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Handy tips

- Export to PPT by clicking File > Download > Microsoft PowerPoint.
- **When you paste text, paste without formatting; the pasted text will adopt the correct font and size.**
- If you need to reduce the size of body copy to fit, consider splitting your slide over two pages.
- You can increase the size of text to highlight key points.

Layout rules

- Do not change the size or placement of the titles.
- Use the light or thin weights of fonts for most text and the bold just for highlights.
- Place large images on their own slides, or on angle-framed master pages. To add the image to these, right-click and set the image as the background. Remember to use images with a resolution of at least 1920 x 1080 (16:9 ratio).
- Avoid placing text over images

shARed space

Sarah Bearman - M.S. Student - Tempe, Arizona October 15, 2025

3-15 Min

shARed space

shARed space is an augmented reality app that allows anyone to design a community space by placing 3D objects or artwork in the area. Each person’s space will be saved and can be kept private or shared publicly to be viewed by others who visit the space, and all designs combined can be used to inform urban design/city planning.

Goal

The goal of this project is twofold:

1) Provide an interactive experience to help build a sense of community in the local areas that people frequent. Creating a personal touch to a public space can make one feel more personally attached to the space, and the ability to share/view others' spaces can potentially foster a feeling of camaraderie with people you otherwise might never interact with

2) Inform city planners about what patrons who frequent these spaces need/want and allow patrons of public spaces to feel heard
    a) For example, if a significant number of people all add extra sitting areas to a park it can act as a sort of survey for those in charge of that space that they should add more benches/ramadas to the space

Inspired **by**

World Building and Future Thinking

LEVEL ONE
ARCADE BAR

New Times BEST OF PHOENIX WINNER

Researcher: Sarah Bearman

Level One is a midgrade bar with a nostalgic 80s theme with locations in Downtown Gilbert and Downtown Mesa. It features LED bar tops, a variety of pinball machines, and 80s/90s classic arcade games such as PacMan, Mortal Kombat, Galaga. Level One is family friendly during the day, but transitions into a 21+ establishment after 7pm with monthly themed parties and djs on the weekend.

Kyle Ward is the general manager at Level One Arcade Bar. He has been working in the hospitality and liquor industry for 20 years. His typical duties include making food and liquor orders for the bar, keeping inventory of all products, making the staff's schedule, and managing the day to day things like making sure staff and customers abide by the rules of the establishment. Alongside his duties managing Level One Kyle also frequently does events for Tito's Vodka, manning booths for a myriad of events that Tito's hosts or partakes in.

"Things are becoming more and more automated...eventually I can imagine bars getting to a point where it's make your own cocktail..."

"That's why I like bartending as much as I do, like, you need people. I've made relationships and contacts with people that if I wasn't doing this industry I would have never met that person."

- Kyle Ward, General Manager of Level One

INTERVIEW SUMMARY

Level One is a place that people can come to relax, enjoy themselves, and escape from the stress of daily life. However, going to bars is a luxury, not a necessity, so business fluctuates with the economy. Level One has tried a few different marketing strategies like hosting theme parties and participating in local events to keep people coming in the door. They are also planning on investing in more TVs to increase how long people are staying in the bar.

The future of bar trends will also depend on the economy. Kyle can foresee a future where there is a move toward both automated service as well as more science-based craft cocktails (molecular mixology). This molecular mixology involves more niche ingredients and more involved preparation like smoking cocktails and using infusions. These kinds of craft cocktails are more expensive and take longer though, so they will only be successful if the economy is in a state where people can afford to spend $17-$30 on a drink. On the other hand, moving toward more automation and removing the bartender will help with speed and convenience, but will open up new problems for regulating consumption and eliminating the social camaraderie between the establishment and its customers.

Some of the challenges that Level One faces specifically is that downtown Mesa has strict parking. Relaxing some of the parking restrictions will make people more inclined to stay longer. Another challenge is that the group that is in charge of marketing for events occurring in Downtown Mesa (called Visit Mesa) don't understand bars well enough for the events to be beneficial to them. For example, bar crawls have been scheduled on Wednesdays at 4pm where the average person with a 9-5 job cannot participate. Also, large events that block off parts of the street are only active from 5pm to 9pm, missing the window of time to draw the nightlife crowd.

There also seems to be some missed opportunities for marketing to larger and younger crowds by advertising on Facebook groups rather than more viral platforms like Instagram and Tik Tok

What if the city of Mesa invested in more recreational spaces like a splash pad to attract more people during the summer months?

What if there was a section of Mesa that allowed open container like they do in Tempe Marketplace or the Las Vegas Strip?

What if Level One collaborated with other businesses in the community to host larger events, or organized a workshop with Visit Mesa to ensure events are more effective to the local businesses?

AUTOMATION EXPERIENCE

ArcGIS CityEngine

A modern 3D city design solution

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3D GIS for urban design

ArcGIS CityEngine is a procedural 3D city generator for creating and iterating on urban environments and scenarios using either synthetic or real-world geographic information system (GIS) data.

An essential tool for urban designers, planners, architects, and 3D artists, CityEngine powers rapid adjustments to the architectural style, or other features, of an urban environment to support more efficient and streamlined workflows.

An innovative approach to urban design

Discover how ArcGIS CityEngine can help optimize your typical workflows in urban design and planning, architecture, and 3D immersive experiences.

Accelerate urban planning workflows

Gain a deeper understanding of real-world urban contexts with 3D models. Create and iterate on urban development projects using existing data, or design new cities from scratch. CityEngine consumes data for urban planning environments to create procedural models you can use to test your ideas and solve problems.

Elevate architectural designs

Create realistic, place-based building models and iterate between different parameters by adjusting floor plans, size, architectural styles, and textures. View structures in context to analyze factors such as zoning requirements, natural resource preservation, viewshed, and more.

Create stunning, immersive experiences

Take your CityEngine models to new heights by leveraging integrations with industry-leading game engines. Connect CityEngine to powerful animation tools to create hyper-realistic 3D scenes, stunning visual effects, and interactive experiences and simulations.

CoFUTURES Conference

From June 15-17, 2023, CSI co-presented the CoFUTURES 2023 virtual conference, "Community Speculations and Technopolitics," hosted by our friends at the University of Oslo. This global convening featured three days of keynotes, lectures, panels, workshops, and more, considering how and why communities come together and utilize speculative methods to rethink the world, and what kinds of technologies and politics allow or necessitate these efforts.

As part of the conference, we organized three roundtable sessions:

Latin American Climate Futures, featuring Fábio Fernandes, Gabriela Damián Miravete, and João Queiroz, moderated by CSI's Joey Eschrich

Collaborative Approaches to Designing Personal Futures, featuring Laura Cechanowicz and CSI's Bob Beard and Ruth Wylie

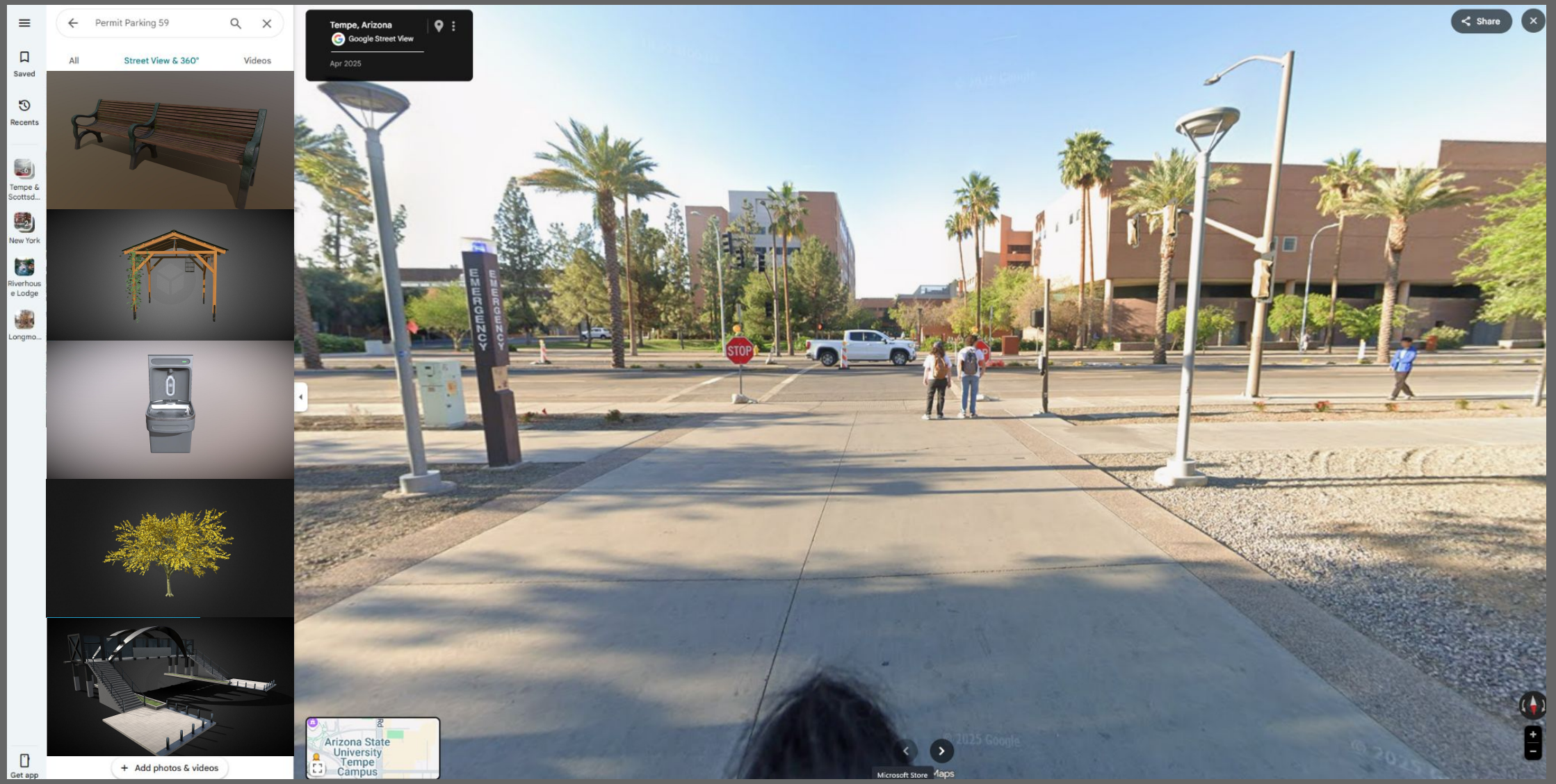
Crafting Locally Situated, Culturally Responsive Climate Futures, featuring Libia Brenda, Hannah Onoguwe, Gu Shi, and Vandana Singh, moderated by CSI's Joey Eschrich

Imagination Network Gatherings

Inspired by the infectious conviviality and creative alchemy of our tenth-anniversary festivities, we launched a series of monthly virtual gatherings to forge connections among members of CSI's expansive network. Since their launch in April 2023, these convenings have provided a space for freewheeling conversations, short presentations about projects and opportunities for collaboration, and incubating inspiring ideas among imaginary friends old and new.

To be added to the invitation list for upcoming Imagination Network Gatherings, drop us a note at imagination@asu.edu.

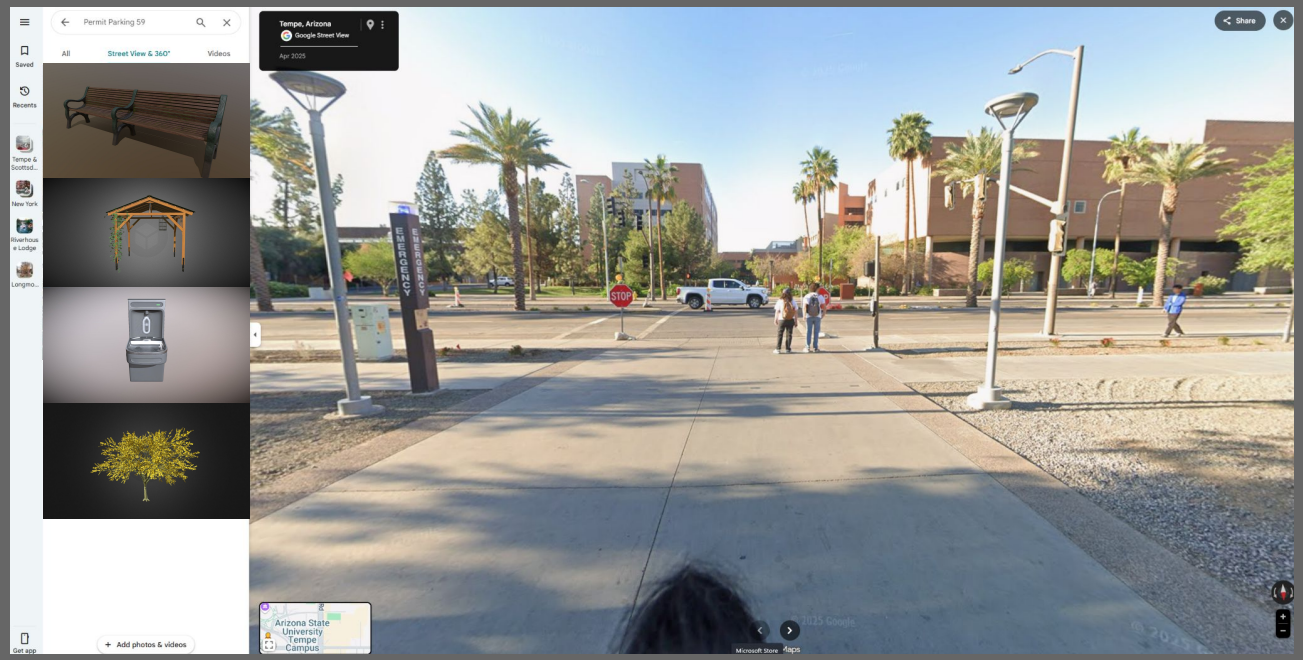
XR interaction



XR interaction

Users can click and drag assets into the space with an interface similar to Google Street View.

- there will also be a “suggestion box” input where people can submit assets that should be added to choose from
- this “suggestion box” can also be used for suggestions that aren’t related to adding physical assets.
    - ex) in busy 4-way intersections with a lot of pedestrian crossings, green lights don’t allow pedestrian crossings and instead include a time where all lights are red and students can cross in all directions, even diagonally



Using the ArcGIS integration, the app can know the location of where in the real world objects are being added

- this can be used to create hotspot maps of where people want different features

Environments

This app can be used in all environments, though the public input part will likely only be effective for outdoor environments since indoor environments are privately owned

- a future iteration could allow businesses to have special accounts so they can get input from people who frequent their establishments
- businesses could use it as a virtual gallery space to bring patrons in

The assets to choose from will be grouped into categories, so people can choose from things like:

- Indoor plants
- Outdoor plants (could use location to limit assets to native species)
- Outdoor structures (benches, bridges, etc.)
- Amenities (drinking fountains, outlets/charging stations, etc.)

Other references

Augmented Reality & GIS
Create 3D web apps—3D Workflows | Documentation
Use Living Atlas 3D OpenStreetMap layers to add context to scenes
Mastering Google Maps AR Navigation and Live View - BrandXR

Thank You!

Name – Date - Version

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