# DAAP Cares<sub>2024</sub>



## DAAPcares MISSION

DAAPcares honors and supports the work of DAAP students, faculty, staff, and alumni to improve the quality of life around the world. From local to global, individual to multidisciplinary, and academic to professional - we connect scholarship to solutions. These accomplishments are celebrated annually in a showcase of innovative projects and research that represent our mission to achieve sustainable outcomes with environmental, economic, and cultural equity.



### **DAAPcares Student Organization**

Faculty Advisor: John Dixon

Staff Advisor: Lora Alberto

Graduate Assistant: Rachel Carr

#### **Student Leadership:**

Margaret Dull
Chloe Beckmeyer

### **DAAPcares Awards Jury**

John Dixon, SOD Brian Grubb, SOP Mrinalini Aggarwal, SOA Anca Matyiku, SAID

### **Printing Thanks**

Michael Everett, Photo & Print Lab

## AGENDA

- INTRODUCTIONS
- AWARDS
- PROJECTS
- DAAPCARES: YEAR ROUND



## **Awards**



### **Awards**

SOD Undergrad

Cincy Composts

SOD Graduate

Full Inclusive Participation SAID Undergrad

Community Building Blocks

SAID Graduate

Covington Rehab SOP Undergrad

Back to the Future!

SOP Graduate

Lead Pipe Replacement

## inclusivity and equitability for people with different abilities

Professor | HORT 3050, LAND 7051, HORT 2040, LAND 7061

LOCATION: Cincinnati, OH, USA

**PARTICIPANTS** 

**Professor:** Stevie Famulari Gds

**Students:** 50 Students from 4 courses in

Horticulture and Landscape

Architecture

# 2024 **DAAPcares** Compassion Award



#### **PROJECT DESCRIPTION**

Inclusivity in design is vital. All my students in my all courses in the Autumn 2023 semester were required to spend one class time in a wheelchair and some further spent additional time using a walking cane. This lesson is done to teach students- through experience- to celebrate inclusivity in their design process (notably in landscape architecture and horticulture), and not as an ADA required afterthought. The effects of this lesson continue not just through essays and images, but also through their designs in my classes and beyond to their careers.





#### SOD

## Terra: Perinatal Mental Wellness Preparation App

INDL 4045 | PRODUCT CAPSTONE STUDIO | Professor Peter Chamberlain

LOCATION: Cincinnati, OH, USA

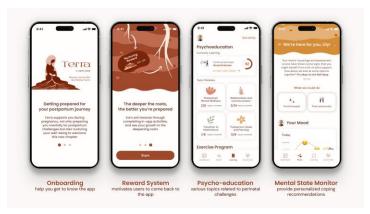
**PARTICIPANTS** 

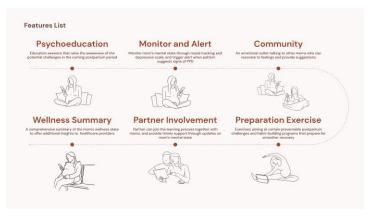
**Students:** Zhixin Wang

#### PROJECT DESCRIPTION

Terra is a mobile app crafted to support new mothers on their journey to positive perinatal mental wellness. It mainly offers psychoeducational resources to illuminate postpartum challenges and features to monitor mental health from early pregnancy. By fostering awareness and providing continuous support, Terra empowers women to navigate their pregnancy with confidence and embark on their postpartum journey feeling prepared and reassured.







### **Eutrophication Science Museum**

SAID

2002 | Studio | Professor Amber Wasinski

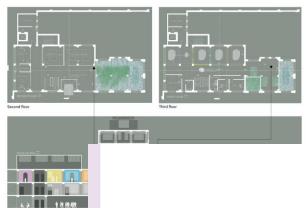
LOCATION: Cincinnati, OH

**PARTICIPANTS** 

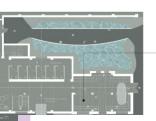
**Students:** TT Klafter

#### PROJECT DESCRIPTION

This project is a museum to teach the public about the impact of water pollution on the environment and how eutrophication can be prevented and remedied. The site of the science museum is the former Peter's Cartridge Factory in Maineville, Ohio. When active, the factory polluted the site, including the nearby river. The museum explains the process of water purification through an immersive experience. It emphasizes the problem of eutrophication, which is caused when pollution causes algae to grow on the surface of water, killing all the organisms within. Mussels have been used to naturally and successfully filter and purify bodies of water that have suffered from eutrophication and this will be demonstrated in the museum as well.





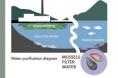




#### **EUTROPHICATION SCIENCE MUSEUM**

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Pollution from factories causes algae to grow on the surface of the water, killing all the organisms. When mussels are introduced to an ecosystem,

Site Plan of Peter's Cartridge Factory, adjacent to the Little Miami Rive

## Cincy Mobility 2050 - Re-Imagining Cincinnati's Transit

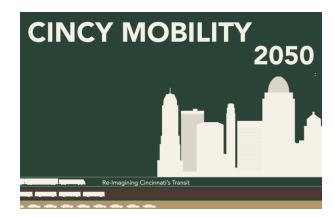
PLAN 7009 | Capastone | Professors Leah Hollstein & Rainer Vom Hofe

**LOCATION**: Greater Cincinnati Metro Area

**PARTICIPANTS** 

**Students:** Lizzy Geraghty, Weston Floro-

Hageman





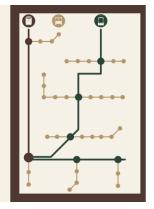
Higher speed, longer distance, lower service frequency, lower stop frequency.

#### High Level Transit

- -Route serves commutes
- -Does not serve final destination
- -Intercity reach

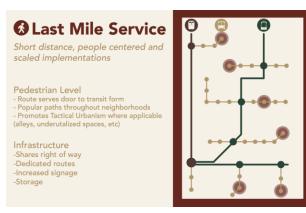
#### Infrastructure

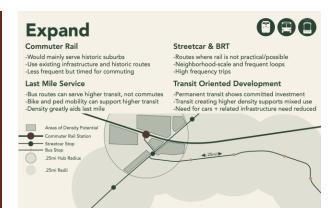
- -Uses existing, separated right of way
   -Supports transit oriented development
- -Creates hub/transfer station



#### PROJECT DESCRIPTION

By 2050, our goal is to have every Cincinnatian walk out their door and be able to choose transit. We want Cincinnati residents to be able to complete inter-neighborhood, across neighborhood or to nearby cities trips with public transit. Bringing a Germany-esc mindset to our station design, from experiences studying abroad, we want multi-use transit hubs and stations that re-invigorate the economy, connect communities, and provide critical last-mile services to residents.





## **Pollinator City**

ARCH 7036 -002 / 5051-002

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

**Professor:** Anca Matyiku

**Collaborator**: Alex Roman Gonzalez, University of Cincinnati Office of Sustainability and the University of Cincinnati Garden

**Consultants**:Patrick Guerra, Stevie Famulari, Brian Grubb, Sangyong Cho

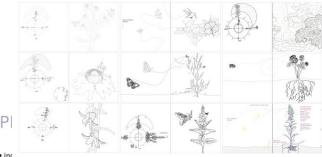
Design-build + research student Team: Varun Bhimanpally, Matthew Davis, Prajakta Gangapurkar, Justin Hamilton, Patrick Leesman, Jacob Mackin, Julio Martinez, Simon Needham, Kaylee Pugh, Hilda Rivera, Juvita Sajan, Hannah Webster, Megan Welch, Meghana Yelangandula, Isaiah Zuercher



INTERDIS.

POLLINATOR CITY - OUTCOMES

COLORING BOOK (IN PROGRESS) compiles our team research



empower action

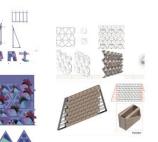
 test efficacy of the living cell pollinator wall to operate as habitat for pollinator species

POLLINATOR CITY - OUTCOMES

DESIGN & BUILD LIVING CELL POLLINATOR WALL (PRELIMINARY IDEAS)







AND A MATVING // MATVINA GUICANA UN FOU

#### **PROJECT DESCRIPTION**

The Pollinator City project is a design-based response to the crisis facing pollinator species that are essential to our ecosystems. It consists of an educational coloring book and a Pollinator Wall, a modular-based system of "living cell" units that explores the wilding of the humble masonry wall as a thickened living cell, and its potential to sustain an ecosystem of insects and plants.

#### SOD

### **Bosses**

Fashion Design | Entrepreneurship Study

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

Students: Clare Wilker, Rafa Shomburgk,

NickMurphy

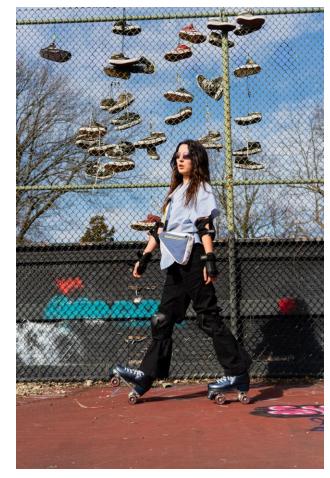
#### PROJECT DESCRIPTION

Boess is driven by our mission to create a space for those who feel lost between their need to escape into nature and their need to connect with humanity.

Challenging the societal pressure to choose between both worlds, we take pride in our position, seeing the internal conflict not as a problem but as an opportunity to find new belonging.

Here we create a lifestyle full of adventure, in all environments from deep in the backcountry to downtown streets.

Our dream is a vibrant community joined in embracing the duality, and creating a community rooted in nature and deeply connecting with others.







## **Community Building Blocks**

Architecture Studio 4 | ARCH4001 | Peter Yi | Fall 2023

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Seth Aridano, Jean-Luc

Baudelogue

#### PROJECT DESCRIPTION

As of late 2023, Cincinnati became the first city in Ohio to legalize the use of an Accessory Dwelling Unit, ADU. This zoning policy innovation provided an opportunity to reshape the city's urban fabric and construction techniques. Community Building Blocks is a bold reimagining of suburban living, transforming traditional singlefamily lots into a neighborhood that embraces sustainability, efficiency, and fosters a strong sense of community.





# Shaping the Future: 3D Printing for Affordable and Climate-Resilient Housing in Urban Cincinnati

PLAN7009 | Capstone | Professor Leah Hollstein and Prof Rainer Vom Hofe

**LOCATION**: Cincinnati, OH

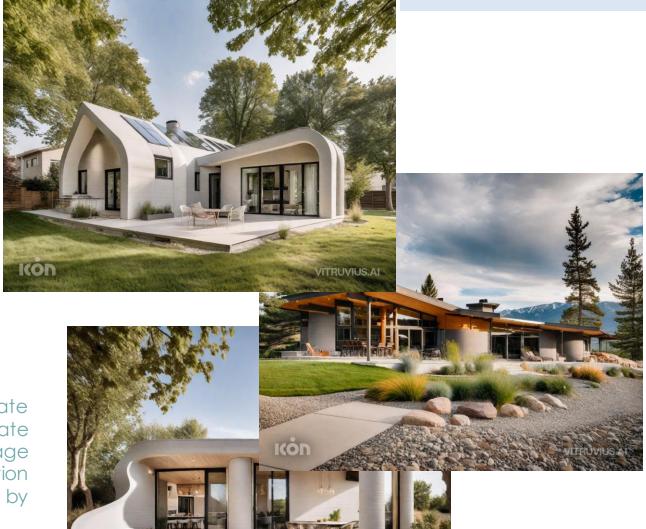
**PARTICIPANTS** 

**Students:** Simon Donkoh

**Partners:** College Hill CURC / Cincinnati Parks

#### PROJECT DESCRIPTION

Responding to Cincinnati's housing challenges and climate concerns, our project utilizes 3D printing technology to create affordable and climate-resilient housing solutions. We leverage innovative design approaches and alternative natural construction materials to provide sustainable housing options in Cincinnati by 2050.



### **Cincinnati Band Uniforms**

Independent Work | University of Cincinnati Bearcat Marching Band | Stanbury Uniforms

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Erica Frost



I noticed issues of wear and tear in the marching band uniforms. This drove me to want to design a new uniform for the program. Now we wear new uniforms that I designed the concept for.

I gave a final concept to the directors after some debate on other concepts and they presented it to the student government and athletics board. After getting approval and money towards the design, they sent my design out to a few marching band uniform manufacturers to see who would return a usable option. At the end, they went with Stanbury Uniforms. Stanbury was able to help bring my concepts into reality. Now, the uniform team never has to sew alterations that take months to finish and doesn't have to worry about uniforms falling apart on the field for the next 8 years.







INDL 42253 | Professor Brigid O'Kane

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Caroline McCarthy

#### PROJECT DESCRIPTION

Cincy composts aims to increase sustainability at the University of Cincinnati. This project includes a proposal to increase food waste diversion that could handle all pre and post consumer food waste across campus. The system includes a bucket collection system, drop-off kiosks, and an integrated app that provides information, tracks composting goals, and allows members to connect with others in the community.









# Virtual reality studio for collegiate industrial design education

DSGN 8002 | Thesis | Chair: Steve Doehler | Committee: Ming Tang

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

Students: Rashid Sadki

#### PROJECT DESCRIPTION

A Remote Immersive Virtual Reality Industrial Design educational system has the potential to foster accessibility and sustainability, revolutionizing how students interact with technology and each other. The evolution from pen and paper to digital interfaces and now to I-VR signifies a return to hands-on learning, enhancing empathy and connection. This approach not only democratizes education globally but also integrates existing technology into the learning experience which is not currently in use, reducing reliance on traditional screen-based communication.

#### internal development



university of cincinnati rashid sadki mdes 2024

Seven Year Pilot Year 0 Year 1 Year 2 Year 3 Year 4 Year 5



### **Back to the Future!**

PLAN 5099 | Senior Capstone

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Natalie Kunes

2024 DAAPcares

Best in School of Planning Undergraduate



#### PROJECT DESCRIPTION

The key to Cincinnati's future is in the past! Back to the Future: exploring methods of food production for Cincinnati in 2050. For centuries humans have been taking nutrients from the earth and giving very little back in return. To avoid going too far down this detrimental path, we need to implement restorative agriculture methods that replenish the earth. By doing so, we give the Cincinnati of 2050 a better future; a future composed of healthy, happy residents who have access to responsibly cultivated food, land that is less susceptible to flooding and landslides, and a population that takes responsibility and stewardship of the natural environment.





#### SOD

### Monda

CODE 4021 | Design Research Methods | Professor Muhammad Rahman

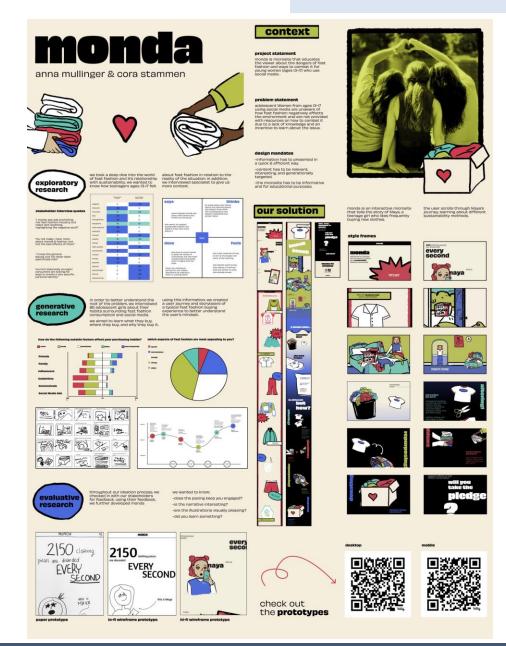
LOCATION: US PARTICIPANTS

Students: Cora Stammen, Anna

Mullinger

#### PROJECT DESCRIPTION

Adolescent women ages 13-17 using social media are unaware of how fast fashion negatively affects the environment. They are not provided with resources on how to combat it due to a lack of knowledge and an incentive to learn about the issue. So, we created Monda, an interactive microsite that educates viewers about the dangers of fast fashion and makes them excited to learn more.



## The Impact of Lead Pipe Replacement on Property Values in Cincinnati, OH

PLAN 7008 | Capstone | Chair: Dr. Rainer vom Hofe | Committee: Dr. Olivier Parent, Dr. Christopher Auffrey

LOCATION: US **PARTICIPANTS** 

**Students:** Xavier Yozwiak

# Best in the School

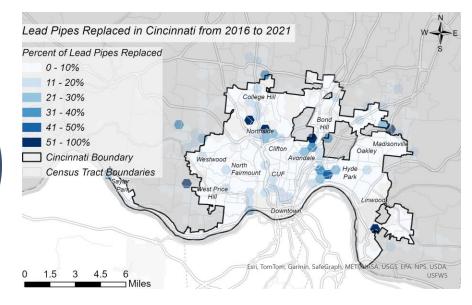
2024

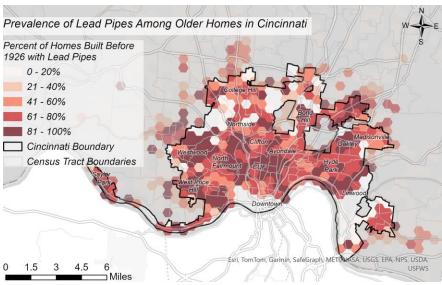
**DAAPcares** 

of Planning Graduate

#### PROJECT DESCRIPTION

The 36,000 homes in Cincinnati with lead pipes make it possible that the drinking water crisis in Flint, MI could happen in Cincinnati. Despite this threat, only 50 percent of the homeowners contacted by Greater Cincinnati Water Works (GCWW) agree to replace their lead pipes, even though GCWW pays for the entire cost of the replacement. This study found another potential "incentive" for homeowners to replace their lead pipes: properties that had their lead pipes replaced from 2016 to 2021 and had sales before and after replacement (n = 66) saw a 4.6 percent increase in sale price (\$10,600 on average) compared to similar homes (n = 2,230) in the three years after replacement. The study used a difference-in-differences framework and controlled for an extensive list of building and neighborhood characteristics to determine that the lead pipe replacement caused the increase in price for the homes in the study. These results imply that Cincinnati customers value a "lead free" home, and that local and state-level outreach efforts should increase to make the presence of lead pipes widelyknown to all homebuyers and residents.





## Painting Preschools for a Change

CODE 4021 | Design Research Methods | Professor Muhammad Rahman

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Sophia Levy, Haley Cole, Taryn Brown, Carol Theetge, Nicole Taylor, James Gibbs, Louisa Wetli, Sophie Hemingway, Aditiya Pradhan, Ayusha Giri

#### PROJECT DESCRIPTION

At Cincinnati Urban Promise Preschool, a volunteer group painted a vibrant mural on the exterior entrance wall, aiming to uplift an underserved community. Inspired by the transformative potential of education, the mural represents hope and possibility, serving as a beacon of inspiration and community for children and residents alike. Collaborating with a dedicated team, we braved challenges and setbacks, learning firsthand the impact of collective effort and artistic expression in fostering community resilience and creativity. This experience deepened our commitment to community engagement, reaffirming the power of collaborative action to create meaningful change and a more vibrant, inclusive world. The mural stands as a testament, enriching the community with its message of unity and possibility.







#### INTERDIS.

### **Hidden Little Corners**

DAAPcares | Student Organization

## LOCATION: University of Cincinnati PARTICIPANTS

**Students:** Margaret Dull, Chloe Beckmeyer, Emma Madden, Maddie Lawson, Abby Lawson, Gordon Petrie, Sophie Gartland

### 2024 DAAPcares

Community Award



#### PROJECT DESCRIPTION

Hidden Little Corners is a project to bring recognition to underutilized parts of the University of Cincinnati's campus. Most students spend over half their day on or adjacent to UC's campus, but never have taken the time to explore all areas. Our project is assessing UC's campus and highlighting visually the spots that we feel are great for peace of mind.

# Comparative Urban Heat Island Mitigation Framework

DAAPcares | Student Organization

LOCATION: United States (various)

**PARTICIPANTS** 

**Students:** Nur Ayuni Mohd Bohori

#### PROJECT DESCRIPTION

An onhoing research based study on comparism of Green Infrastructure usage in Urban Heat Island (UHI) Mitigation of existing frameworks and Artificial Intelligence based Frameworks. This study is to compare the ranking of green infrastructure used in several case study Frameworks with the existing policy and how much the Artificial Intelligence study aligns with the current framework.



#### Temperature

Urban area have higher temperature on average, than rural area.

#### Days above 90 degree

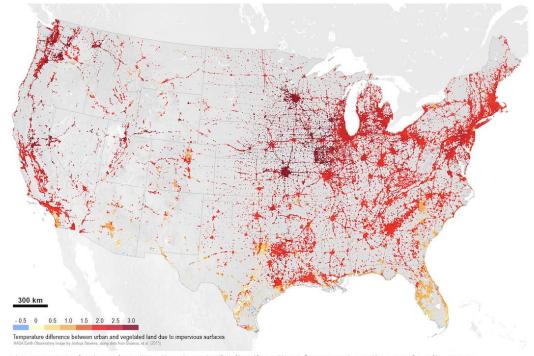
Urban are have more "very hot" days that above 90 degree than rural area.

#### Hotter Summer

SOP

Summer in USA have been hotter since 1970, but the urban area temperature rate tend to increase faster than rural area.

### Literature Review



Above map is showing the the heat distribution that focused on the main city area, highlighting the critical need for UHI mitigation.

# Full Inclusive Participation: A Design Process Case Study in Urban Mobility

MDES Thesis | Chair: Professor Heekyoung Jung

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

**Students:** Domagoj Bui

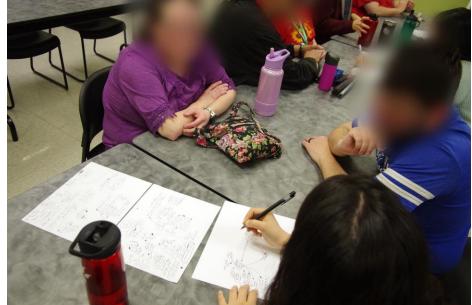




This design research project identifies that urban mobility not bei inclusive is connected to the design process used not bei inclusive, and that inclusive design is not used enough because i inaccessible to designers and organizations. The project proposes start with full inclusive participation. A comparative case study we conducted with two groups of design students using a convention mobility design process, but one equitably and fully together with people with visual impairments. Design students and experts who evaluated solutions conclude that it is a viable option to achieve inclusive urban mobility more easily but with challenges in scaling up.







## **Mapping Madisonville**

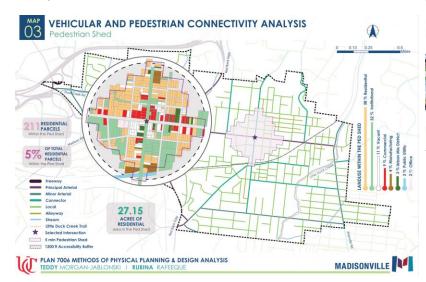
PLAN 7006 | Methods of Planning & Physical Analysis | Professor Leah Hollstein

LOCATION: Madisonville, Cincinnati, OH

**PARTICIPANTS** 

**Students:** Rubina Rafeeque, Teddy

Morgan-Jablonski



#### PROJECT DESCRIPTION

Our project aims to analyze various facets of Madisonville, including history, transportation, topography, soil, and urban development. Through meticulous research and data analysis, we seek to understand the city's evolution and its response to changes over time. Our ultimate goal is to identify opportunities for sustainable improvement and innovation that will positively impact the community's quality of life.



PROPERTY, PARCEL AND BUILDING ANALYSIS

## Art History Outreach Program: Helping Students to Engage with Artworks at First Hand

Independent Collaborative Project

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

**Students & Faculty:** Arthur Brum, Shepherd Ellis, Riley Haag, Charlotte Ogorek, Christopher Platts, Tegan Recker, Kristopher Reisser, Leah Shannon

#### PROJECT DESCRIPTION

The Art History Outreach Program offers interactive, audience-centered presentations on Renaissance art and culture (ca. 1400-1700) for students at local public high schools and the Osher Lifelong Learning Institute (OLLI) in Cincinnati. Using centuries-old European prints and illuminated manuscripts from the University of Cincinnati's DAAP Library, these presentations are primarily object-based, so that students can directly examine and physically handle artworks of the fifteenth to seventeenth centuries. The presentations are entirely free of charge to the high schools and OLLI, and they are available for – and tailored to – different sorts of classes, whether art history, fine arts, history, or foreign languages. These presentations are created by UC undergraduate and graduate students under the supervision of a UC faculty member in art history, who also develops and offers presentations.

2024 DAAPcares

Diversity, Equity, & Inclusion Award







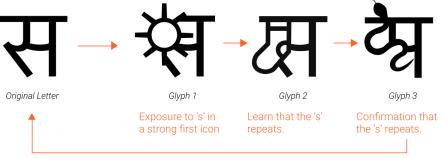
# Unscripted: Typography for Non-Native Language Acquisition

MDES Thesis | Chair: Professor Renee Seward

LOCATION: Cincinnati, OH

**PARTICIPANTS** 

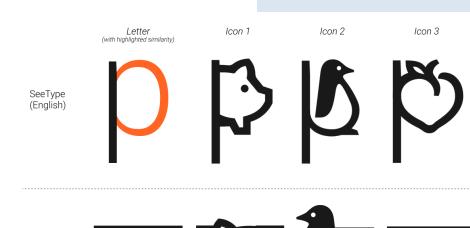
Students: Urvi Prabhu



Recall based on recognition of icons and the preserved letterform

#### PROJECT DESCRIPTION

Unscripted redefines language education systems by employing typography as a tool to decode letters in a new script. The font uses icons as mnemonics embedded within the letters to provide visual cues in the typeface to familiarize new scripts to English readers. By using the readers' knowledge of one language to familiarize them with an entirely new one, this project explores a novel application of Seward Design's SeeType font to the context of cross-cultural communication through non-native language acquisition.





## covington [re]hatched

ARCH 7005 | Studio | Professor De Peter Yi

**LOCATION**: Cincinnati, OH

**PARTICIPANTS** 

Students: Simon Needham, Jacob Mackin, Isaiah

Zuercher

#### PROJECT DESCRIPTION

This proposal reimagines 23 acres of the levee-impeded Covington riverfront as an athletic campus that combines recreation with bright, exciting environmental graphics. Prominently spread across the site are large circular buildings lifted above ground level, protecting the buildings from flooding and allowing inhabitants to walk directly into the courtyards that each contain various sport courts and fields. Atop each of these buildings are public spaces that provide arena-like seating and elevated vantage points to spectate activities across the site. We developed a vibrant interstitial space: a field of ground surface hatches behaving as a system of colorful porous surfaces to address the stormwater and flooding that the sites endures. The monotonous rectangular city blocks of the immediate urban context are exchanged for circular forms, creating a more open, wandering, and varied pedestrian experience as a relief from the rectangular city grid.

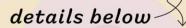


## DAAPcares: Activities through the Year



## Keep Cincinnati Beautiful

mural work service event



Fri. April 12 | 1-4pm

Dyer Playground

2124 Freeman Avenue

Text 513.439.0775

if interested

DAAP cares

**Upcoming event** 

paint & get a lil' messy

serve your community

be ready to...

have fun

