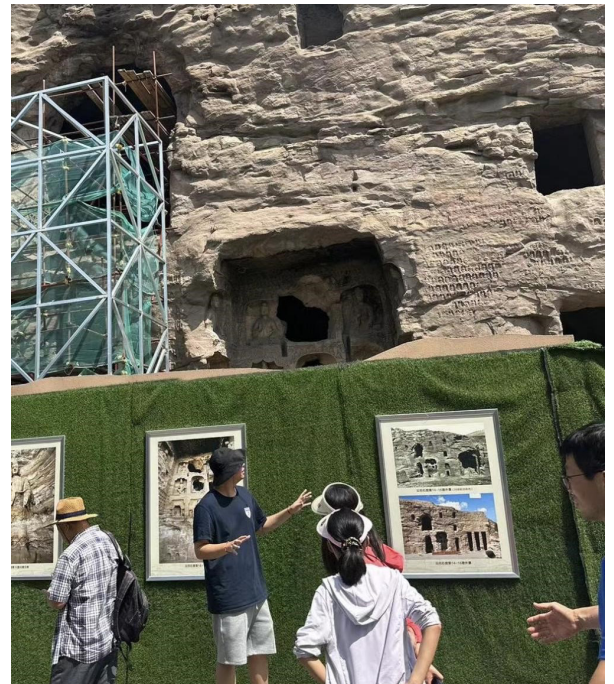
During my internship, I became proficient in documenting and repairing structural issues within historic sites, particularly in the use and optimization of preservation materials. For example, my team initially experimented with plexiglass for surface consolidation and grouting on weathered cave walls, but after observing an unintended color change, we adjusted the materials to better suit the site. This hands-on experience significantly enhanced my practical skills in heritage conservation, allowing me to apply theoretical knowledge to real-world situations. Additionally, I improved my ability to effectively communicate complex historical and cultural information to a diverse audience, which also strengthened my public speaking skills. Besides, by presenting historic information to the audience help me to better understand and memorize the knowledge of the site.

I had the opportunity to work closely with experts in cultural heritage conservation, particularly those specializing in the preservation of stone structures and repairing materials. This allowed me to gain insights into advanced techniques and expand my professional network within this specialized field. The weekly meetings and training sessions provided valuable opportunities for professional development, enabling me to better understand visitor engagement and site management.



*Image 1 (above): Using a distance measuring tool to measure and document the structure*

*Image 2 (below): Introducing the basic information about the cave and the restoration project to the tour group*



Shanxi Ancient Architecture Conservation Institute  
Yungang Grottoes, Shanxi, China  
**Cultural Heritage Conservation Intern**



# Franny Hutchins

This summer, I interned at The Tileworks of Bucks County, a historic tile factory in Doylestown, Pennsylvania, founded by Henry Chapman Mercer between 1911 and 1912. Today, the building functions as a “working history” museum, where the traditional methods, materials, and tools are used to produce Mercer’s hand-crafted tiles while preserving the principles of the American Arts and Crafts Movement. The site operates not only as a museum but also sells tiles through its store and online, with many customers commissioning custom tiles, fireplace surrounds, and other installations.

My role in tile production was highly interdisciplinary. I was involved in various aspects of tile making, such as mixing local clay using the same 1903 mixer that Mercer and his team originally used. I also assisted in pressing tiles using plaster molds based on Mercer’s original designs and participated in glazing tiles, adhering to Mercer’s original glaze recipes to preserve the historic palette. While the old coal-fired bottle kilns are no longer in use, I was responsible for loading and unloading the gas and electric kilns used in contemporary production. Perhaps the most important responsibility I had was to give tours to visitors to the museum. The production staff guides visitors through the entire tile making process, showing and explaining the equipment no longer used like the steam engine, boiler, and coal fired bottle kilns, and then gives the tour a demonstration on how the tiles are pressed today.

As a student concentrating in Architectural Conservation, this internship was highly relevant to many of my material lab courses, particularly Conservation Science. The coursework on earthen

materials was directly applicable to understanding the properties of clay soil particles, including their size, texture, and effects on the quality and consistency of clay during mixing. Building Pathology was also a course pertinent to my time at Tileworks, as it provided insight into the deterioration of building materials, which was crucial for understanding the maintenance needs of the factory’s concrete building and the preservation of its architectural elements and historic tools.

Despite my limited background in ceramics, I gained extensive knowledge about pottery and tile production, including clay handling, glazing techniques, glaze creation, and the kiln firing process. I observed and participated in numerous demonstrations, such as making plaster molds using Mercer’s original designs and creating ceramic mosaics. This experience highlighted the dual importance of preserving both the material aspects of the museum site and the methods used in its operation.

I had the opportunity to work closely with Museum Director Katia McGuirk, gaining valuable insights into her plans for preserving the building. She discussed her vision for documenting the unique architectural features of the building, collaborating with the Doylestown community, and involving tile makers and potters from across Pennsylvania. We also explored innovative ideas for enhancing programming, events, and educational opportunities. Additionally, working with Pottery and Site Manager Jesse Pham allowed me to benefit from his decades of experience in tile making, deepening my understanding of the craft and the entire process.



Image 1 (left): View of Tileworks building from the roof.



Image 2 (right): Midway through hand-painting glaze onto Mercer-designed mosaics titled “Silva Vocat,” which translates from Latin as “The Forest Calls.”

The Tileworks of Bucks County  
Doylestown, PA  
**Tile Technician & Tour Guide**

# Nour Jafar

This summer, I had the privilege to intern with the Center for Architectural Conservation in collaboration with the Aga Khan Trust for Culture as an architectural research associate. I spent 6 weeks on site at Fort Cornwallis, a historic landmark in George Town, Penang, Malaysia. The fort was constructed in the late 18th century under the patronage of Francis Light, the founder of the British colonial island of Penang. The fort has gone through many iterations over the past few decades, with different methodologies of conservation applied. The current conservation efforts are focused on reconstructing the bridge and moat that surround the Fort, as well as repairing conservation efforts that utilized cement in the past. The scope of work is not only limited to the reparation efforts of the Fort, but also integrating the surrounding landscape and outdoor food court to blend within the context of the project.

As research associates for the CAC, our scope of work varied depending on the ever evolving work site. Some of the tasks that I worked on included researching different case studies that focused on brickwork and natural ventilation, learning manual methods of surveying such as using a water hose as a level to document elevation changes, how to calibrate and operate an auto level, and how to manually map out coordinate points using tangential points. Those skills built up the methods and

techniques that we had learned previously in HSPV 6000 and 6010 Documentation, Research, Recording I & II, And how to apply them on an active work site. The second half of the internship focused on more practical skills, such as developing different dry mortar mixes, understanding the lime process, the difference between active and inactive aggregates and the mortars they produce, and how to lay bricks and apply mortar for both wall sections and flooring requirements.

Beyond the practical skills that I have gained in this internship, I have been exposed to numerous professionals with architectural conservation experience. Being able to learn from both Francesco Siravo and Giovanni Santo from the Aga Khan Trust for Culture has been wonderful, as both have decades of experience in heritage conservation in different climates and cultures. Working with Siravo and Santo closely has allowed me to build lasting relationships with them, and we have discussed the possibility of future collaborations on projects in Kuwait.

In conclusion, this internship with the Center for Architectural Conservation and the Aga Khan Trust for Culture has helped me develop my skills in preservation. I am grateful for the experience to work with experienced professionals on a unique colonial reconstruction project.



*Image 1: View of Phase 1 of the completed South Moat, as viewed from the top of the fort wall*



*Image 2: Giovanni Santo demonstrating how to ensure all bricks are level in the mockup section wall*

Center for Architectural Conservation, Aga Khan Trust  
for Culture, and Think City  
Penang, Malaysia  
**Fort Cornwallis Conservation Intern**



# Yuexin Liu

This summer, I worked as an intern at the Center for the Preservation of Civil Rights Sites (CPCRS). Our mission is to advance the understanding and sustainable conservation of heritage places commemorating American civil rights histories and Black heritage. My work for this summer mainly focused on nominating several civil rights sites to the African American Civil Rights Network (AACRN). This network, administered by the National Park Service, recognizes and supports sites that have been instrumental in the struggle for civil rights.

My work was carried out in a gradual manner. In the first week, we were required to have a basic knowledge of what "civil rights" means, and were asked to give a definition to the term "civil rights". Through learning and writing, I was able to know the history of the civil rights movement, especially in Philadelphia. In the next few weeks, I received an inventory that included several civil rights sites in Philadelphia. My responsibility for this period was to dig into the history, location, and current condition of these sites through archival research and fieldwork, which made me realize that, for most civil rights sites in this inventory, no preservation methods but historic markers could tell their civil rights stories.

My internship derived largely from Prof. Amber Wiley's class, Topics in Historic Preservation & Public History Revolutionary Approaches to Philadelphia's Black Heritage, during which I developed a comprehensive understanding of Black heritage. Through specific research on the Underground Railroad, I learned the urgency and importance of preserving and researching Black Heritage in Philadelphia. Thus, I applied for the position of intern at CPCRS.

Throughout this journey, I explored various sites connected to the struggle for justice and equality. I learned about the ongoing efforts to preserve these places and the hurdles faced in ensuring their stories are told and remembered. These sites are not just historical markers; they are living testimonies to the resilience and courage of those who fought for civil rights. This experience has reinforced my commitment to advocating for the preservation of Philadelphia's Black heritage. Moving forward, I am determined to contribute to the protection and recognition of these vital sites, ensuring that future generations understand and honor the legacy of the civil rights movement. This internship has been a transformative experience that has solidified my dedication to preserving the rich history of African American communities in Philadelphia.



Image 1: Statue of Octavius V Catto



Image 2: William Whipper House Historic Marker

Center for the Preservation of Civil Rights Sites  
Philadelphia, PA  
**Research Assistant**

# Dan Lu

This summer, I had the pleasure of interning at Richard Grubb & Associates, Inc. (RGA), a cultural resource consulting firm specializing in archaeological, historic preservation, and GIS services across multiple projects. RGA operates from four offices spanning three states. My internship was based at the Philadelphia office, situated within the Bok commercial office complex, a historic building known for its adaptive reuse.

During my seven-week internship, I was primarily involved in the development of a cultural resource database for Morristown, New Jersey, based on the ArcGIS platform. This database, built upon surveys conducted by multiple generations of researchers, including government entities, aims to create an online, interactive inventory accessible to the public. My responsibilities focused on the visual representation of streetscapes and buildings, including drawing, modifying, and refining these visualizations, as well as authoring detailed architectural descriptions for each building as part of the data entry process.

After completing the mapping and data entry for a full streetscape, I expanded my work to include area and point

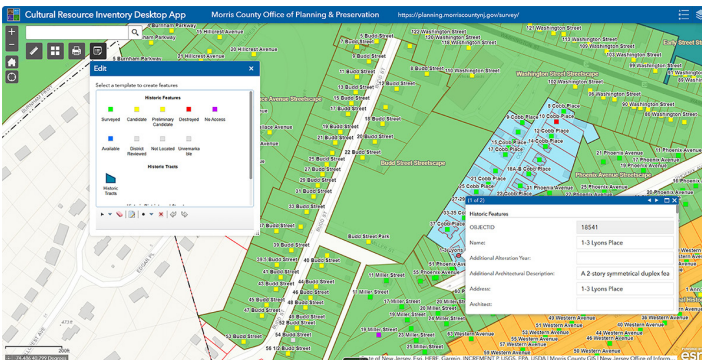
mapping for additional streetscapes and buildings, ensuring the accuracy and verification of all graphic data. For the architectural description part, I not only completed the writing for all buildings within three streetscapes of the database but also contributed to the descriptions of several buildings in a separate research project along a rail transit corridor in Maryland. Both projects also required historical research via tax records, historical maps, and aerial images.

Throughout the internship, I applied the ArcGIS skills acquired in HSPV 6240 and 6270 Digital Media courses, alongside relevant undergraduate experience. Of particular importance was the application of historical research techniques and architectural description writing developed in HSPV 6000 Documentation, Research, and Recording class. I consistently referred to McAlester's A Field Guide to American Houses as my primary resource for architectural styles and description writing, and utilized Sanborn maps to determine the construction dates of buildings. This internship significantly enhanced my proficiency in conducting research using historical maps and aerial images, and deepened my understanding of various architectural styles across the United States, spanning from the Victorian era to the modern Craftsman period.

I have been very fortunate to meet and collaborate with my professional colleagues, and have had the privilege of participating in a department's training on railroad survey at the New Jersey State Archives, even though it was not directly related to my main responsibilities. During the training, I was introduced to the documents of the railway companies for the first time, as well as the historical resources and preservation efforts related to transportation corridors, which are not widely known.

Reflecting on my time at RGA, I am deeply grateful for the enriching experience this internship offered. It provided me with a valuable insight into the professional world, and with the new school year approaching, I now have a clearer sense of my goals and direction. I sincerely appreciate the support, patience, and kindness of my RGA colleagues, all of which have played a significant role in my personal and professional development.

*Image 1 (top): Screenshot of the ArcGIS-based database being modified.  
Image 2 (bottom): Screenshots of buildings in Morristown, used for description writing. Image Source: Google Street View.*



Richard Grubb & Associates, Inc.  
Philadelphia, PA  
**Architectural Historian Intern**



# Daniel Saldaña Ayala

During the 2024 Summer, I had the opportunity to be part of the Center for Architectural Conservation (CAC) Internship in George Town, Penang, Malaysia in cooperation with the Aga Khan Trust for Culture, a major cultural agent in the Muslim world, and Think City, an urban regeneration agency supported by the Malaysian government.

Over the 6-week internship, I worked at Fort Cornwallis, an 18th-century military complex in the heart of the UNESCO-listed George Town Historic City. This imposing historic structure safeguarded the maritime trade along the Strait of Malacca in the 19th-century, fought against the Japanese Invasion during World War II, and is now a major cultural asset of the city.

My first task, along with the CAC team, was to work on the documentation of the old Gunpowder Magazine, a military storage building. In spite of its great dimensions, the building had not been studied in detail before. This task required numerous activities: historical research, interior and exterior wall measurements, obtaining elevations using a water level, sketches of elevations and walls, photographic documentation, study of the old drainage patterns surrounding the structure and the analysis of the built environment. Despite its apparently simple design, the structure encompassed a vault ceiling supported by buttresses and a system of ventilation shafts which kept the gunpowder dry. A report was produced describing our findings for future restoration projects.

My second task was to document the archeological findings of the old bridge supports and brick drainage system during the West Moat excavation activities with the CAC team. While discovering small artifacts, we obtained wall measurements and elevations that were plotted in AutoCAD to plan future interventions. The next task was to test different mortar mixes on site. After learning the different types of mortars used at the current project, the CAC team tried different compositions to observe its properties throughout the days.

After weeks of working at the Gunpowder Magazine and being fascinated by its unique architectural features, I decided to expand this research by studying the exterior architectural finishes for my Thesis Project. As the final task, many explorations windows were opened under the supervision of Giovanni Santo, the main conservator at Fort Cornwallis. It was amazing to have this hands-on experience which allowed me to identify and document the numerous layers. Later, wall samples were extracted to be analyzed at the Penn Laboratories. I know this research will expand the knowledge about old European construction techniques applied on tropical contexts such as the Strait of Malacca.

Working on an international project like Fort Cornwallis presented unique challenges such as languages barriers, bureaucratic limitations, as well as different perspectives of what preservation means, especially in a melting-pot city as George Town with its amazingly diverse culture. However, this multidisciplinary approach is what makes this place an urban laboratory for preservation where knowledge can be shared and transmitted from Malaysia to the world. The residents of George Town had numerous stories related to the Fort, not just as a legacy of a colonial past, but also as a symbol of resistance during war times. These experiences showed me that Historic Preservation can be a catalyst for urban regeneration in a community. I return to Penn with an enriched perspective of preservation, new skills and great lessons that I know I will apply in the future: If creativity and passion are encouraged, innovation will flourish from these old buildings.



Image 1 (top): Aerial view of Gunpowder Magazine in Fort Cornwallis. Photo by Think City, 2024

Image 2 (bottom): Sample extracted from bastion wall showing original mortar

Center for Architectural Conservation, Aga Khan Trust  
for Culture, and Think City  
Penang, Malaysia  
**Fort Cornwallis Conservation Intern**

# Anna Veilleux



*Image: Parks Canada workers conducting a condition assessment and window and deck removal on the observatory.*

I had the opportunity to work as a Built Heritage Intern at Parks Canada which provided me with a useful and unique foundation for further growth in the world of Canadian conservation. Throughout the summer, I was able to witness the work of numerous professionals in the field, inspiring my own career goals and exponentially furthering my passion for conservation.

The main project for the summer was the creation of three conservation briefs that could be used by a wide range of individuals working on Canadian historic sites. The briefs (Historic Concrete, Concrete Assessment, and Concrete Repairs) outlined what concrete is, the importance of historic documents in conservation practice, proper documentation methods, how to conduct concrete assessment and tests, and how to repair historic concrete. To create the three briefs,

I drew upon research techniques and resources from HSPV 7410 Conserving Modern Concrete. The briefs explained the methodology and test methods that were discussed in class, allowing me to further hone my skills in concrete conservation.

I also had the opportunity to work on the development of architectural guidelines for Wasagaming Townsite in Riding Mountain National Park. Working on the guidelines allowed me to gain experience in urban planning and community development for areas with historic character. My main task was to create graphics that showcased the types of architectural features that should be implemented in future developments so that the historic character of the area can be maintained. The graphics work allowed me to further the skills that I had developed in the Digital Media course through the use of software such as Adobe Illustrator and Indesign.

Lastly, I had the amazing opportunity to do field work through conducting a condition assessment and window removal on the historic site of Sulphur Mountain Observatory in Banff National Park. During the field work, I largely drew upon the skills learned in HSPV 6010 Documentation, Research, and Recording II. HSPV 6010 teaches you how to properly record a building, such as measurement, drawing, and survey methods. On the site, I was able to effectively use these skills when I recorded the conditions of the building and measured the removed features of the structure (the windows and the door). The recording conducted while on the mountain further enhanced previous documentation of the site and concluded in a scope of work for future conservation practice.

During my work in Banff, Jasper National Park, another park in Alberta, had experienced a significant fire that caused devastating impacts to the area and those who lived in it. Thus, in tandem with my Banff projects, I worked to refine and share heritage inventories to allow employees to understand which assets had been damaged and to help survey the sites more efficiently. The work for Jasper allowed me to experience the importance of conservation work during a natural disaster, exposing me to the challenges and techniques of working in a field that is vulnerable to the unpredictability of nature.

In summary, my internship with Parks Canada provided me with an opportunity to further the knowledge and skills that I had gained in my first year at the University of Pennsylvania. Working in my hometown of Calgary and on sites I have been visiting since I was a child was an irreplaceable experience that had exceeded my expectations.

Parks Canada  
Calgary, Alberta, Canada  
**Built Heritage Summer Intern**



# Zhijie Wang

This summer, I worked as a Landscape Architect Intern at Unknown Studio in Baltimore, Maryland. I engaged in various projects, each showcasing different landscape types. This includes a historic site reutilization in the Pikesville Armory. It was strongly connected to my studies in historic preservation.

The Pikesville Armory, with a history of weapons and military training, was added to the National Register of Historic Places in 1985. The current project envisions transforming the site into a dynamic space for youth learning and competition as well as public use.

My role involved iterative planning to strike a balance between new development and historic preservation. One of the key challenges was to incorporate historic elements and values into the design, including preserving the existing buildings, as well as proposing a new symbol of the site's history.

The preservation and adaptive reuse of the historic garages is one of the main tasks of the design. The garages border the site on three sides and were originally used for military vehicles. Our team explored various possibilities for adaptive reuse, including converting these structures into studios and outdoor classrooms. We also proposed modern seatings and bleachers in the garages for people to watch the matches.

We also considered using the quincunx pattern—a military formation—for tree planting as a symbolic nod to the site's history. Grading and water management also required careful consideration due to the varying elevations of up to 10 feet across the garages. Our design needed to respect and integrate these existing structures.

This project directly connected with the principles I studied in the Historic Preservation department, particularly the idea that preservation is not merely about maintaining buildings in their original state but about proposing adaptive uses.

Through this internship, I deepened my understanding of designing for historic sites, often weighing the potential for preservation and adaptive reuse. Additionally, I gained valuable experience working with clients to develop a shared vision for the site.

I also honed my problem-solving skills by addressing complex site constraints, such as integrating modern utilities with historic structures. This experience reinforced the importance of creativity and adaptability in landscape architecture.

I am grateful to have this internship and the opportunity to contribute to such a multidisciplinary project and to collaborate closely with historic structures.



*Image 1: Aerial photo of the Pikesville Armory showing the current condition of the site, Image Source: Unknown Studio.*



*Image 2: Site visit showing the material of the garages and the concrete ground with weeds.*

Unknown Studio Landscape Architecture & Urban Design  
Baltimore, MD

**Landscape Architect Intern**

# Laurie Wexler

This summer I had the opportunity to work at EHT Traceries in Washington, DC. EHT Traceries is a full service historic preservation firm that works in the Metro Washington DC area including Maryland and Virginia, nationally, and internationally for American embassies and other clients. Their service areas include preservation planning, historic tax credit certification, technical preservation services, and survey and documentation. I worked full-time in their Washington, DC office.

My experience included researching and writing a Phase 1 Architectural Survey for a building in Northern Virginia, writing property summaries for an amended National Register designation of the Chestertown, Maryland Historic District, researching a historic consolidated school in Hampstead, Maryland for a federal tax credit project, transcribing oral histories of individuals associated with a low-income housing project in Alexandria, VA, researching and writing a storymap of the Shephard Park neighborhood in Washington, DC, and researching modern office buildings in Northern Virginia.



The internship directly and indirectly built upon several historic preservation classes at Penn. I drew heavily on HSPV 6000 Documentation, Research, Recording I, followed by HSPV 5210 American Architecture, and HSPV 5720 Preservation Through Public Policy, as well as other classes more broadly. Research and writing were the primary skills used for this internship. In addition to visiting one site with the owner, I did research at the Library of Congress and the historical society in rural Maryland as well as government offices in Northern Virginia and public history archives at public libraries in Virginia and the District of Columbia. I also became more adept at accessing research platforms online including Maryland's historic site platform and several other governmental and private collection systems.

The experience enabled me to hone research and writing for architectural and historic resource surveys. I learned about the components of filings for nominations and amendments to individual property and historic district nominations. These assignments required me to deeply research sites and, for that reason, locate and utilize historic and current maps to help explain the context of the architecture and history of specific sites on their own and in relation to the time period. I was challenged to uncover maps, documents and images that would provide understanding of such context. Moreover, I gained practice in writing thoroughly and succinctly about the architecture and history of a site, especially for the architectural survey. In addition, the experience required me to improve my understanding and writing of footnotes and bibliographies.

As a firm that has served historic preservation needs locally, nationally and internationally for over 35 years, I was fortunate to work with a knowledgeable group of preservation professionals. They were approachable and had patience to answer my many questions. I feel that I will be able to keep in touch and call upon these individuals as I proceed in the field.

*Image 1 (top): 5613 Leesburg Pk, Falls Church, VA – Architectural Survey. Source: Loopnet.*

*Image 2 (bottom): Hampstead School, Hampstead, MD – Certification for tax credit project. Source: Landex Development.*



EHT Traceries  
Washington, DC  
**Research Intern**



# Kate Whitney-Schubb

This summer I had the opportunity to learn from and work with the wonderful team at Architectural Resources Group. As the conservation intern, I assisted Senior Associate and Conservator Sarah Devan with a variety of conservation projects throughout LA County. My internship was packed with incredible, once-in-a-lifetime site work, such as documenting the disassembly of Wright's Wayfarers Chapel in Rancho Palos Verdes (**Image 1**), performing a condition assessment at Rudolf Schindler's How House in Silverlake (**Image 2**), and performing cleaning and patching mockups on Heath ceramic tiles at the Norton Simon Museum in Pasadena.

At Wayfarers Chapel, I witnessed a brilliant team work together to save the nationally registered building from destruction by catastrophic land movement. The chapel glass was cracking under the stress, so to avoid losing any more of the historic fabric, preservationists decided to disassemble, store, and rebuild the chapel elsewhere. I wrote field notes during each site visit and provided documentation for a variety of items – drawing from both John Hinchman's expertise for hand measuring architectural details and Joe Elliot's expertise in photo documentation of the site's conditions, the deconstructed elements and of the team at work.

At the How House, Sarah and I spent a day surveying the conditions of the concrete walls both from the interior and exterior. We surveyed all four elevations, taking photographs and notes I then compiled in a condition report for the client. The report included suspected issues and treatment recommendations. I then marked up the architect's elevation drawings with the observed conditions – creating a color-coded, easily digestible document of each elevation.

At the Norton Simon Museum, I established treatment plans for mineral deposit buildup and for spalls in the exterior tile that clad the museum. I performed cleaning, patching, and painting tests and mockups both in office and in the field, focusing on easily repeatable, conservation-grade methods for future contractors to execute on the entirety of the building. I corresponded with product manufacturers and consulted a variety of products to identify a compatible treatment system.

In addition to these projects, I worked at a variety of other sites, preparing condition assessments and documentation, writing field reports, and researching and analyzing material. Sarah was a wonderful mentor, entrusting me with tasks that directly put to test all that I learned during my first year at Penn. On just my second day, Sarah and I went to DTLA's Union Station to observe a poorly draining roof canopy on its iconic façade. After walking the site, she asked me to write a memo to the Station's project manager, detailing the conditions observed and suspicions as to root issues. The memo also recommended next steps, specifically how the observed conditions should be examined, tested, and treated. In

writing the memo, I drew on what I learned from Michael Henry's spring semester Building Pathology final: drafting a narrative that, while using technical terms to describe the issues, was accessible enough that any reader would understand the severity and scope of work required. With Building Pathology's final assignment, we had nearly two months to perfect the memo – with this, I had until the end of the day! I could not believe how perfectly applicable the work had been and how prepared I was. It felt cosmic and I was so grateful for Michael Henry. And this was true for virtually every other task I performed. This internship was such an unforgettable experience. It was not only perfectly aligned with what I have learned during my time at Penn, it reinforced my decision to concentrate on architectural conservation.

*Image 1 (top): One of (many) photographs of the disassembly progress at Wayfarers Chapel.*

*Image 2 (bottom): Documenting Schindler's How House. Image Source: Sarah Devan, ARG.*



Architectural Resources Group  
Los Angeles, CA  
**Conservation Intern**

# Di Wu

During my internship from June to August at the Southeast University National-Local Joint Engineering Research Center for Smart Construction and Operation in Nanjing, China, I served as an intern within the Market and Engineering Application Division, specifically focusing on the Smart Solution System as a Product Director. My day-to-day tasks included contributing to the drafting of specialized urban lifeline plans and risk assessment reports for counties and cities such as Xinyi and Yizheng. Additionally, I led the advancement of the Smart Solution System, which involved facilitating the development of online intelligent solution management. This project aimed to enhance the efficiency and accuracy of bid preparation and evaluation processes by incorporating advanced data analytics and AI-driven tools.

The internship setting was dynamic and collaborative, with a strong emphasis on cross-functional teamwork. I worked closely with professionals from various departments, including engineering, data analytics, and project management, to ensure the successful implementation of the Smart Solution System.

I drew extensively on the research techniques and resources I learned in HSPV 6000 (Documentation, Research, Recording), particularly the methodologies for compiling and analyzing data. My experience in HSPV 6250 (Preservation Economics) was

also highly relevant, particularly in understanding the economic feasibility of the urban lifeline projects and the necessity of public or non-profit intervention. This course equipped me to make informed decisions about project viability and to critically assess the economic impact of the Smart Solution System on the broader preservation goals.

Throughout the internship, I significantly improved my project management skills, particularly in coordinating complex, multi-faceted projects such as the Smart Solution System. I also became proficient in risk assessment techniques, which involved evaluating potential threats to urban infrastructure and developing mitigation strategies. Additionally, I enhanced my ability to communicate technical concepts effectively, both within my team and when presenting to stakeholders.

This internship provided numerous opportunities for professional networking. I had the chance to work closely with Prof. Jin Zhu, who is a mentor at the School of Civil Engineering at Southeast University. Prof. Zhu specializes in smart cities and urban resilience research and has extensive experience in the U.S. academic community. This shared background facilitated many engaging discussions between us, enriching my understanding of the field and broadening my professional network.



Image 1: Photo at workplace on last day

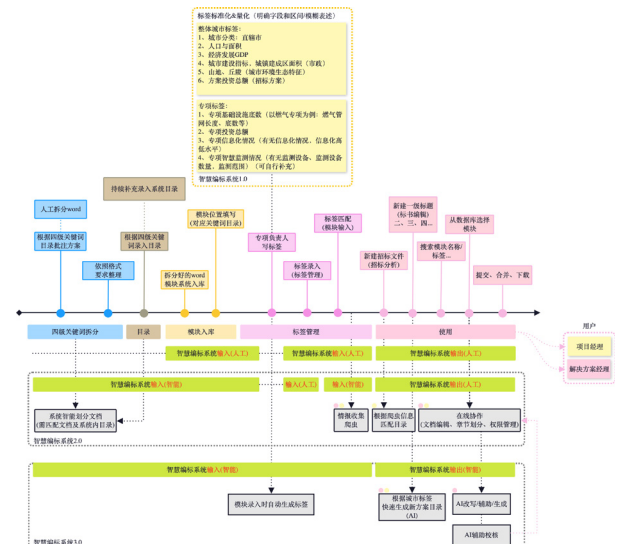


Image 2: Smart Bidding System Flowchart

Southeast University  
Nanjing, China  
**Smart Solution System Product Director Intern**



# Rachel Wu

During the summer of 2024, I worked as a Research Assistant for the Urban Heritage Project at PennPraxis, focusing on the Cultural Landscape Report for the Chesapeake and Ohio Canal (C&O Canal) project at Carderock. This project is part of a broader effort to document, preserve, and interpret the cultural and historical significance of the Carderock area within the C&O Canal National Historical Park. The park, which spans 184.5 miles from Georgetown, D.C., to Cumberland, Maryland, is a vital site of American industrial history. Carderock, a key section in Montgomery County, Maryland, played a crucial role in the 19th-century transportation of goods along the Potomac River and is noted for its scenic beauty and the contributions of the Civilian Conservation Corps (CCC) in the 1930s, which built trails and recreational facilities still in use today.

As part of an interdisciplinary team, I collaborated with colleagues from city planning and landscape architecture. We were assigned to different projects—Carderock for me, and Catoctin Mountain Park and the Martin Luther King Memorial Park in D.C. for others. We began the internship with site visits to these locations, offering us the chance to hike and appreciate the natural beauty while gaining a deeper understanding of each other's roles. The interdisciplinary exchange was inspiring and broadened our perspectives. At Carderock, I focused on photography and GIS mapping of park service facilities, which provided me with a strong sense of the park's spatial context and informed my subsequent research.

My daily tasks involved conducting in-depth research on Carderock's historical and cultural significance, a site that has been key along the Potomac River since prehistoric times. I analyzed historic aerial photographs, examined landscape changes, and compiled a detailed chronology of the area. This work included tracing significant developments like the 19th-century construction of the C&O Canal and the 1930s CCC activities. I used satellite imagery and cross-referenced old newspapers and documents to

uncover the natural and human causes of landscape changes. This investigative process felt like solving a mystery, piecing together clues to understand the broader landscape system. The ultimate goal was to create a comprehensive cultural landscape report to guide preservation efforts and enhance public appreciation of the site's heritage.

I also contributed to writing the first draft of the Cultural Landscape Report, particularly the historical chronology and the analysis of the natural system and land use. This work required extensive archival research, documentation, field observations, and data analysis, necessitating good organization and a methodical workflow. This internship not only deepened my understanding of cultural landscape research but also honed my task management skills. I also improved my ability to present complex historical narratives effectively for both internal reports and public-facing materials. Collaborating closely with Penn faculty and the Cultural Resource Program Manager at the C&O Canal National Historical Park from the National Park Service enriched my professional experience.

The coursework from my first year was instrumental in guiding my work, especially in documentation, park concepts, and preservation theories. The Documentation class equipped me with crucial archival research skills, including aerial and newspaper research, which were invaluable. Seminars on national park management and landscape conservation were directly applicable to my tasks, while the cultural landscapes theories provided foundational knowledge that underpinned my research.

This internship was a transformative experience, allowing me to apply and expand the knowledge and skills I've gained through my coursework at Penn. It not only deepened my understanding of cultural landscape preservation but also provided invaluable insights into professional practices within the field.



Image 1 (left): Remains of a pivot bridge over the C&O Canal, constructed by the Civilian Conservation Corps (CCC) in 1938, Carderock, MD.  
Image 2 (right): GIS mapping for the cultural landscape features in the C&O Canal National Historical Park, Carderock, MD

Urban Heritage Project, PennPraxis  
Philadelphia, PA  
**Research Assistant**

# Weizi Yu

During the summer internship, I worked as a research intern for Arch Street Meeting House Preservation Trust (ASMHPT). The trust is a non-profit organization preserving the historic landmark of Arch Street Meeting House, a meeting place for the Philadelphian Quakers since the early 19th century. The project goal is to accomplish a landscape report of the meeting house's burial ground, which could be dated back to the late 17th century before the meeting house was constructed and was used for interment until the mid-19th century. My regular task is to collect archival materials relevant to the burial ground, including Quaker meeting records, epistles, and manuscripts. I paid frequent visits to Quaker institutes including Haverford College and Swarthmore College for documentation. In many cases, it involves digging through piled meeting records and epistles to find those documents that have never been cited. I'm expected to sum up the records I find to make a bibliography entry, which is to be referred to by other researchers in the future.

The work in archives, including HSP and Quaker archives in Haverford and Swarthmore demands the documentation techniques learned in HSPV 6000. The organization of records in the bibliography and knowledge regarding the history of the Quakers and the meeting house burial ground are relevant to what I learned in HSPV 5340 Public History of the Built Environment.

During the internship, I worked with many archivists in archives across Philadelphia. Aaron and the trust's director Mr. Connolly instructed me on preliminary Quaker history; by working with them I learned many basic aspects of Quaker culture, how the Society of Friends functioned in history, and how their customs influenced relevant cultural landscape. Laura gave me detailed instructions on my research as my supervisor, specifically arranging my bibliography in formality. By working with those specialists, I become proficient in the documentation of public history. I learned how Quakers manage their worship organization and file their meeting records, so I could look through the records I want more efficiently. I have a deeper understanding of Quaker aesthetics, and how this aesthetic is embodied in Quaker architecture as well as burial grounds. I grew more acquainted with the progress of landscape research, especially the arrangement of the bibliography at the early stage.

I feel impressed that Quaker's unique testimonies and organizational forms distinguish them from other Christian organizations and play a great role in Philadelphia's history. This experience is a great help to my future research on public history. It encourages me to seek further on the path of combining public history studies with urban landscapes to understand the great legacies of our cities truly.



Image 1: Remaining Burial Site at Arch Street Meeting House



Image 2: Working in the Quaker Archive in Haverford College

Arch Street Meeting House Preservation Trust  
Philadelphia, PA  
**Research Intern**



# Hechen Yuan

This summer, I had the opportunity to intern with ICOMOS China (Chinese National Committee for the International Council on Monuments and Sites), a non-profit social entity located in Beijing, China. I worked as a research assistant, focusing on tasks related to world heritage sites.

My time at ICOMOS China coincided with the preparations for the 46th session of the World Heritage Committee, which provided me with a unique and fortunate opportunity to be involved in the majority of the preparation for the meeting. Therefore starting in May, my mentor guided me on how to read and interpret the documents for the upcoming conference. We familiarized ourselves with the potential discussion topics, including but not limited to draft decisions, tentative lists, and final decisions from previous sessions. This experience was instrumental and practical in deepening my understanding of the complex processes involved in world heritage management.

In July, I had the opportunity to work closely with Marie-Noël Tournoux, an expert and program director from WHITRAP Shanghai (World Heritage Institute of Training and Research for the Asia and the Pacific Region), and accompanied her to the Ming Dynasty Culture Forum, an annual event set at the Ming Tombs, also a world heritage site. I was responsible for planning the itinerary and coordinating with the site managers. Together, we conducted a site visit to the Ming Tombs and the Juyong section of the Great Wall. During the forum, experts

from various fields and nations shared their thoughts on the future development of the Ming Tombs. Their discussions on site monitoring and the potential for opening other Ming tombs for tourism reminded me of what we learned from HSPV 6600 Theories of Historic Preservation, which was about the debates on how to resolve the conflict between preservation and tourism development.

Through this internship, I also gained a deep understanding of how ICOMOS China operates as a non-profit organization and academic entity in China. They manage and host ICOMOS events, such as the ICOMOS University Forum, which will be co-hosted by ICOMOS China and Tsinghua University this autumn. At the same time, as an academic non-profit entity, ICOMOS China undertakes research projects commissioned by other institutions, including national agencies and also private business groups. During my internship, I contributed to a report on the interpretation of world heritage sites in China and the development of their museums.

In conclusion, I am fortunate to have this internship opportunity, as it has pushed me to seriously consider how scholars, organizations, governments, and heritage sites and their managers can collaborate to conserve world heritage. This experience has been invaluable in shaping my understanding of heritage preservation.



Image 1: Ming Dynasty Culture Forum



Image 2: Trees growing from the wall at Ding Ling (one of the Ming Tomb components)

ICOMOS China  
Beijing, China  
**Research Assistant**

# Yanjie Zhang

This summer, I was fortunate to intern at NBBJ's New York City office Healthcare Studio. NBBJ is a global architecture and design firm with offices worldwide, including its Seattle headquarters, and locations in Boston, San Francisco, Los Angeles, Columbus, London, Shanghai, and Hong Kong. The New York office is situated in midtown Manhattan, near the iconic Flatiron Building and Madison Square Park. The office comprises three main studios: Commercial/Corporate, Healthcare (where I was placed), and ESI (Environmental Systems Integration).

During my internship, I was exposed to and contributed to a diverse range of projects. These included conceptual studies for the Children's Hospital of Philadelphia, research on healthcare design trends and regulations, architectural design SD/DD drawing sets for Montefiore projects and CHOP King of Prussia Hospital, and a construction site visit to Cornell Tech on Roosevelt Island. My tasks were varied, encompassing physical and digital model making using Rhino, creating construction documents with Revit, rendering images, compiling and formatting reports, and drawing diagrams.

The projects required multiple skills and knowledge bases, with healthcare design demanding more technical expertise than other architectural genres. For conceptual design, adherence to zoning regulations was paramount. Key planning units, which satisfied client requirements while aligning with design team and consultant discussions, were crucial elements. Our goal was to meet all needs while providing clients with options regarding land size requirements, minimum parking areas (surface or structured), potential for expansions, and other pros and cons.

For construction drawing sets, I applied the Revit knowledge gained at school, supplemented by guidance from senior designers. This experience allowed me to understand how designs are realized step-by-step, from fitting medical equipment in Operating Rooms to suit doctors' workflows, to appropriately placing electronic and data devices. Adherence to codes and regulations, such as ADA compliance, was also essential. Through this process, I significantly enhanced my Revit skills.

The firm also provided lectures on past projects, as well as tutorials and workshops on technical tools like Midjourney and Krita. These AI tools show potential for facilitating the design process by inspiring ideas and improving renderings and drawings, although the AI training aspect can be complex. All interns in U.S. offices were assigned to specific intern projects, allowing us to apply our newly acquired AI knowledge in reimagining and designing spaces.

My internship at NBBJ has been an incredible and rewarding experience. It has provided me with a comprehensive understanding of healthcare architecture, spanning from conceptual design to construction documentation. Through exposure to diverse projects, cutting-edge technologies, and industry best practices, I've significantly enhanced both my technical abilities and professional insight. I'm deeply appreciative of the opportunity to collaborate with such talented individuals and contribute to meaningful projects. The knowledge I've gained, the relationships I've formed, and the foundation I've built for my future career in architecture are invaluable.



*Images: NBBJ NYC office redesign, interior collage drawing, image assisted by Krita. Image Source : Yanjie Zhang, Michelle Wang*

NBBJ Architects  
New York, NY



# Siqi Zhao

This summer, I worked as an Architectural Conservation Lab Summer Intern at the Architectural Conservation Lab and the Center for Architectural Conservation.

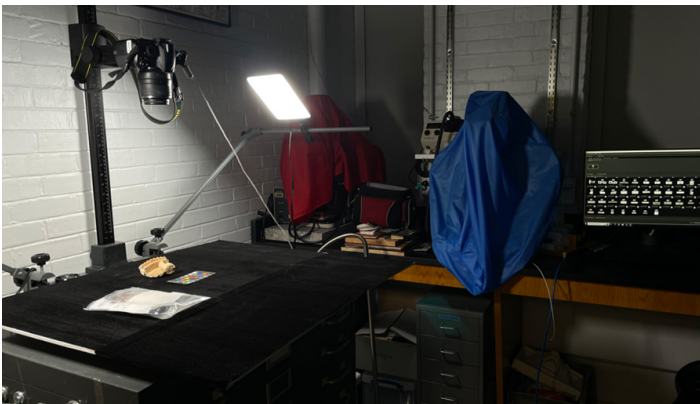
My work was divided into two primary projects. The first part of my internship focused on the Walker Zanger Stone Collection, where I continued the ongoing task of categorizing and organizing stone coupons. I utilized Microsoft Access to catalog the information related to these stone samples. The database was designed to systematically organize the previously disordered material information, classifying the stone coupons based on geological characteristics, place of origin, and other relevant features. This process not only facilitated easier comparison and retrieval but also streamlined the data for bulk operations, such as website uploads, reducing the risk of data loss. Additionally, I categorized and input information from the Walker Zanger Collection's paper materials, which included multilingual documents related to stone and architecture, technology, geology, geography, and extensive materials from various quarries around the world.

The second part of my work involved organizing and entering data for the Historic Building Materials Collection into a database. This included tasks such as sorting materials, photographing samples, setting IDs, and ultimately uploading the results to the Architectural Conservation Lab's website. A particularly meaningful aspect of this project was using archival research techniques to fill in missing information for some material samples. By examining characters on the materials,

reviewing research papers, and scouring news journals, I could deduce missing data.

My internship allowed me to draw upon knowledge from several courses in the HSPV program. For instance, in the Walker Zanger Stone Collection project, I applied basic knowledge of mineral composition, classification, and physical properties learned in conservation science courses. Working hands-on with numerous stone samples helped deepen my understanding of these concepts. The archival research skills I developed in the first-year course were essential when completing the Historic Building Materials Collection project, where identifying missing information required systematic research and critical thinking.

During my internship, I had the privilege of working alongside distinguished researchers and curators in the department. This experience provided insights into how lab work is organized and conducted beyond the classroom. I gained valuable skills in multi-tasking and project management, and I learned how to apply foundational knowledge to real-world projects. This internship was a highly rewarding experience that allowed me to bridge the gap between academic learning and practical application. I became proficient in database management, which is crucial for organizing large collections of materials systematically. It deepened my understanding of architectural conservation and equipped me with new skills and insights that I will carry forward into my future studies and career.



*Image 1: Photographing and recording of material samples in the Microscopy room.*



*Image 2: Stone coupons and literature organizing site at Center for Architectural Conservation*

Architectural Conservation Lab  
Philadelphia, PA  
**Zanger Stone Collection & Historic Building  
Materials Collection Intern**