

Putting AI to Work:

Practical Applications of AI in Landscape Architecture

ASLA 2023 
SCALE UP

Conference on Landscape Architecture
OCTOBER 27-30 | Minneapolis, MN

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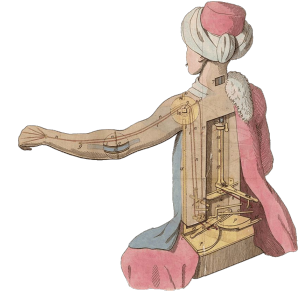


What is Artificial Intelligence?

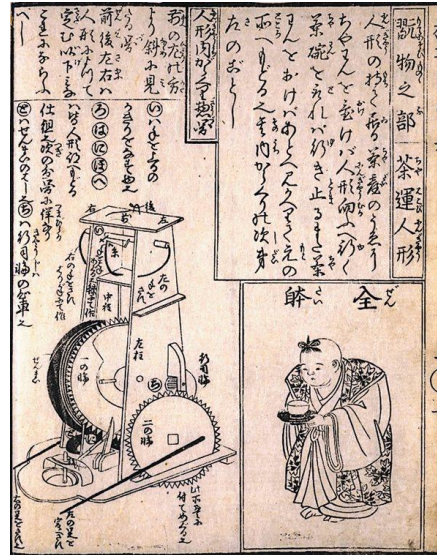
Questions of human and non-human intelligence have been pondered for millennia.



Golem



The Mechanical Turk



Japanese Karakuri



Mesopotamian Automaton

The Dartmouth Workshop



DARTMOUTH SUMM

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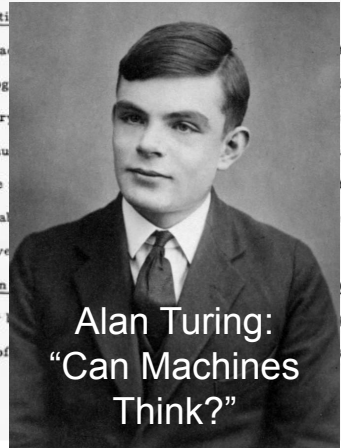
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INTELLIGENCE

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Ada Lovelace,
Analytical Engine

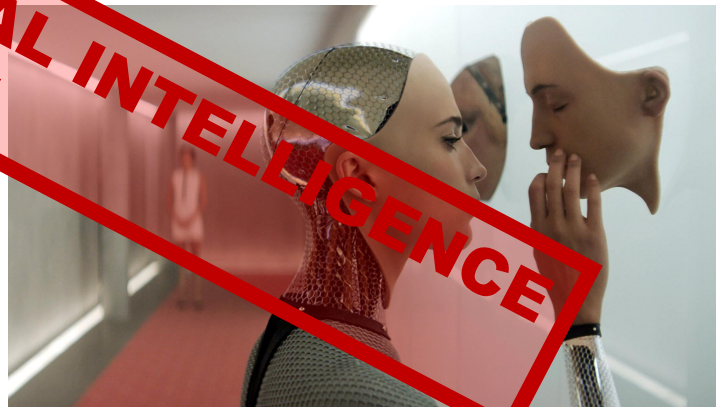
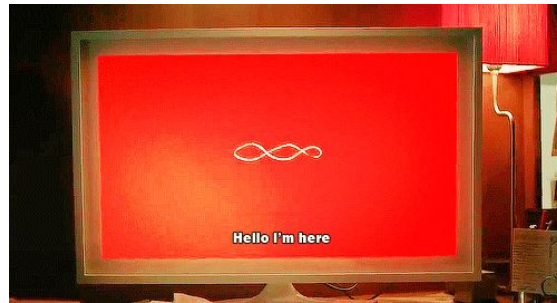
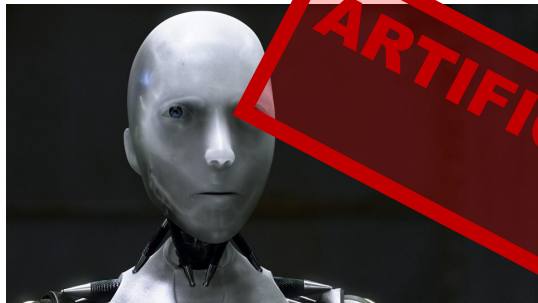


Alan Turing:
“Can Machines
Think?”

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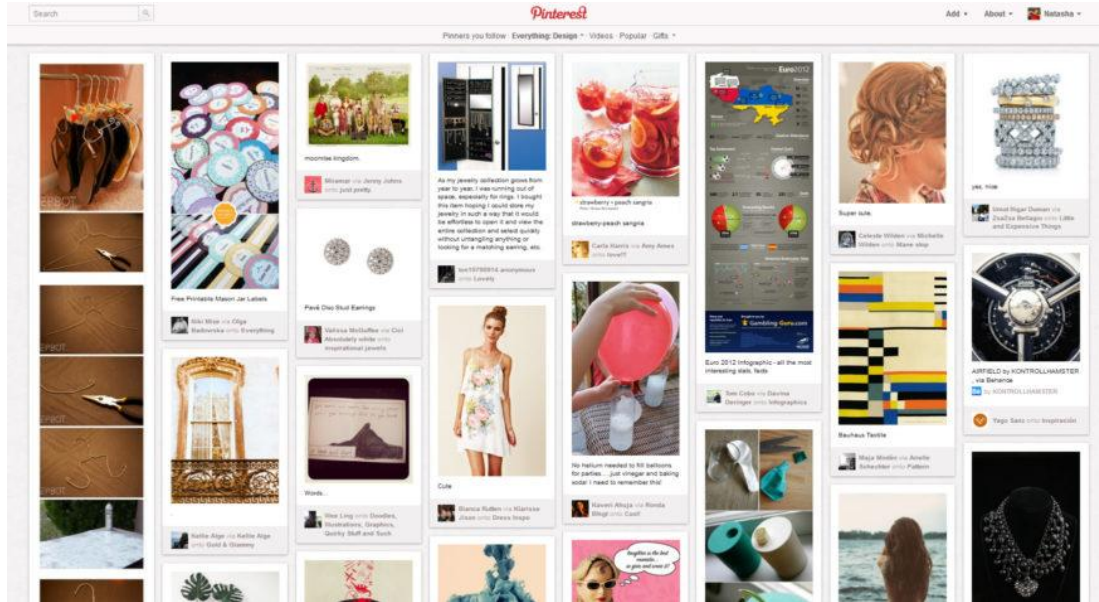
“The *theory* and *development* of computer systems able to perform tasks that normally require human intelligence.”

Is this AI?



ARTIFICIAL GENERAL INTELLIGENCE (AGI)

Artificial Narrow Intelligence (ANI)

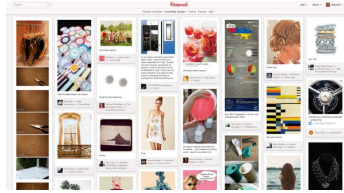




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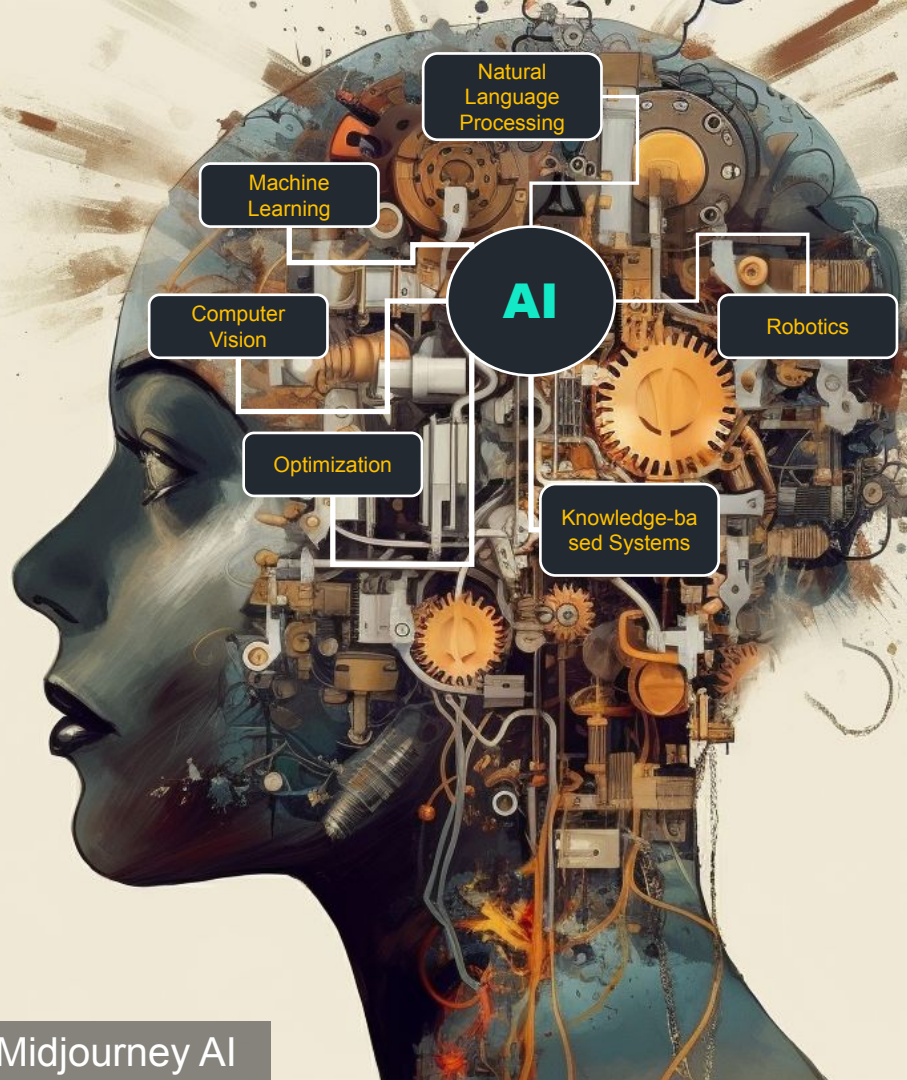
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= AI



≠ AI



Natural Language Processing

Machine Learning

Computer Vision

Optimization

Knowledge-based Systems

Robotics

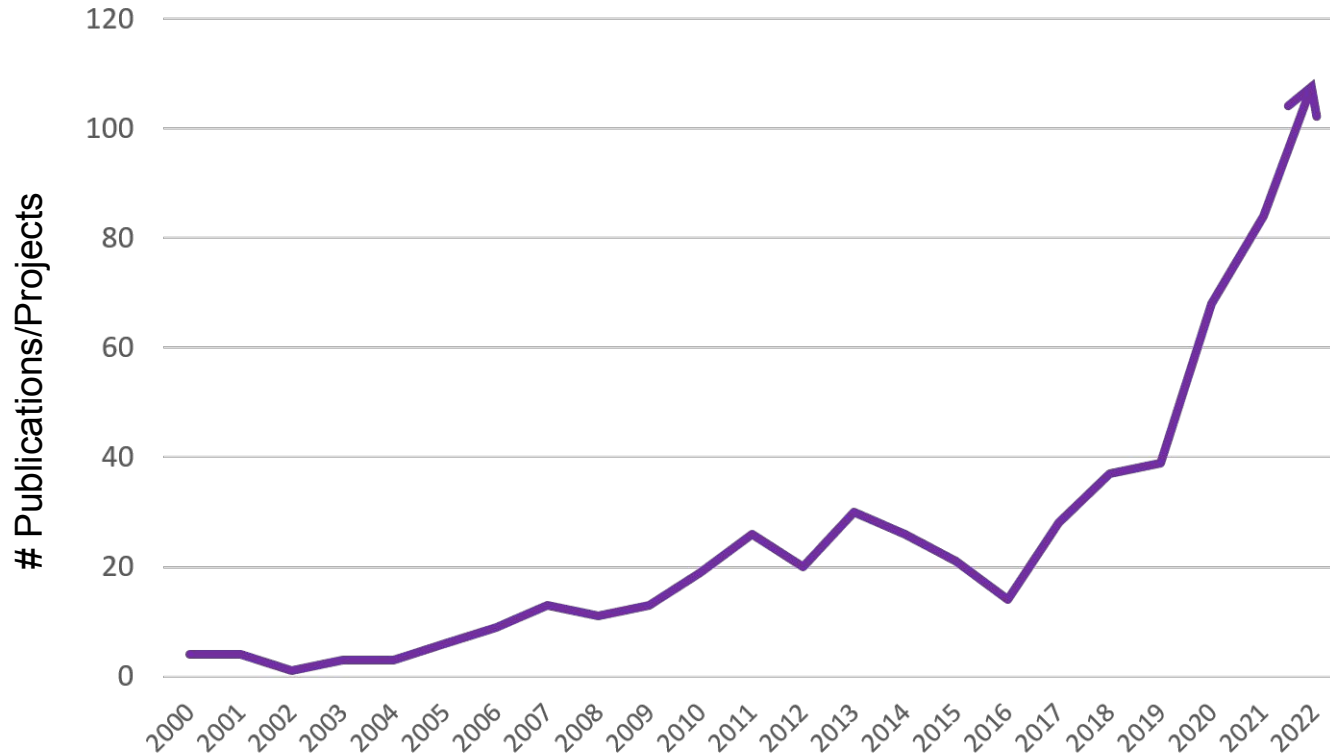
AI

Image produced using Midjourney AI

AI in Landscape Architecture

Possible AI Integrations with Landscape Architecture		Landscape Design Process												Aspects of Design								
		Marketing	Des Research	Public Outreach	Inventry/Analysis	Concept Des	Master Planning	Schematic Des	Des Development	Construction Docs	Bidding	Implementation	Post Occupancy	Maintenance	Site Des/Layout	Grading	Stormwater Mgmt	Planting Des	Hardscape	Transport infra	Urban Des	Land Use Planning
Branches of AI	Expert Systems	Green	Green		Green						Green			Green	Green	Green						
	Robotics											Red	Red	Red						Red	Red	
	Machine Learning	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	Neural Networks	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Fuzzy Logic			Yellow	Yellow					Yellow			Yellow	Yellow								
AI-adjacent tech	NLP	Purple	Purple							Purple	Purple	Purple	Purple					Purple				
	Algorithmic Design				Purple	Purple	Purple							Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
	BIM/ABM/IBM/etc				Pink	Pink	Pink	Pink	Pink	Pink												
	Geodesign																			Blue	Blue	Blue

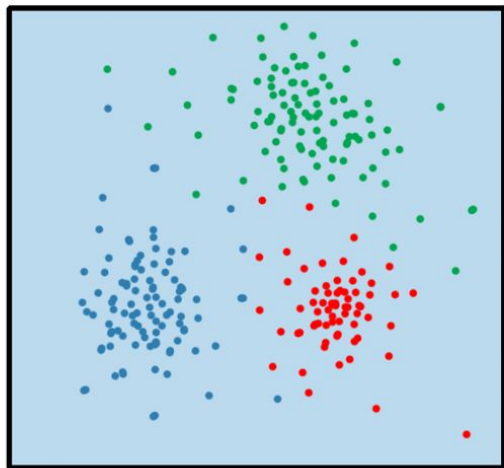
Growth in AI-LA Work through Time



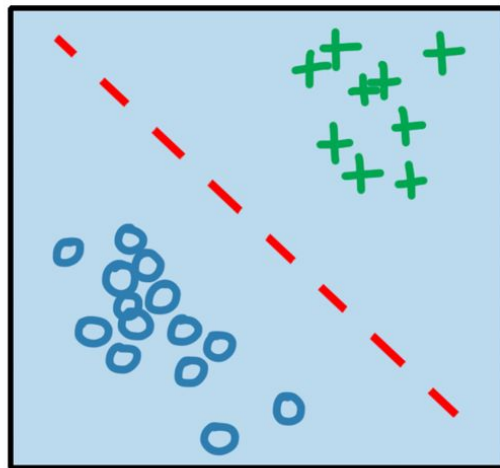
Fernberg, P., & Chamberlain, B. (2023). Artificial Intelligence in Landscape Architecture: A Literature Review. *Landscape Journal: design, planning, and management of the land* 42(1), 13-35.

machine learning

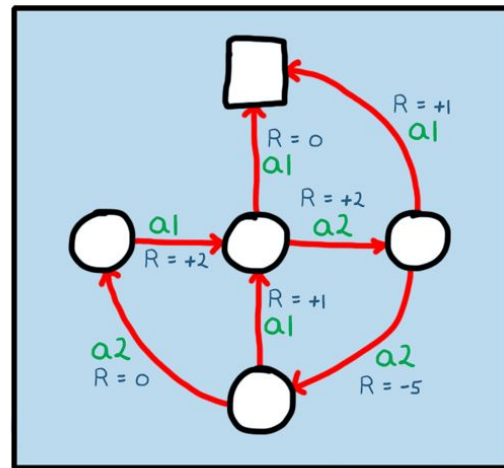
unsupervised learning



supervised learning



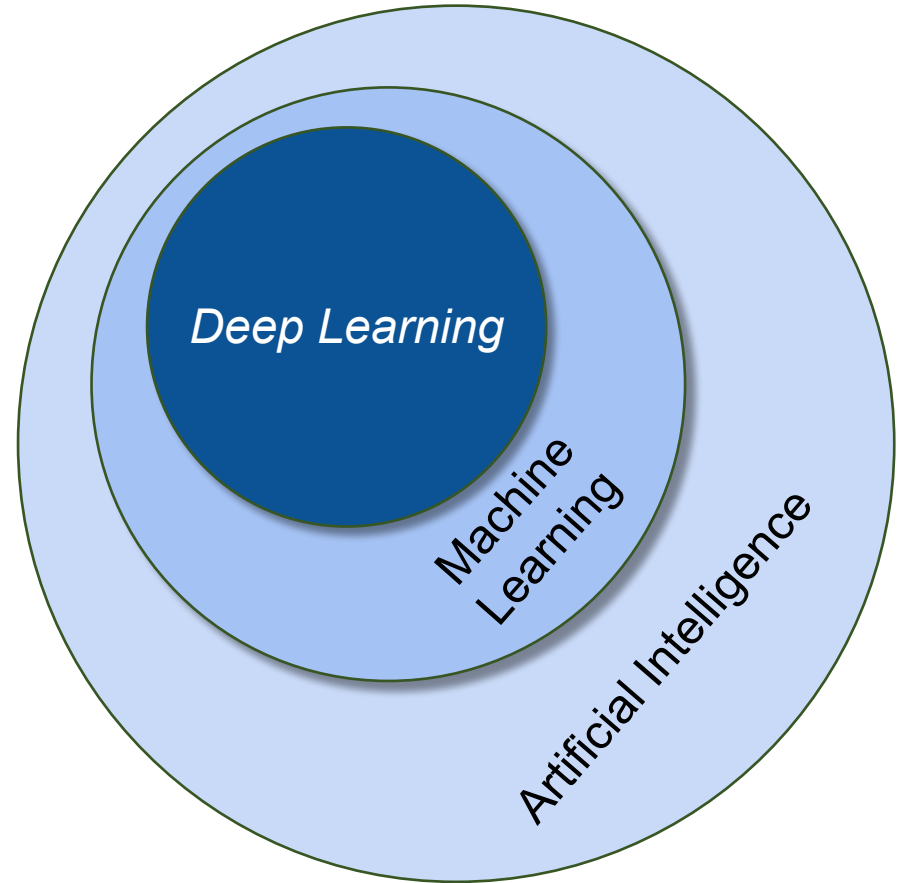
reinforcement learning

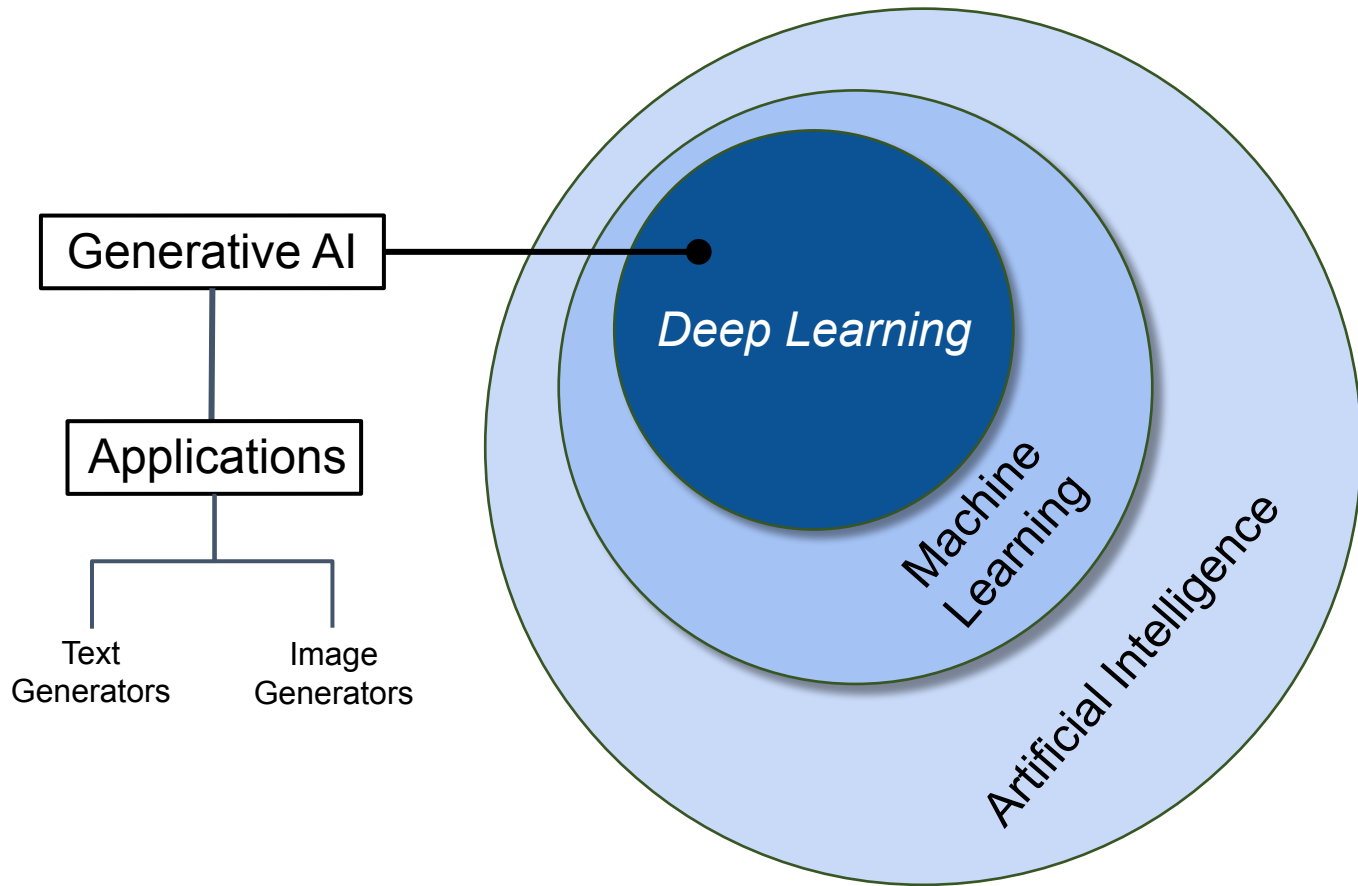


Artificial Intelligence (AI) - theory and development of computer systems able to perform tasks that normally require human intelligence

Machine Learning (ML) - form AI that helps computers learn without explicit programming. Largely statistical (regression, clustering, etc.)

Deep Learning (DL) - subset of ML that uses artificial neural networks (roughly representing neurons in the brain), allowing them to process more complex patterns than traditional ML





assess the impact of design choices on various stakeholders, and make informed decisions based on evidence and analysis.

6. Collaborative Design: AI can facilitate collaboration among landscape architects and other professionals involved in the design process. By leveraging AI-powered tools, multiple stakeholders can work together in real-time, sharing ideas, providing feedback, and making adjustments to designs. This collaborative approach can lead to more inclusive, holistic, and well-coordinated landscape designs.

While AI offers significant potential for the future of landscape architecture, it is important to note that human expertise, creativity, and intuition will remain vital. AI should be seen as a tool to augment the capabilities of landscape architects, enabling them to make more informed decisions and create landscapes that are more sustainable, functional, and aesthetically pleasing.

 Regenerate response

 Send a message.



How do LLMs work?

You can use the tool below to understand how a piece of text would be tokenized by the API, and the total count of tokens in that piece of text.

GPT-3 Codex

Enter some text

Clear

Show example

Tokens	Characters
1	1

TEXT TOKEN IDS

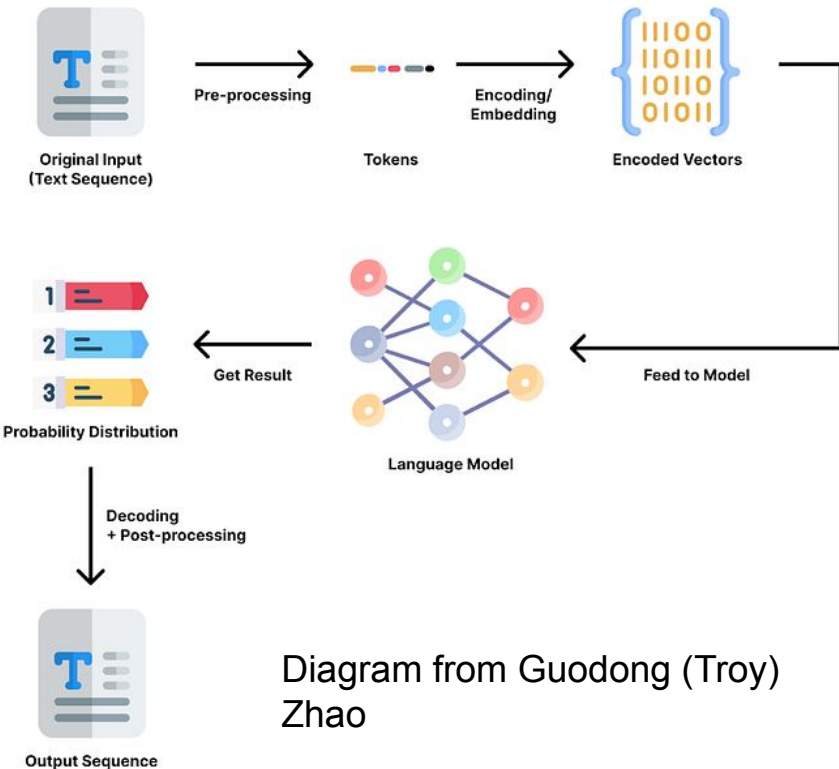


Diagram from Guodong (Troy) Zhao

ASLA 2023 Digital Tech PPN Workshop

LLMs & ChatGPT

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Design Technology Specialist,
Parallax Team;
Founder and Author,
landarchBIM

Content

1. What is LLM and how do they work?
2. What is ChatGPT?
3. What can it do for LAs?
4. Limitations & best practices
5. Cheat sheet for designers

Generative AI & ChatGPT

Generative AI

Generative AI refers to a class of artificial intelligence systems that have the ability to generate new content, including

- Texts
- Images
- Audio and music
- Even entire virtual environments

These systems use machine learning techniques, particularly deep learning, to generate data that is similar to the data they were trained on.



ChatGPT

 **DALL·E 2**



BARD AI



Stable Diffusion

Large Language Model (LLM)

A LLM is a type of language model that is able to achieve general-purpose language understanding and generation.

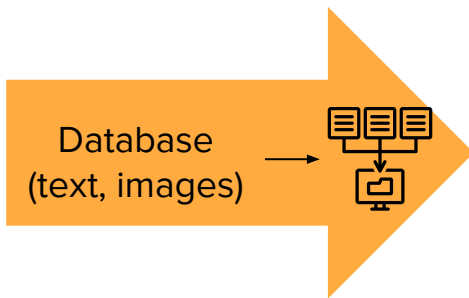
Examples of LLMs:

- GPT, OpenAI
- PaLM, Google
- LLaMa, Meta
- BLOOM



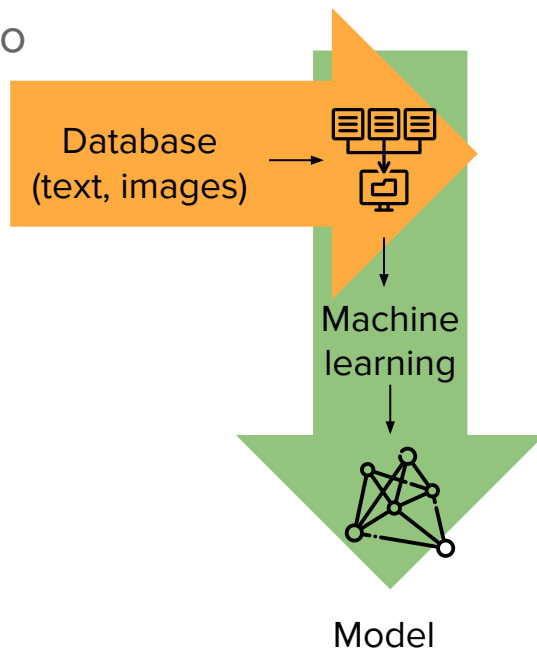
How do LLMs and AI work?

1. Begin with large body of data



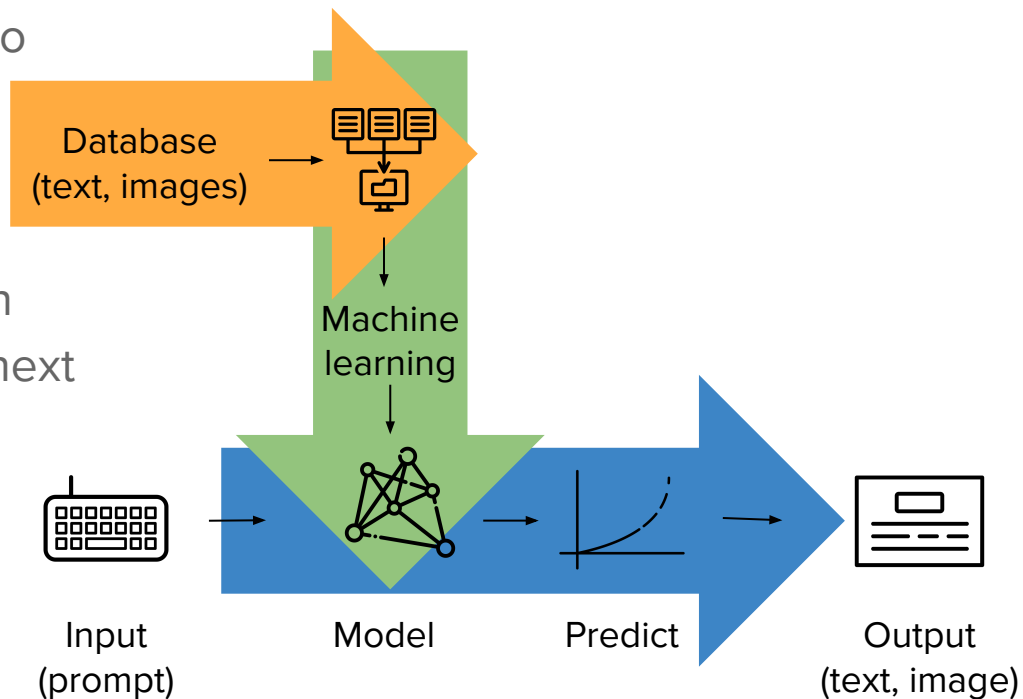
How do LLMs and AI work?

1. Begin with large body of data
2. Feed data through algorithm to create/train a model



How do LLMs and AI work?

1. Begin with large body of data
2. Feed data through algorithm to create/train a model
3. Send prompts to model, which will then predict what comes next



ChatGPT

ChatGPT (Chat Generative Pre-trained Transformer) is a large language model-based (text-based) chatbot.

- by OpenAI
- Model: GPT-3.5 or 4 (paid)
- Since 2018



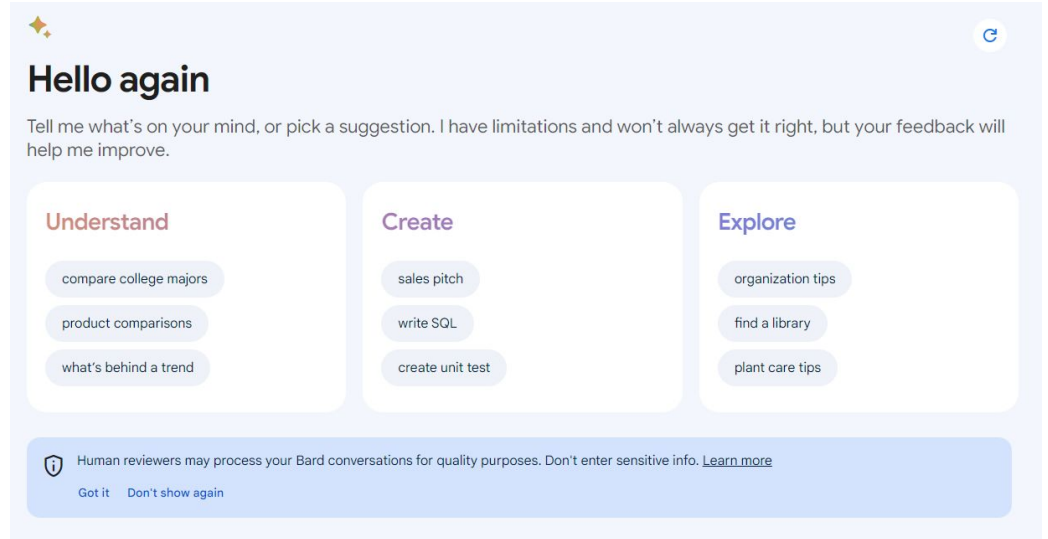
ChatGPT

ChatGPT		
☀ Examples	⚡ Capabilities	⚠ Limitations
"Explain quantum computing in simple terms"	Remembers what user said earlier in the conversation	May occasionally generate incorrect information
"Got any creative ideas for a 10 year old's birthday?"	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content
"How do I make an HTTP request in Javascript?"	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021

Google Bard (Experiment)

Google's AI chatbot that can generate text, translate languages, write different kinds of creative content & more.

- by Google
- Model: PaLM 2
- Since March 2023



What can LLM chatbots do for Landscape Architects

Ways to use ChatGPT/Google Bard

- Simple Questions
 - Design
 - Cost Estimates
 - Plant Lists
 - Translations

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- Complex Tasks
 - Code Summaries
 - Develop Framework

Ways to use ChatGPT/Google Bard

- Simple Questions
 - Design
 - Cost Estimates
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 - Translations
- Complex Tasks
 - Code Summaries
 - Develop Framework
- Copywriter
 - Summaries
 - Analysis
 - Editing
 - Critique

Brainstorming Ideas



please tell me 10 ways to use wood materials for outdoor gardens?



Wood is a versatile and popular material for outdoor gardens due to its natural aesthetics and durability when properly treated. Here are ten ways to use wood materials for outdoor garden projects:

1. **Garden Beds:** Construct raised garden beds using treated lumber or cedar. Raised beds provide good drainage and make it easier to control soil quality.
2. **Fencing:** Install wooden fences or screens to define garden boundaries, create privacy, and add a decorative element to your outdoor space.
3. **Decking:** Build a wooden deck or patio for outdoor seating, dining, and entertainment areas. Ensure the wood is appropriately treated for outdoor use.
4. **Pathways:** Create garden pathways with wooden stepping stones, mulch-covered wooden walkways, or wood plank paths.
5. **Pergolas:** Build a pergola or arbor using wooden posts and beams to provide shade and support climbing plants like vines and roses.
6. **Garden Benches:** Design and build wooden garden benches or seating areas for relaxation and enjoying the garden view.
7. **Planters:** Craft wooden planters or containers to showcase your favorite flowers, herbs, or small shrubs. You can customize them to fit various plant sizes and shapes.
8. **Garden Trellises:** Install wooden trellises to support climbing plants like tomatoes, cucumbers, or flowering vines. They add vertical interest to your garden.
9. **Compost Bins:** Build a compost bin using wood to conveniently compost garden waste and kitchen scraps, enriching your garden soil.
10. **Garden Edging:** Use wooden boards or logs to create garden edging, defining the borders of flowerbeds or vegetable plots while keeping grass and weeds at bay.

When using wood materials in your outdoor garden projects, it's essential to choose rot-resistant wood types like cedar or redwood or treat the wood with an appropriate outdoor sealant or preservative to ensure longevity and resistance to the elements. Regular maintenance, such as staining or sealing, can also help prolong the life of your wooden garden structures.

Look Up Design Dimensions



How much space is needed for a multi-usage lawn which can accommodate people play soccer during the weekend, or host a 500-people music festival?



Creating a multi-usage lawn that can accommodate weekend soccer games and a 500-person music festival will require a substantial amount of open space. Here are some considerations:

1. Soccer Field:

- For weekend soccer games, you can use a regulation-sized field or a smaller field depending on the age group and level of play.
- A regulation-sized soccer field for adults typically measures about 100 yards (300 feet) in length and 50 yards (150 feet) in width. For kids, a smaller field will suffice, such as 50-80 feet in width and 100-130 feet in length.
- Ensure there is additional space around the soccer field for safety, player movement, and spectators.

2. Music Festival Area:

- Hosting a 500-person music festival will require a significant area. The space needed can vary based on the layout, stage size, seating arrangements, vendor booths, and any other activities or amenities.
- As a rough estimate, you might allocate around 10-15 square feet per person for standing room. For a 500-person festival, this would translate to 5,000-7,500 square feet.
- Keep in mind that you'll also need space for the stage, backstage areas, sound equipment, food vendors, restrooms, and potentially a VIP area.

To combine both activities effectively on a multi-usage lawn, consider the following:

1. Flexible Design: Create a flexible lawn design with movable, collapsible soccer goals and removable seating or stage structures that can be set up and removed easily to create space for both soccer games and the music festival events on different days or times to avoid conflicts.
2. Scheduling: Coordinate the use of the space and schedule soccer games and the music festival events on different days or times to avoid conflicts.
3. Infrastructure: Ensure there are adequate power sources, restrooms, facilities, and waste disposal options to support the festival and soccer games. Also need to consider security and medical services for a multi-sized event.
4. Safety: Maintain clear separation between the soccer field and festival area to ensure the safety of participants and attendees.
5. Permits and Regulations: Hosting a music festival, even on a lawn, may require permits and compliance with local regulations. Consult with local authorities, event planners, and experts in event planning.

The space requirements for such a multi-usage lawn will be significant but manageable for many parks or open areas. Working closely with professionals in event planning, landscape architecture, and local authorities is essential to design and execute the event safely and successfully. Additionally, consider transportation and traffic management to ensure a smooth experience for attendees.

Cost Estimates



What is the cost estimate of installing a 500 square foot rain garden in Oklahoma including planting materials and labor?



The cost estimate for installing a 500 square foot rain garden in Oklahoma, including planting materials and labor, can vary depending on several factors such as the specific location within Oklahoma, the depth and design of the rain garden, the types of plants used, and labor costs. As of my last knowledge update in September 2021, I can provide you with a rough estimate. Please keep in mind that actual costs may vary. Here's a general estimate:

Low-End Estimate: \$2,500 to \$3,500

Mid-Range Estimate: \$3,500 to \$5,000

High-End Estimate: \$5,000 to \$7,000+

These estimates include the cost of materials such as plants, soil, mulch, rocks or gravel, and any labor required for excavation, planting, and site preparation.

Labor costs can vary based on local labor rates and the complexity of the rain garden design.

To get a more accurate cost estimate for your specific 500 square foot rain garden project in Oklahoma, I recommend contacting local landscaping or environmental contractors who have experience with rain garden installations in the state. They can assess your site, discuss your design preferences, and provide you with a customized estimate that takes into account local factors, materials, and labor costs. Additionally, they can help you plan for any necessary stormwater management features, which may add to the overall cost.



Get a Plant List for a Specific Region



Please give me a list of 15 commonly used perennial plants that is suitable for growing in rain gardens in Stillwater, Oklahoma.



Certainly! Here's a list of 15 commonly used perennial plants that are well-suited for rain gardens in Stillwater, Oklahoma. These plants are adapted to handle occasional periods of excess moisture and can thrive in your region:

1. **Purple Coneflower (*Echinacea purpurea*):** This native perennial produces striking purple-pink flowers and attracts pollinators like bees and butterflies.
2. **Black-Eyed Susan (*Rudbeckia hirta*):** A cheerful and hardy perennial with bright yellow flowers that bloom throughout the summer.
3. **Swamp Milkweed (*Asclepias incarnata*):** A must-have for supporting monarch butterflies, it features pink blossoms and thrives in moist conditions.
4. **Cardinal Flower (*Lobelia cardinalis*):** This native perennial offers vibrant red blooms and is a favorite of hummingbirds.
5. **Joe Pye Weed (*Eutrochium purpureum*):** With its tall stature and clusters of pink or purple flowers, it's a magnet for pollinators.
6. **Copper Iris (*Iris fulva*):** A native iris species with copper-colored blooms, well-suited to wetter conditions.
7. **Great Blue Lobelia (*Lobelia siphilitica*):** Known for its striking blue flowers and tolerance for moist soils.
8. **Blue Flag Iris (*Iris virginica*):** A native iris with blue-purple blossoms and attractive, sword-like foliage.
9. **Blazing Star (*Liatris spp.*):** These tall, spiky perennials produce striking purple or white flower spikes, attracting butterflies.
10. **Bee Balm (*Monarda spp.*):** Known for its aromatic foliage and vibrant tubular flowers, it's a favorite of pollinators.
11. **Switchgrass (*Panicum virgatum*):** A native grass that provides structure and helps with soil erosion control.
12. **Little Bluestem (*Schizachyrium scoparium*):** A native grass with fine-textured foliage that turns reddish-brown in the fall.
13. **Sideoats Grama (*Bouteloua curtipendula*):** A native grass that adds a graceful, airy quality to the garden.
14. **New England Aster (*Symphotrichum novae-angliae*):** Late-blooming with purple or pink flowers, providing nectar for pollinators.
15. **Culver's Root (*Veronicastrum virginicum*):** A tall perennial with spiky white flowers and attractive foliage.

Translations

Beschreibung

Bellagio Cavoli Picknicktisch 220x85x74 cm

Der Bellagio Cavoli Picknicktisch 220x85x74 cm – ein echter Hingucker in jedem Garten! Aluminium verleiht dem Tisch ein modernes Aussehen. Das besondere Merkmal dieses Picknicktisches ist, dass die Beine der Sitzfläche mit den Tischbeinen verbunden sind. Somit wird ein sicheres und bequemes Sitzen ermöglicht. Auf jeder Seite finden 3 Personen bequem nebeneinander Platz.

Material und Eigenschaften

Das Gestell des Cavoli Picknicktisches ist aus pulverbeschichtetem Aluminium gefertigt. Pulverbeschichtet bedeutet, dass die Farbe unter großer Hitze auf das Aluminium gebrannt wird. Hierdurch ist der Tisch ideal vor Witterungseinflüssen geschützt. Aluminium ist pflegeleicht, leicht im Gewicht und stabil. Außerdem rostet Aluminium nicht durch.

Der Picknicktisch kann im Winter am besten drinnen gelagert werden. Wenn diese Möglichkeit nicht besteht, kann dieser draußen stehen bleiben. Wir empfehlen Ihnen, Ihre Gartenmöbel nicht abzudecken. Unter einer Abdeckung können sich Feuchtigkeitflecken auf dem Material bilden.

Vervollständigen Sie Ihr Gartenmöbel-Set

Der Cavoli Picknicktisch lässt sich gut mit verschiedenen Accessoires und anderen Möbeln kombinieren. Denken Sie auch an unser großes Angebot an Kissen zur individuellen Gestaltung Ihres Gartenmöbel-Sets. Sonnenschirme aus unserem Sortiment sorgen für noch mehr Komfort. Stellen Sie Ihre eigene Kombination zusammen oder lassen Sie sich von uns beraten. Wir helfen Ihnen gerne weiter!



Description

Bellagio Cavoli Picnic Table 220x85x74 cm

The Bellagio Cavoli Picnic Table 220x85x74 cm is a real eye-catcher in any garden! Aluminum gives the table a modern appearance. The special feature of this picnic table is that the bench legs are connected to the table legs, ensuring safe and comfortable seating. Three people can comfortably sit side by side on each side.

Material and Features

The frame of the Cavoli picnic table is made of powder-coated aluminum. Powder-coated means that the color is baked onto the aluminum at high heat, providing excellent protection against weather conditions. Aluminum is easy to maintain, lightweight, and stable. Additionally, aluminum does not rust.

It is best to store the picnic table indoors during the winter. If this is not possible, it can remain outdoors. We do not recommend covering your garden furniture, as moisture stains can form on the material under a [cover](#).

Complete Your Garden Furniture Set

The Cavoli picnic table can be easily combined with various accessories and other furniture pieces. Don't forget to explore our wide range of cushions for customizing your garden furniture set. Umbrellas from our selection add even more comfort. Create your own combination or let us assist you. We are here to help!

Code Research

Input:

look up city of Seattle code for a site located at the intersection of 9th Ave and Pine Street



The intersection of 9th Ave and Pine Street in Seattle is located in the **Downtown Commercial (DC)** zoning district. The DC zone is intended to provide for a variety of commercial and retail uses, as well as high-rise office and residential development.

The following are some of the key provisions of the Seattle Municipal Code (SMC) that apply to development in the DC zone:

- **Height limits:** Buildings in the DC zone are limited to a height of 400 feet.
- **Density requirements:** New development in the DC zone must achieve a minimum density of 12 floor area ratio (FAR). FAR is a measure of the total floor area of a building divided by the area of the lot on which it is built.
- **Setback requirements:** Buildings in the DC zone must be set back from the property line by a distance equal to 10% of the building height, with a minimum setback of 10 feet.
- **Parking requirements:** New development in the DC zone must provide a certain amount of parking for vehicles. The specific requirements vary depending on the type of use and the location of the development.

In addition to the general zoning requirements, there are a number of other SMC provisions that may apply to development at the intersection of 9th Ave and Pine Street. For example, the property may be located within a historic district, which would impose additional restrictions on development.

To determine the specific code requirements that apply to a particular site, it is always best to consult with the Seattle Department of Planning and Development (DPD). The DPD can provide information on the zoning district for the site, as well as any other applicable regulations.

Here are some additional resources that may be helpful:

- Seattle Municipal Code (SMC): https://library.municode.com/wa/seattle/codes/municipal_code
- Seattle Department of Planning and Development (DPD): <https://www.seattle.gov/sdci>
- DPD Zoning Map: <https://www.seattle.gov/sdci/resources/zoning-map-books>



Note: this requires Google Bard, as free version of Chat-GPT doesn't have internet access

Complex Process

Input:

Develop a framework for starting and running a volunteer group that meets monthly to remove invasive species in local parks



Starting and running a volunteer group dedicated to removing invasive species in local parks is a noble and impactful endeavor. Here's a framework to help you get started and effectively manage such a group:

1. Define the Mission and Goals:

- Clearly define the mission of your group, such as "To protect and restore local ecosystems by removing invasive species from our parks." Establish specific, measurable goals to track progress.

2. Research and Identify Invasive Species:

- Collaborate with local environmental organizations, botanists, or park authorities to identify the specific invasive species present in your parks. Prioritize based on the ecological impact.

3. Legal and Safety Considerations:

- Ensure you are complying with local laws and regulations regarding invasive species removal. Develop safety guidelines and protocols for volunteers to follow.

4. Recruitment and Outreach:

- Create a website or social media presence to attract volunteers. Reach out to local community groups, schools, and environmental organizations to spread the word.

5. Training and Education:

- Provide training to volunteers on the identification and proper removal techniques for invasive species. Consider partnering with experts for workshops.

6. Monthly Meetings:

- Set a regular schedule for monthly meetings to organize group activities. These meetings can also serve as a platform to share knowledge and progress updates.

7. Workdays and Events:

- Plan and organize workdays in the parks, where volunteers come together to remove

8. Data Collection and Reporting:

- Encourage volunteers to record the species they remove. Use this data to track progress and show the impact.

9. Collaboration:

- Partner with local authorities, park managers, and other organizations to gain support, access to resources, and a broader reach.

10. Resources and Tools:

- Secure the necessary tools, such as gloves, pruning shears, and bags, and ensure their storage and transport to work sites.

11. Fundraising and Grants:

- Explore fundraising options and apply for grants to purchase equipment, and educational materials.

12. Recognition and Appreciation:

- Recognize and appreciate your volunteers for their contributions through appreciation events or awards to boost morale.

13. Monitoring and Adaptation:

- Continuously monitor and evaluate the effectiveness of your strategies and goals as you learn more about the impact of your work.

14. Public Awareness:

- Educate the community about the importance of removing invasive species and the benefits of your group's work. Engage in outreach efforts.

15. Long-Term Sustainability:

- Plan for the long-term sustainability of your group by securing ongoing funding, and developing a strategy for future growth.

16. Evaluation and Impact Assessment:

- Periodically assess the impact of your group's work and use this data to improve and expand your efforts.

Running a volunteer group to combat invasive species

Part of Larger Process

Input:

create a short description of Gaultheria shallon for an image generator



Gaultheria shallon, commonly known as Salal, is a Pacific Northwest native evergreen shrub. It features glossy, oval-shaped leaves, clusters of bell-shaped flowers, and dark, edible berries. Salal thrives in forested environments and provides lush ground cover, making it a key component of its ecosystem. The image should depict a dense shrub with dark green foliage, white to pinkish flowers, and purplish-black berries.



Marketing Assistant

Input:

Using this description, come up with 5 catchy titles for a conference session:
This session will show examples of how landscape architects can use generative AI for practical use within landscape architectural practice. The session will focus on ChatGPT and Stable Diffusion



1. "AI in Bloom: ChatGPT and Stable Diffusion for Landscape Architects"
2. "Generative AI Unleashed: Transforming Landscape Architecture"
3. "ChatGPT & Stable Diffusion: Shaping the Future of Landscape Design"
4. "Landscapes of Tomorrow: A Deep Dive into Generative AI Tools"
5. "From Pixels to Parks: Empowering Landscape Architects with AI"



Summarizer


Input:

Condense this summary of Fredrick Law Olmsted into 50 words:

Frederick Law Olmsted (April 26, 1822 – August 28, 1903) was an American landscape architect, journalist, social critic, and public administrator. He is considered to be the father of landscape architecture in the United States. Olmsted was famous for co-designing many well-known urban parks with his partner Calvert Vaux. Olmsted and Vaux's first project was New York's Central Park, which led to many other urban park designs, including Prospect Park in Brooklyn and Cadwalader Park in Trenton, New Jersey.^[2] He headed the preeminent landscape architecture and planning consultancy of late 19th century United States, which was carried on and expanded by his sons, Frederick Jr. and John C., under the name Olmsted Brothers.^[3]

Other projects that Olmsted was involved in include the country's first and oldest coordinated system of public parks and parkways in Buffalo, New York; the country's oldest state park, the Niagara Reservation in Niagara Falls, New York; one of the first planned communities in the United States, Riverside, Illinois; Mount Royal Park in Montreal, Quebec; The Institute of Living in Hartford, Connecticut; Trinity College in Hartford, Connecticut; Waterbury Hospital in Waterbury, Connecticut; the Emerald Necklace in Boston, Massachusetts; Highland Park in Rochester, New York; the Grand Necklace of Parks in Milwaukee, Wisconsin; Cherokee Park and parks and parkway system in Louisville, Kentucky; Walnut Hill Park in New Britain, Connecticut; the Biltmore Estate in Asheville, North Carolina; the master plans for the University of California, Berkeley, the University of Maine, Stanford University near Palo Alto, California, Mount Holyoke College, The Lawrenceville School; and Montebello Park in St. Catharines, Ontario. In Chicago his projects include Jackson Park, Washington Park, the main park ground for the 1893 World's Columbian Exposition, the south portion of Chicago's emerald necklace boulevard ring, and the University of Chicago campus. In Washington, D.C., he worked on the landscape surrounding the United States Capitol building.

The quality of Olmsted's landscape architecture was recognized by his contemporaries, who showered him with prestigious commissions. Daniel Burnham said of him, "He paints with lakes and wooded slopes; with lawns and banks and forest-covered hills; with mountainsides and ocean views ..."^[4] His work, especially in Central Park, set a standard of excellence that continues to influence landscape architecture in the United States. He was an early and important activist in the conservation movement, including work at Niagara Falls; the Adirondack region of upstate New York; and the National Park system; and, though little known, played a major role in organizing and providing medical services to the Union Army in the Civil War.^[5]

Frederick Law Olmsted	
	
Olmsted in 1893; engraving after a photograph	
Born	April 26, 1822 ^[1] Hartford, Connecticut, U.S.
Died	August 28, 1903 (aged 81) Belmont, Massachusetts, U.S.
Resting place	Old North Cemetery, Hartford, Connecticut, U.S.
Occupation	Landscape architect
Notable work	New York City Park
Spouse	Mary Cleveland Perkins
Children	John Charles, Charlotte, Owen,



Frederick Law Olmsted, the father of American landscape architecture, co-designed iconic urban parks like Central Park and Prospect Park with Calvert Vaux. His influential firm, carried on by his sons, shaped numerous public parks, state parks, campuses, and more, leaving a lasting mark on American landscape design and conservation.



https://en.wikipedia.org/wiki/Frederick_Law_Olmsted

Rewrite Texts w/ Plain Language



You are a climate change engineer.
Please rewrite the following with plain
language for people who are not expert
in this field:

Note: Original texts are the definition of Climate Change from UN
<https://www.un.org/en/climatechange/what-is-climate-change>



Sure, let's break down the concept of climate change into simpler terms:

What Is Climate Change?

Climate change is when the Earth's weather and temperatures change over a long period. Sometimes, this happens naturally because of things like the sun's behavior or big volcanic eruptions. But since the 1800s, people have become the main reason for climate change. This is mainly because we burn fossil fuels, such as coal, oil, and gas.

When we burn these fuels, they release something called greenhouse gases. These gases act like a warm blanket around the Earth. They trap the sun's heat, making our planet hotter.

The main greenhouse gases that are causing climate change are carbon dioxide and methane. We produce these gases when we use gasoline for our cars, burn coal to heat buildings, or cut down forests. Things like farming and operations in the oil and gas industry also produce a lot of methane. Many different areas, like energy, factories, transportation, buildings, farming, and how we use land, are responsible for making these greenhouse gases.

ChatGPT Limitations

Potential to be entirely made-up, inaccurate, or dated

- Being a very helpful chatbot, it is incapable of doing some basic math calculations
- Made-up citations
- Dated/incorrect information (prior to Sep 2021)



$\$549.72 + \$6.98 + \$41.00 + \$35.00 + \$552.00 + \$76.16 + \$29.12$



To find the sum of these values, simply add them together:

$\$549.72 + \$6.98 + \$41.00 + \$35.00 + \$552.00 + \$76.16 + \$29.12 = \$1,340.98$

So, the sum of the given values is \$1,340.98.



The correct answer should be
\$1,289.98

It doesn't provide in-depth information



please explain to me how to pour concrete for a pedestrian sidewalk.



Certainly! Here's a step-by-step guide for pouring a concrete sidewalk:

Tools and Materials:

- Safety gear (gloves, safety glasses, dust mask)
- Ready-mix concrete or mix your own (cement, sand, gravel)
- Wooden forms and stakes
- Shovel, wheelbarrow, concrete rake, trowel, float, groover
- Water source
- Vibrating compactor (optional)

Steps:

1. **Plan:** Decide the sidewalk's dimensions and location. Check for any necessary permits.
2. **Dig:** Excavate the area, making it level and about 4 inches deep.
3. **Set Forms:** Secure wooden forms along the edges to mark the sidewalk's width and depth.
4. **Reinforce (optional):** If needed, add rebar or wire mesh within the forms.
5. **Mix:** Follow instructions for ready-mix or mix cement, sand, and gravel with water until you have the right consistency.
6. **Pour:** Start at one end, pour the concrete, and spread it evenly within the forms.
7. **Level and Finish:** Use a screed to level the surface, then a float to smooth it. Add a non-slip texture with a broom if desired.
8. **Cure:** Cover the concrete and keep it moist for at least 7 days.
9. **Add Joints:** After partial curing, use a groover to create expansion joints.
10. **Cleanup:** Clean tools and dispose of waste properly.

Keep safe throughout the process and consider weather conditions, as extreme temperatures can affect curing. If unsure, consult local experts or contractors for guidance.

It cannot access the internet.



What is the current weather in Boston, MA?



I'm unable to provide real-time information as my knowledge was last updated in September 2021, and I don't have browsing capabilities. To find the current weather in Boston, MA, I recommend using a weather website or app, or you can perform a web search for "Boston, MA weather" to get the latest and most accurate weather updates.



Other Limitations

- Overly wordy answers
- Takes questions at face value
- Not have emotional intelligence
- Answers questions very robotically
- Potential biased answers



Best Practices



- Remind yourself it can be wrong
- Double check its accuracy and reliability against reputable sources
- Use common sense
- Crafting clear and effective prompts

ChatGPT Cheat Sheet

- Act as...
- Create a...
- Consider...

Chat GPT Cheat Sheet for Architects and Designers

Prompt formula: Act as a [\[Specialist\]](#). Create a [\[Task/Asset\]](#). Consider [\[X Details\]](#)

Act as a...	Create a...	Consider...
<ul style="list-style-type: none">Residential architectCommercial architectLandscape architectInterior designerStructural engineerArchitectural lighting proSustainability specialistEnvironmental consultantArchitectural historianGraphic designerVisionary futurist	<ul style="list-style-type: none">Client brief templateSample feasibility studySite analysis templateModern style guideFoundation optionsOutline for lighting planSet of passive design ideasList of risk factorsDetailed lesson planSeries of branding tacticsPrediction for future cities	<ul style="list-style-type: none">Specific site constraintsConstruction budgetEnvironmental contextCurrent design trendsSoil conditionsDesired atmosphereSustainability specialistLocal geographyInfluential architectsCompany culture and voiceEmerging technologies

Chat GPT writing style

"Write in 'X' style"

Formal vs. Informal
Simple vs. Technical
Descriptive vs. Concise
Academic vs. Editorial
Informative vs. Inspirational

Best AI tool for...

- Concept design: [Midjourney](#), [LookX](#) & [Adobe Firefly](#)
- Generating design alternatives: [Maket.ai](#)
- Residential planning: [ARCHITECHTURES](#)
- Schematic design: [ArkDesign.ai](#)
- Urban planning: [Autodesk Forma](#)
- 3D modeling: [Grasshopper](#) & [Sloyd.AI](#)
- Renovation projects: [Luma.ai](#) & [Skipp Renovation](#)
- Building information modeling (BIM): [BricsCAD BIM](#)
- Rendering: [Veras by EvolveLAB](#) & [Arko.ai](#)
- Sustainable design: [Prooptima](#)
- Project management: [ClickUp](#)
- Site Planning: [TestFit](#) & [UrbanForm](#)
- 3D Sketching: [SketchUp AI](#)

Top 3 Chat GPT tips

1. Use unique adjectives
2. Be specific
3. Provide examples

Try these prompt examples...

- Specific Questions:** "What are the key considerations when designing a net-zero energy building?"
- Comparative Prompts:** "Compare and contrast the architectural styles of Modernism and Postmodernism."
- Instructional Prompts:** "Offer tips on optimizing acoustics in an auditorium design for enhanced sound quality."
- Opinion-seeking Prompts:** "In your opinion, how can architecture contribute to social sustainability and community well-being?"
- Request for Examples:** "Can you provide case studies of successful adaptive reuse projects?"

AI Alternatives




-  **For text:** Bing AI, Bard, HuggingChat, Sparrow, YouChat, ChatSonic
-  **For images:** Stable Diffusion + ControlNet, LookX, DALL-E 2
-  **For video:** Synthesia, Runway, Lumen5



Image Generators

Phil Fernberg
Utah State University
OJB

Benjamin George
Utah State University

Tony Kostreski
Vectorworks





Platforms and access

Prompt recipes

Section view demo

Plan view demo

Stylization

Constraints



Midjourney

Cloud-based Discord interface, subscription-based, superior artistry

Prompts: detailed, plain language



DALL-E

Cloud-based web interface, credit-based, literal

Prompts: clear, simple, and segmented for maximum efficacy



Stable Diffusion

Local-based GUI, open-source, multitude of models, integration with other software

Prompts: plain language use weighting and negative prompts



Cloud-based, integrated into Photoshop, uses Adobe-owned Photos for training

Prompts: plain language with weighting and negative prompts

Dall-E 2/3

Reliable

Fewest prompts

Effective variation

Midjourney

Least reliable

Many prompts

Effective variation

Often abandoned

Excellent stylization

Stable Diffusion

Reliable

Fewer prompts

Effective variation

Effective stylization

Excellent image

prompting

(ControlNet)



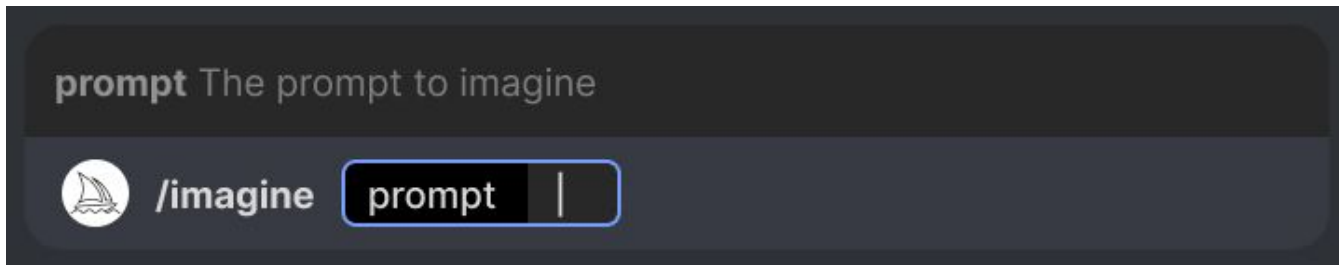
Get Started with Midjourney Recipes

- Idea Generation
- Plant Combination Studies
- Seamless Patterns or Textures
- HDRI Backgrounds



HOW IT WORKS

1. Type `/imagine prompt`
2. Type a description of the image you want to see in the prompt field
3. Optional: Add parameters at the end





HOW IT WORKS

SIMPLE PROMPT

`/imagine prompt`

description of what to imagine

Text Prompt

ADVANCED PROMPT

`/imagine prompt`

`http://imageURL1.png http://imageURL2.png description of what to imagine --parameter 1 --parameter 2`

Image Prompts

Text Prompt

Parameters



Midjourney Bot ✓ BOT

vibrant california poppies



U1

U2

U3

U4



V1

V2

V3

V4

U1 U2 U3 U4 Image Selection and Upscale



Re-run the original prompt

V1 V2 V3 V4 Image Variation



IDEA GENERATION

Prompt Recipe:

/imagine prompt “A mood board for a <STYLE> <PROJECT TYPE> with <LIST OBJECTS>”

Prompt Example:

“A mood board for a modern urban plaza with seating areas, water features, and planting”



Prompt Example 1:

“A mood board for a modern urban plaza with seating areas, water features, and planting”

Prompt Example 2:

“A mood board for a modern residential garden with lush planting, bluestone patio, furniture, pool, border planting”





PLANT COMBINATION STUDIES

Prompt Recipe:

/imagine prompt *“lush plant bed of <LIST PLANTS> on white background, realistic”*

Prompt Example

“lush plant bed of reticulate iris, morning light maiden grass, tassel fern, st. louis gold tropical water lily, yellow wave new zealand flax on white background, realistic”



Prompt Example 1:

“lush plant bed of reticulate iris, morning light maiden grass, tassel fern, st. louis gold tropical water lily, yellow wave new zealand flax on white background, realistic”

Prompt Example 2:

“lush plant bed of carex elata, hosta sieboldiana, and matteuccia struthiopteris on white background, realistic”



Prompt Example 3:

“lush plant bed of tufted Hair Grass, Annabelle Hydrangea, Hidcote Lavender, Hidcote Blue English Lavender, Russian Sage on white background, realistic”

Prompt Example 4:

“lush plant bed of purple dome new england aster, Caradonna meadow sage, black-eyed susan, reticulate iris, limelight japanese stonecrop on white background, realistic”



SEAMLESS PATTERNS OR TEXTURES

Parameters:

--tile “The `--tile` parameter generates images that can be used as repeating tiles to create seamless patterns for fabrics, wallpapers and textures.”

--ar “The `--aspect` or `--ar` parameter changes the aspect ratio of the generated image. An aspect ratio is the width-to-height ratio of an image. It is typically expressed as two numbers separated by a colon, such as 7:4 or 4:3.”

Prompt Recipe:

`/imagine prompt` “<INSERT OBJECT TYPE> `--tile --ar` <SET RATIO>”

Text Prompt

Parameters



SEAMLESS PATTERNS OR TEXTURES

Prompt Recipe:

/imagine prompt "<INSERT OBJECT TYPE> --tile"

Prompt Example

"linear thin pieces of gray stone, different widths --tile



Prompt Example 1:

/imagine "linear thin pieces of gray stone, different widths --tile



Prompt Example 1:

Upscale image 1





Prompt Example 2:

/imagine "rough cut limestone --tile --ar 2:1"



Prompt Example 2:
Upscale 1



Prompt Example 4:

/imagine "white pebbles and gravel --tile --ar 2:1"



Prompt Example 4:
Upscale 4



Prompt Example 4:
Upscale 4



When you're ready, edit the prompt to describe the new image



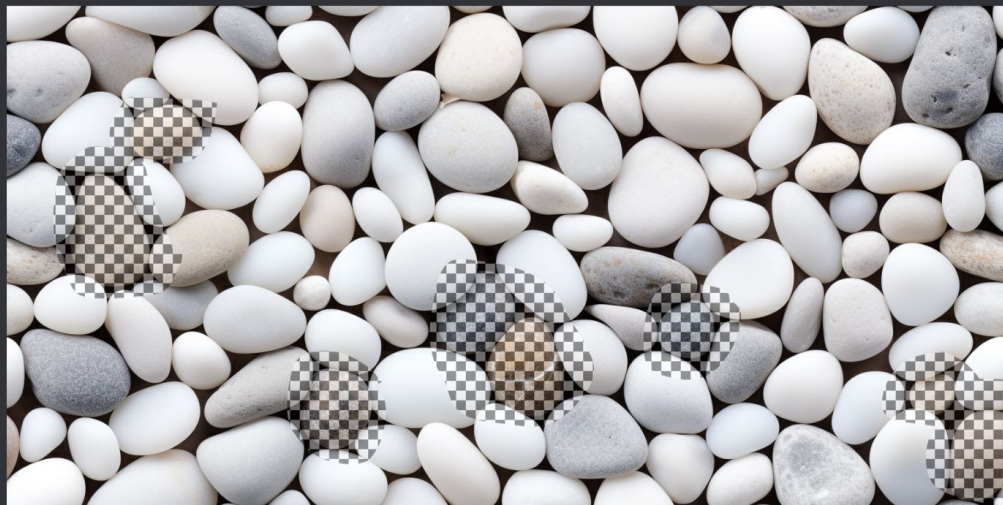
white pebbles and gravel --tile --ar 2:1



Vary Region



Midjourney Bot BOT
Editor



white pebbles and gravel --tile --ar 2:1



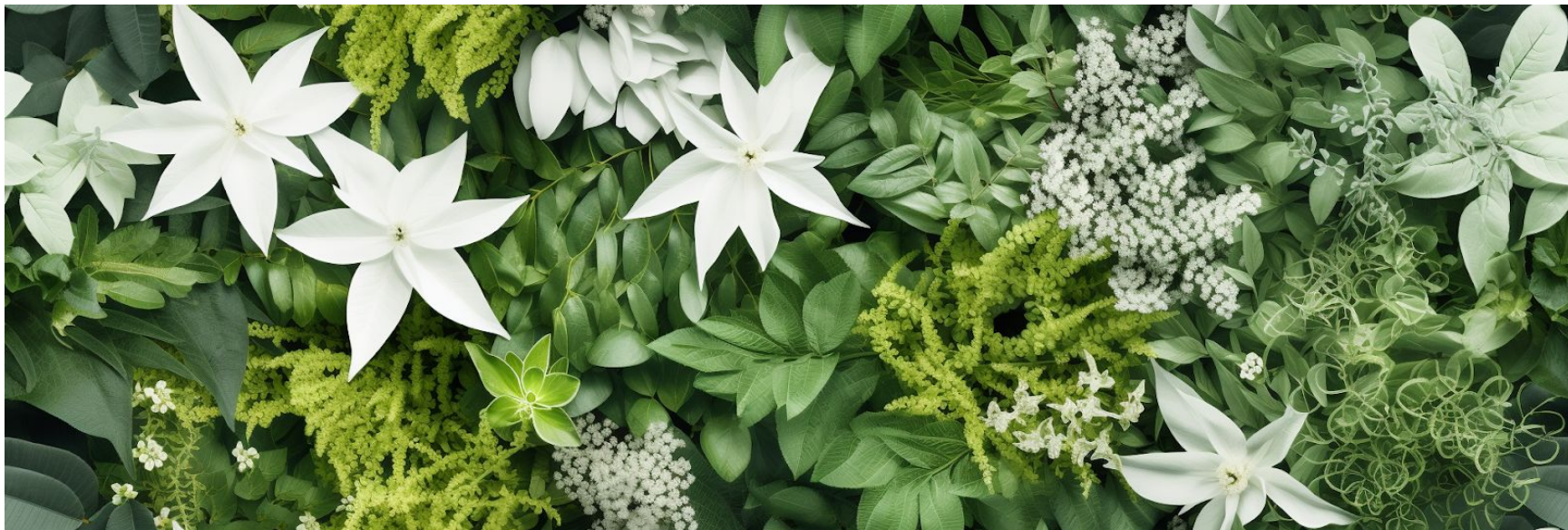






Prompt Example 4:

/imagine "white and green plant mix, view from above, realistic --tile --ar 3:1"



Prompt Example 4:
Upscale 3





Prompt Example 5:

/imagine "pothos vine, photoreal, white background --tile --ar 3:1"



Prompt Example 5:
Upscale 4





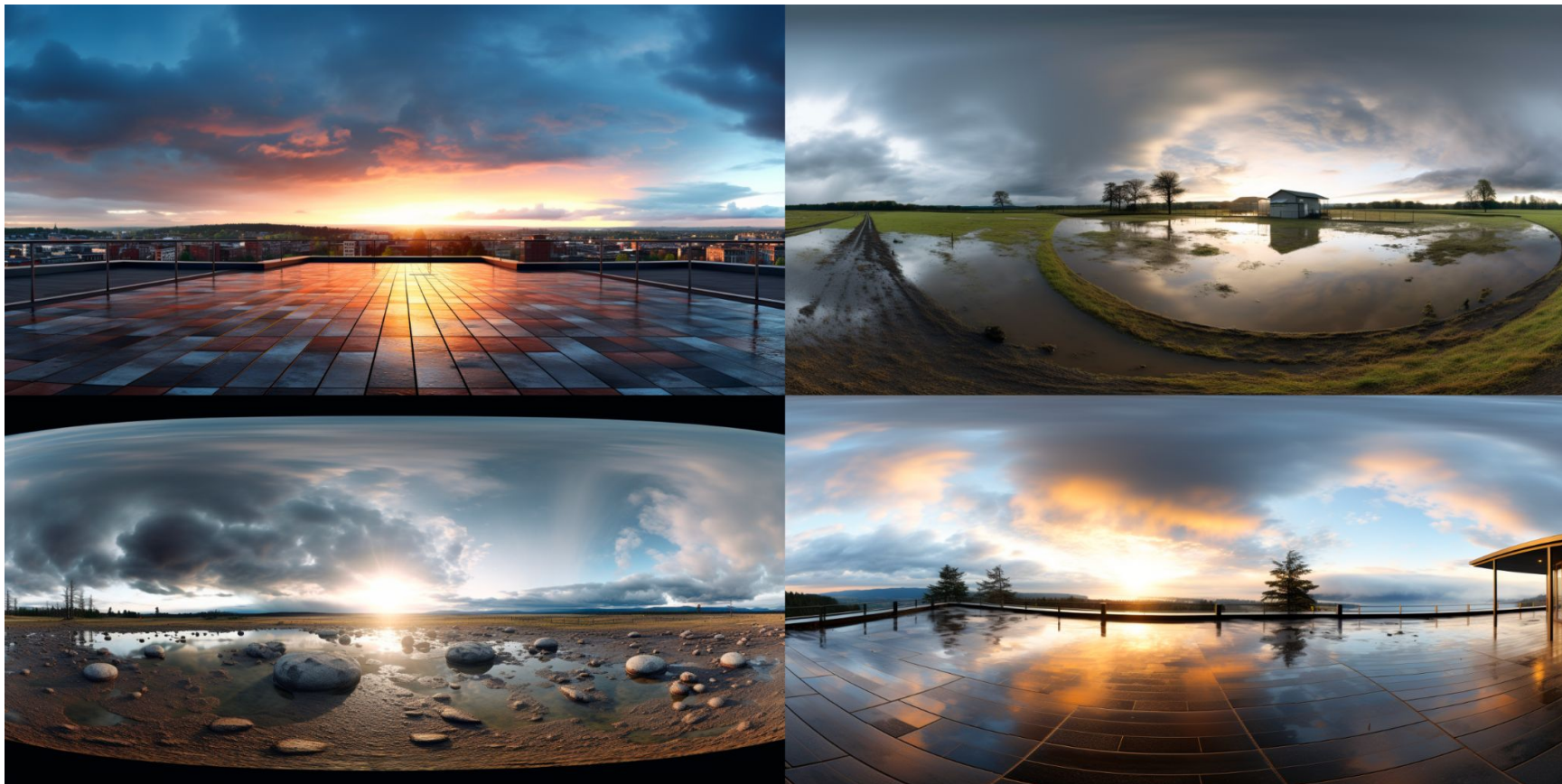
HDRI Backgrounds

Prompt Recipe:

/imagine prompt "Create a vivid 360 panoramic HDRI photograph of <INSERT TEXT> --ar 2:1 "

Prompt Example

"Create a vivid 360 panoramic HDRI photograph of overcast sky, raining --ar 2:1



Prompt Example 1:

/imagine "Create a vivid 360 panoramic HDRI photograph of overcast sky, raining --ar 2:1 "



Prompt Example 1:
Upscale image 2



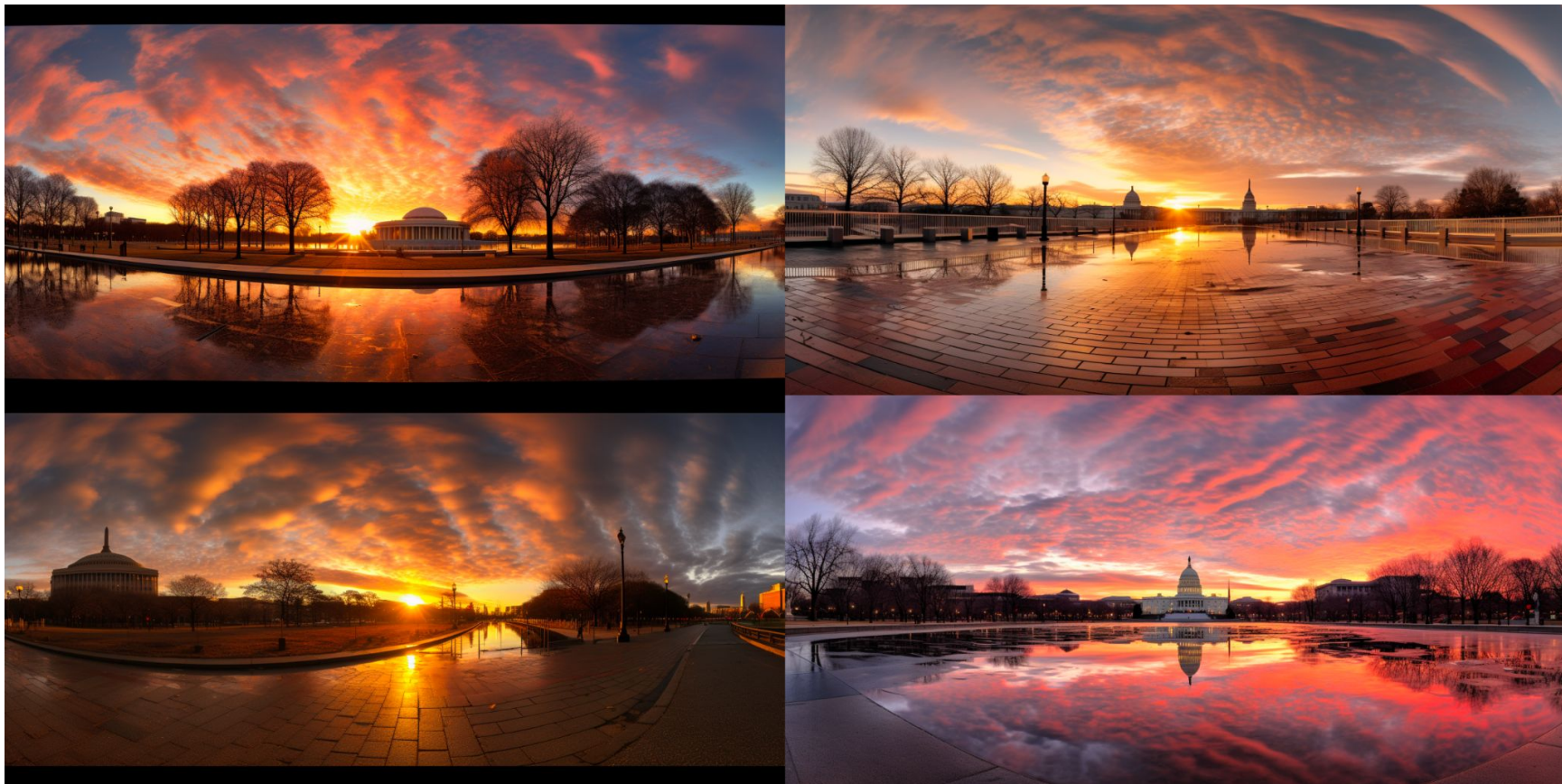
Prompt Example 2:

/imagine "Create a vivid 360 panoramic HDR1 photograph of nighttime sky filled with stars --ar 2:1 "



Prompt Example 2:

/imagine "Create a vivid 360 panoramic HDRI photograph of nighttime sky filled with stars --ar 2:1 "



Prompt Example 3:

/imagine "Create a vivid 360 panoramic HDRI photograph of washington dc sunset --ar 2:1 "



Prompt Example 3:
Upscale image 4

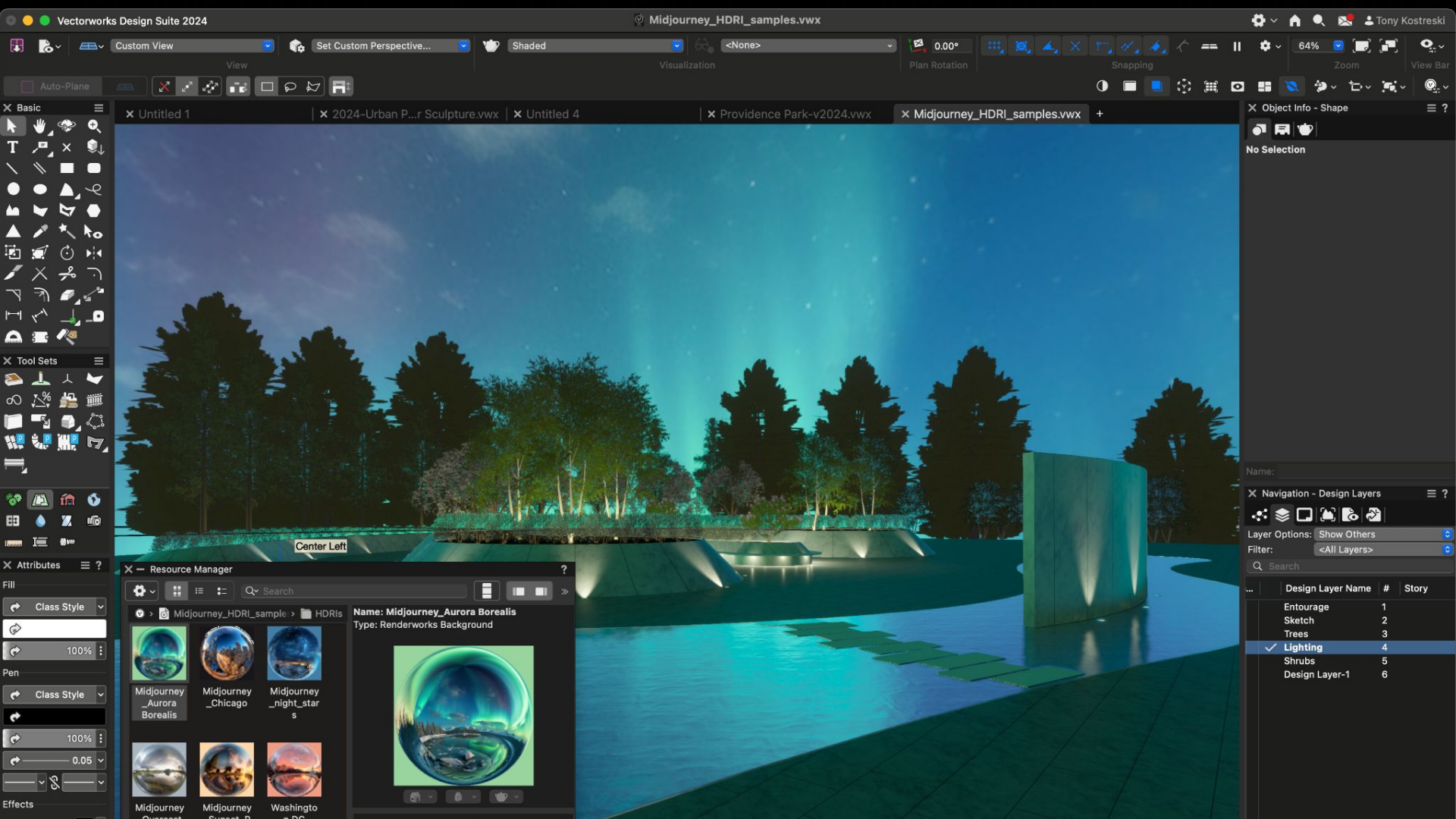


Prompt Example 4:

/imagine "Create a vivid 360 panoramic HDRI photograph of aurora borealis --ar 2:1"



Prompt Example 4:
Upscale image 3



Custom View | Set Custom Perspective... | Shaded | <None> | 0.00° | Snapping | Zoom | View Bar

Untitled 1 | 2024-Urban P...r Sculpture.vwx | Untitled 4 | Providence Park-v2024.vwx | Midjourney_HDRI_samples.vwx

Basic | Tool Sets | Attributes

Object Info - Shape | No Selection

Navigation - Design Layers | Layer Options: Show Others | Filter: <All Layers>

Design Layer Name	#	Story
Entourage	1	
Sketch	2	
Trees	3	
Lighting	4	
Shrubs	5	
Design Layer-1	6	

Resource Manager | Name: Midjourney_Aurora Borealis | Type: Renderworks Background

Midjourney_Aurora Borealis	Midjourney_Chicago	Midjourney_night_star s
Midjourney_Sunset_D	Washington DC	

SECTION



Midjourney Bot ✓ BOT Yesterday at 12:10 PM



facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - [@HemisphereDesign](#) (relaxed)



U1

U2

U3

U4




V1

V2

V3

V4


 **BOT** Midjourney Bot facade of building on main street in a midwestern town. brick buildings. two-storie 



Midjourney Bot **BOT** Yesterday at 12:21 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Image #3 [@HemisphereDesign](#)



 Vary (Strong)

 Vary (Subtle)

 Vary (Region)

 Upscale (2x)

 Upscale (4x)

 Zoom Out 2x

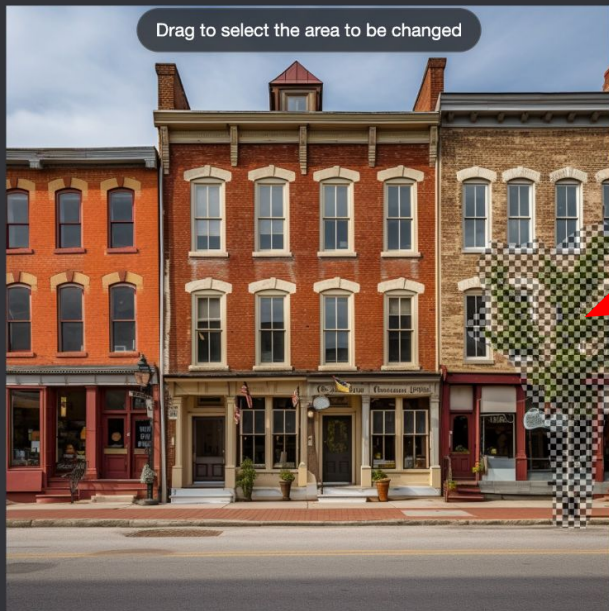
 Zoom Out 1.5x

 Custom Zoom

2 new messages since 1:30 PM

Mark As Read

Midjourney Bot 90T
Editor



Drag to select the area to be changed

Submit

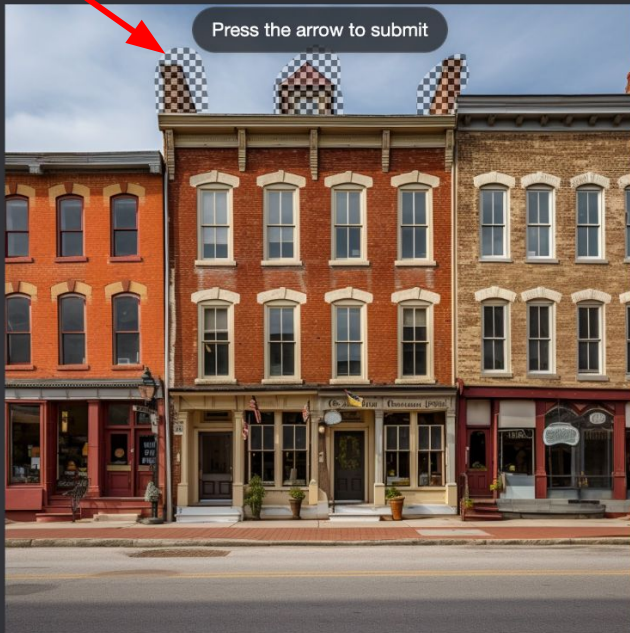




[Open in Browser](#)



Midjourney Bot BOT
Editor



Press the arrow to submit



Submit →



Midjourney Bot facade of building on main street in a midwestern town. brick build...



Midjourney Bot Today at 1:45 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Image #3 @HemisphereDesign



Interaction menu for the image, including buttons for:

- Vary (Strong)
- Vary (Subtle)
- Vary (Region)
- Upscale (2x)
- Upscale (4x)
- Zoom Out 2x
- Zoom Out 1.5x
- Custom Zoom
- Navigation arrows (Left, Right, Up, Down)
- Web link icon





✓ BOT

Midjourney Bot facade of building on main street in a midwestern town. brick buil...



Midjourney Bot ✓ BOT Today at 1:47 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Pan Left by @HemisphereDesign (relaxed)



U1

U2

U3

U4



Midjourney Bot facade of building on main street in a midwestern town. brick buil...



Midjourney Bot Today at 1:48 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Image #1 @HemisphereDesign



Zoom Out 2x Zoom Out 1.5x Custom Zoom Make Square

← → ❤️ Web



✓ BOT

Midjourney Bot facade of building on main street in a midwestern town. brick build...



Midjourney Bot ✓ BOT

Today at 1:48 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Pan Right by @HemisphereDesign (relaxed)



U1

U2

U3

U4







✓ BOT

Midjourney Bot facade of building on main street in a midwestern town.



Midjourney Bot

✓ BOT

Today at 1:48 PM

facade of building on main street in a midwestern town. brick buildings. two-stories. late 18th century american architecture - Pan Right by [@HemisphereDesign](#) (relaxed)



U1

U2

U3

U4





1:53 PM

zalkova green vase tree on white background - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

1:57 PM

japanese zelkova tree on white background - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4



Edit the detailed description

Surprise me

Upload



japanese zelkova on a white background

Generate





...



Share

Save ▾

“japanese zelkova on a
white background”

B

Benjamin × DALL·E

Human & AI



- More actions
- Edit image
- Generate variations
- Remove from collection
- Report



“japanese zelkova on a white background”

B Benjamin × DALL-E
Human & AI



- More actions
- Edit image
- Generate variations
- Remove from collection
- Report

“japanese zelkova on a white background”

B Benjamin × DALL-E
Human & AI



DALL·E

History

Collections

Edit the detailed description

Surprise me

Upload



An Impressionist oil painting of sunflowers in a purple vase...

Generate

ORIGINAL





- More actions
- Edit image
- Generate variations
- Remove from collection
- Report

“japanese zelkova on a white background”

B Benjamin × DALL-E
Human & AI

Edit | white background

Generate

Generation frame: 1024 x 1024



↶ Undo



- +

ORIGINAL



ORIGINAL



Generation frame: 1024 x 1024

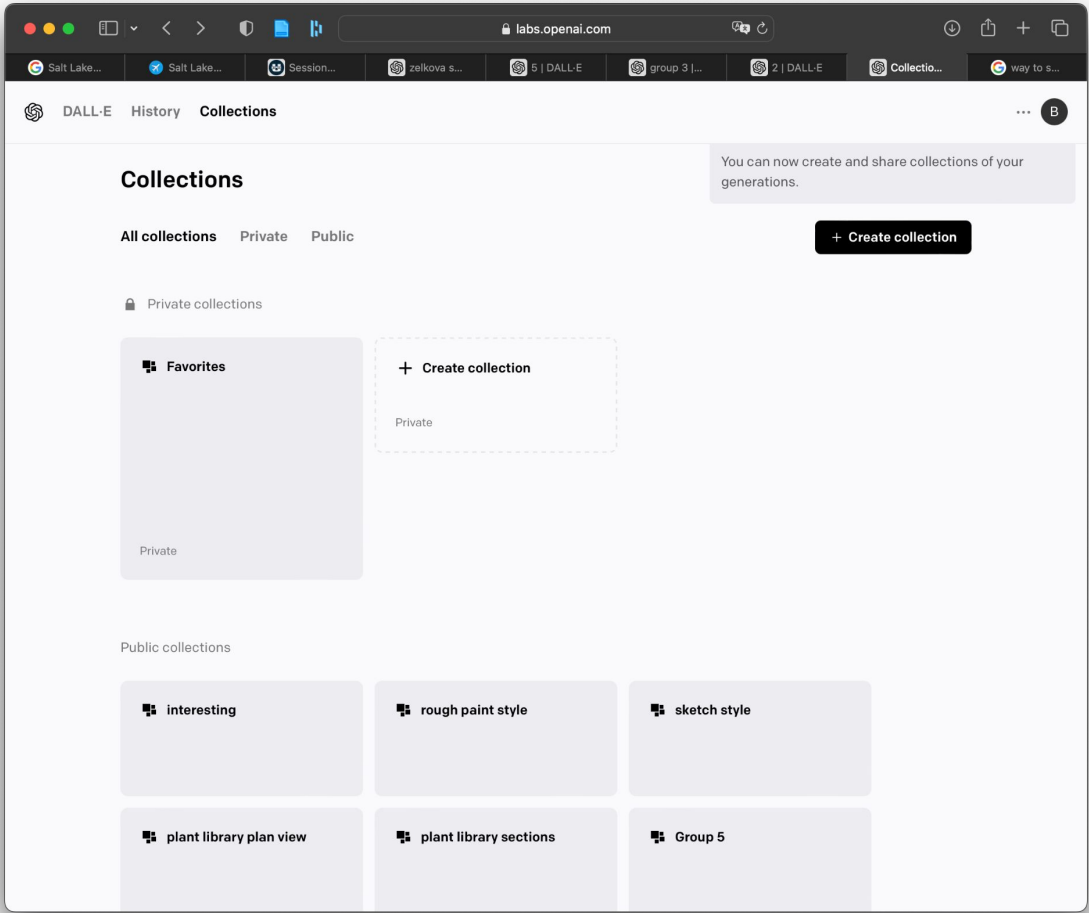


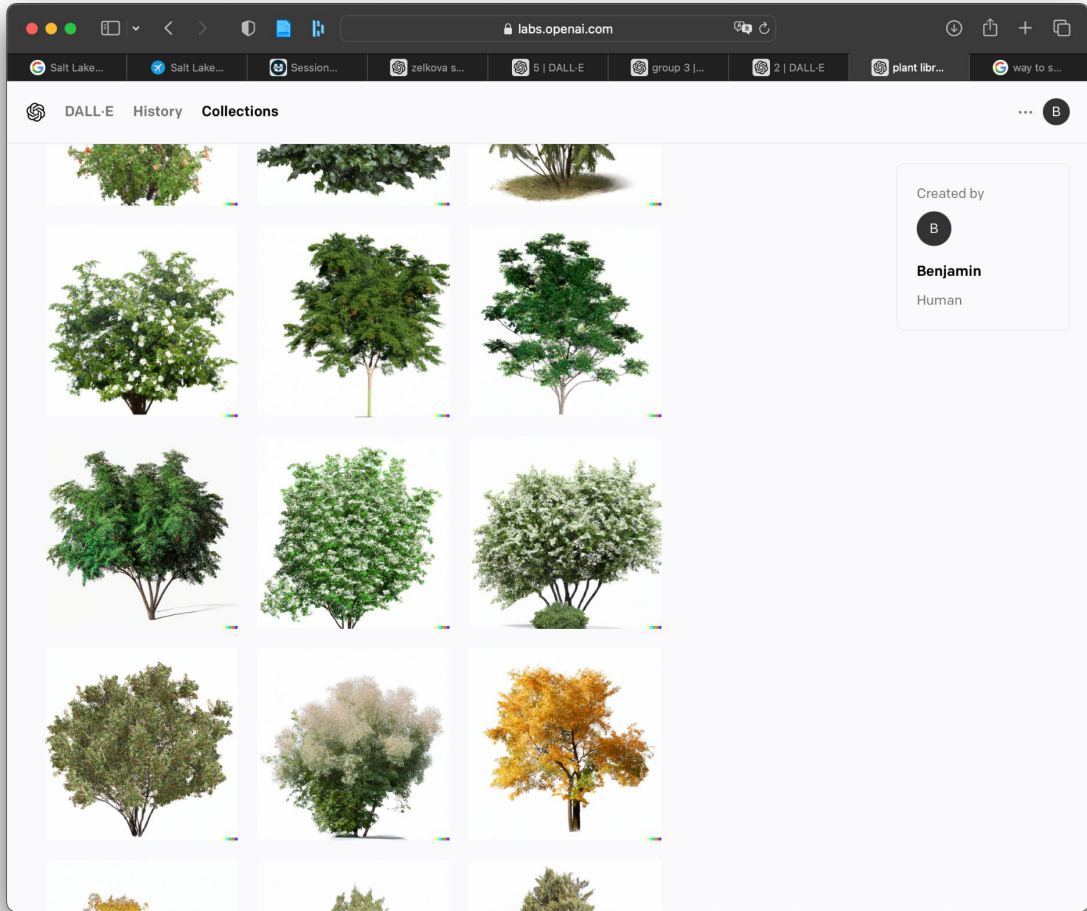
Navigation controls: a left arrow, a progress indicator (a row of four dots with the first one filled), a right arrow, and two buttons labeled "Cancel" and "Accept".

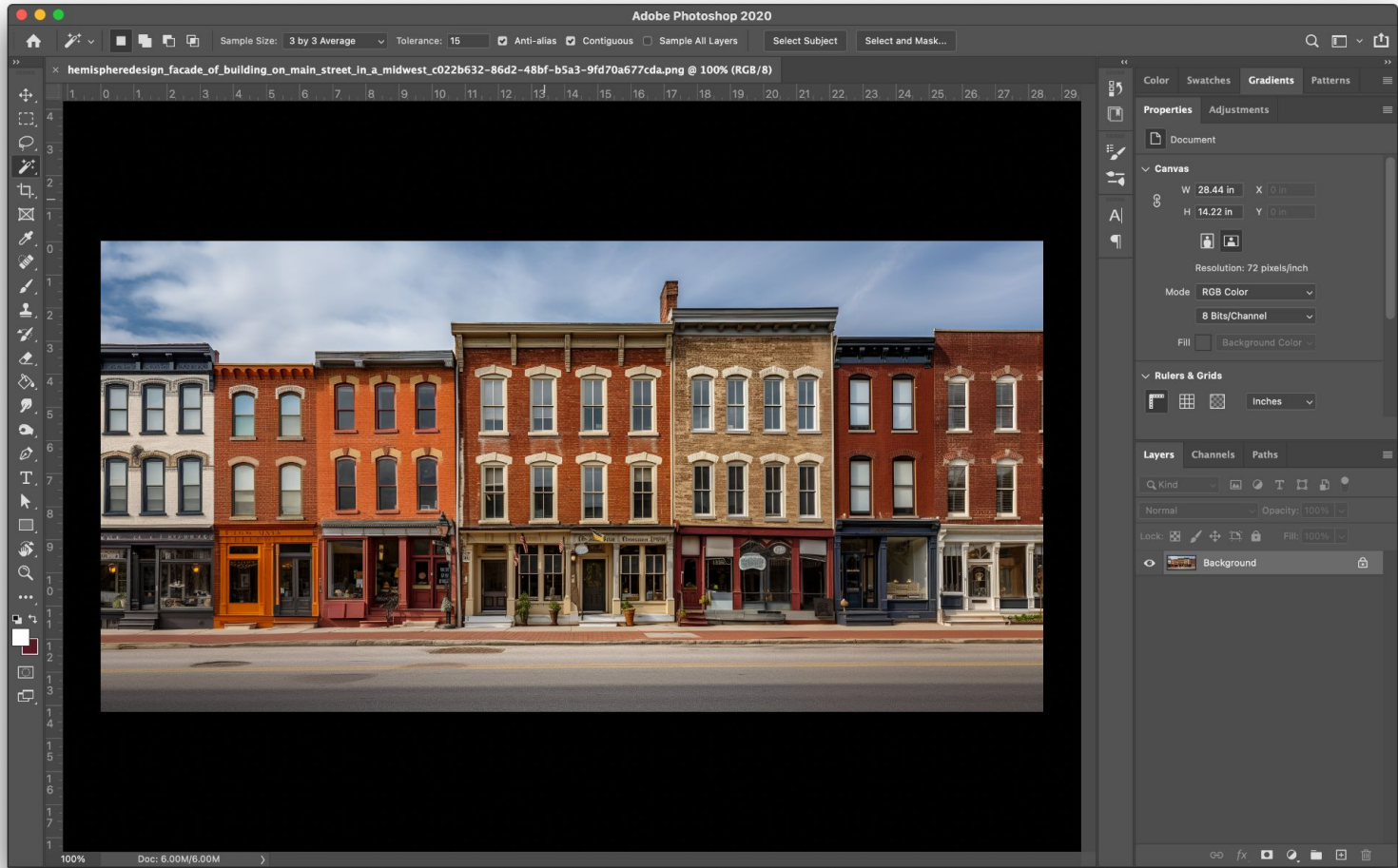
Generation frame: 1024 x 1024



← ● ● ● ● ● → Cancel Accept









Color Range

Select: Sampled Colors

Detect Faces Localized Color Clusters

Fuzziness:

Range: %

Selection Image

Selection Preview:

Buttons: OK, Cancel, Load..., Save...

The Color Range dialog box is overlaid on the image. It features a 'Select' dropdown menu set to 'Sampled Colors'. Below it are two checkboxes: 'Detect Faces' and 'Localized Color Clusters', both of which are unchecked. A 'Fuzziness' slider is set to 87, with the number '87' displayed in a blue box. Below the slider is a 'Range' field with a percentage sign. At the bottom, there are two radio buttons: 'Selection' (which is selected) and 'Image'. A 'Selection Preview' field at the very bottom shows the word 'None'. On the right side of the dialog, there are five buttons: 'OK', 'Cancel', 'Load...', and 'Save...'.

Transform

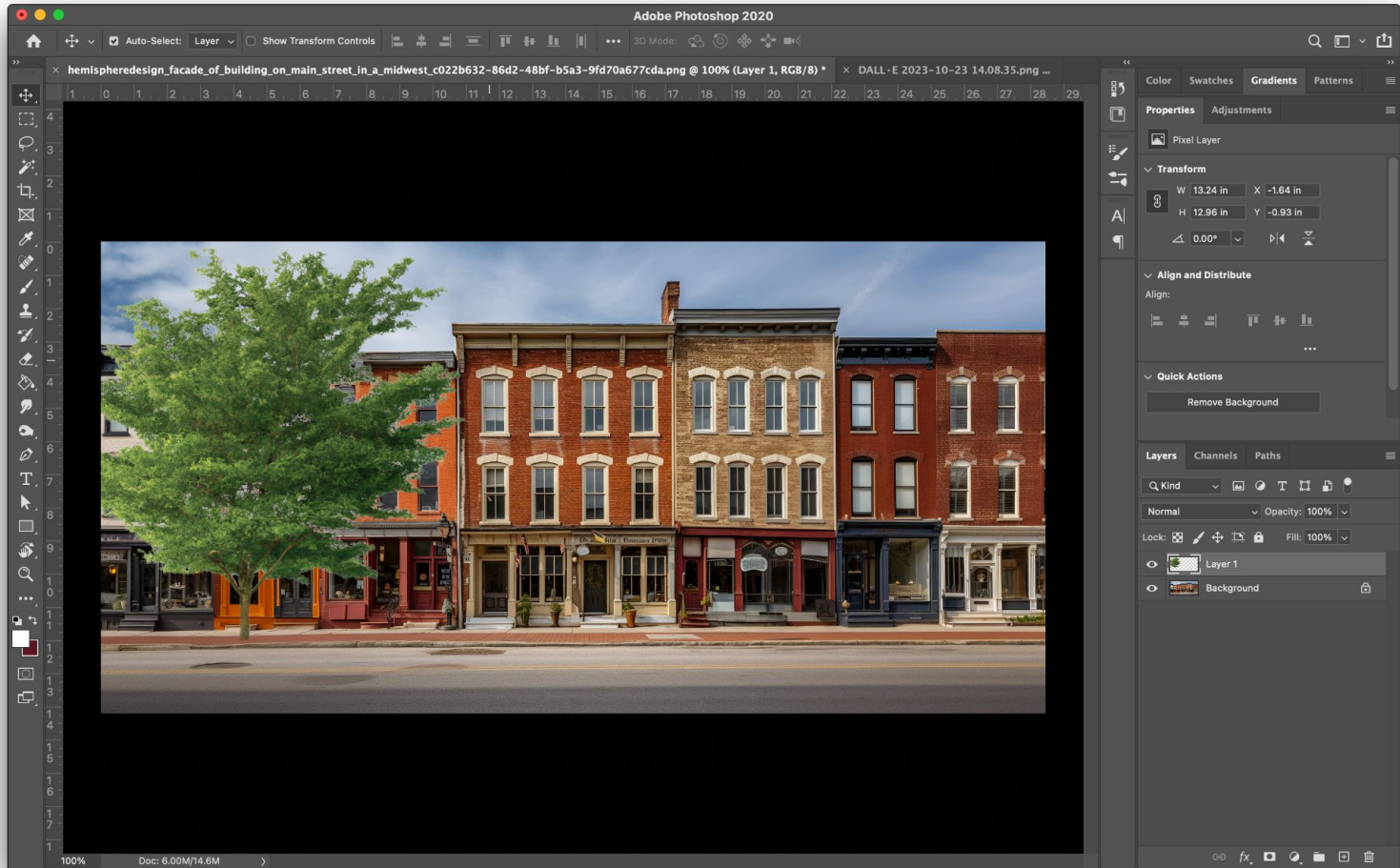
W 14.22 in X 0 in

H 14.22 in Y 0 in

0.00°

The Transform panel is located in the top right corner of the interface. It shows the dimensions of the selected object: width 14.22 in and height 14.22 in. The rotation is set to 0.00 degrees. There are also icons for locking, zooming, and other transform-related functions.







Color Swatches Gradients Patterns

Properties Adjustments Libraries

Generative Layer

Prompt:
side view of a parked yellow car

Generate

Variations

Layers Channels Paths

Kind

Normal Opacity: 100%

Lock: Fill: 100%

a car parked ... of the road

Layer 1

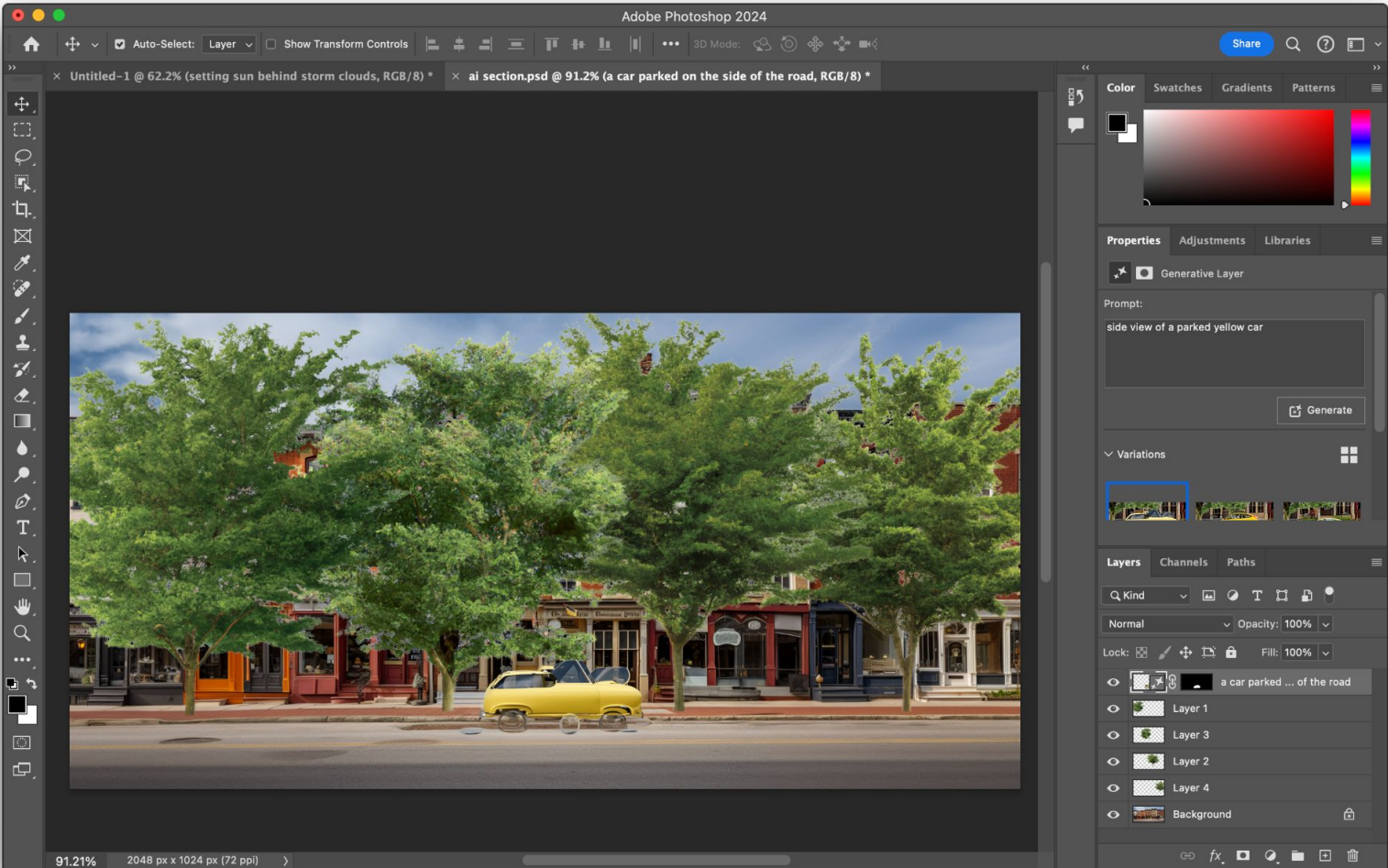
Layer 3

Layer 2

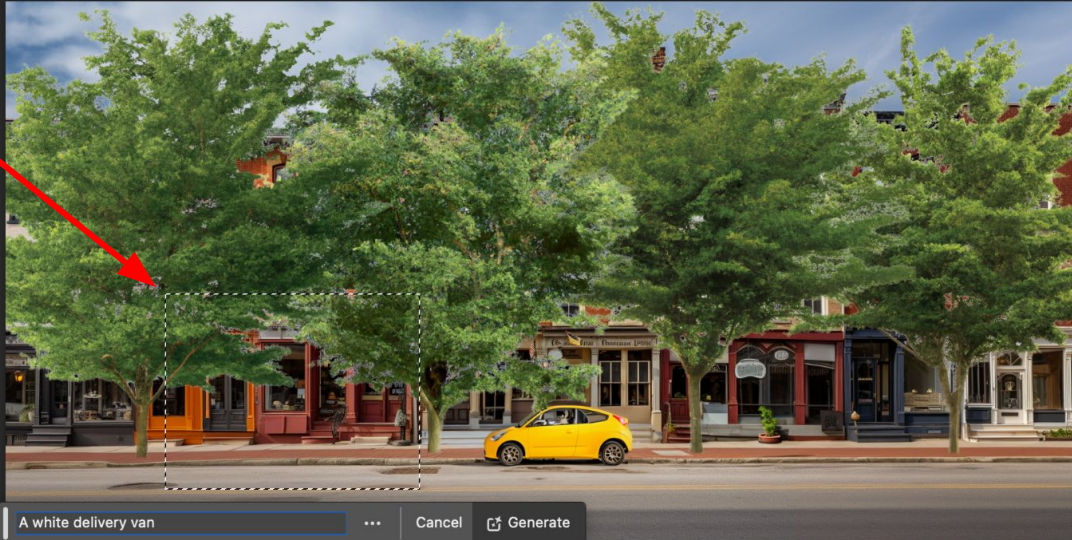
Layer 4

Background

fx







A white delivery van ... Cancel Generate



Document

Canvas

W 2048 px X 0 px
H 1024 px Y 0 px

Resolution: 72 pixels/inch

Mode: RGB Color

8 Bits/Channel

Fill: Background Color

Q Kind Normal Opacity: 100%

Lock: Fill: 100%

- a white delivery van parked
- flowering plants in a pot
- a car parked ... of the road
- Layer 1
- Layer 3
- Layer 2
- Layer 4





father pushing ...



2/6



Generate



Untitled-1 @ 62.2% (Iceland, RGB/8) * ai section.psd @ 99.1% (father pushing a baby stroller, RGB/8) *



Color Swatches Gradients Patterns



Properties Adjustments Libraries

Generative Layer

Prompt:

father pushing a baby stroller

Generate

Variations



Layers Channels Paths

Q Kind

Normal Opacity: 100%

Lock: Fill: 100%

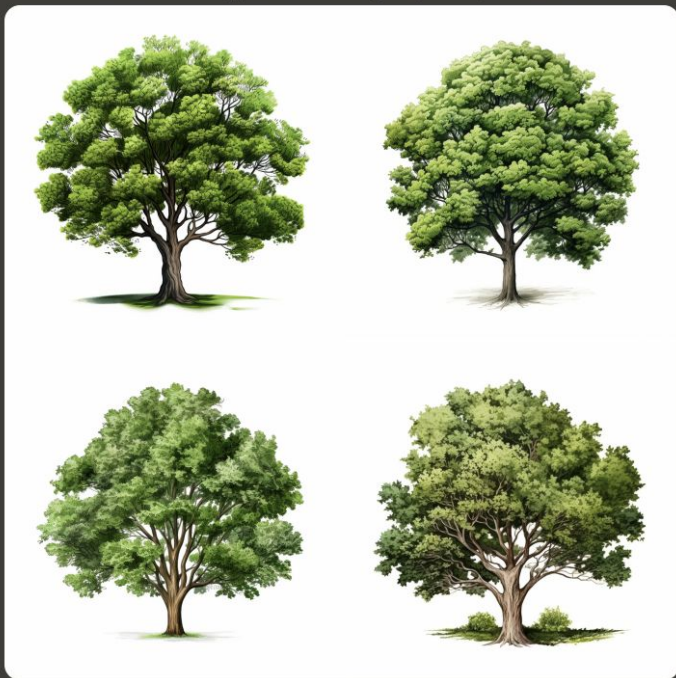
- father pushin...aby stroller
- Layer 5
- a white delivery van parked
- flowering plants in a pot
- a car parked ... of the road
- Layer 1
- Layer 3



PLAN

8:35 AM

tree illustration, plan view graphic, isolated on white background - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

https://s.mj.run/6huh_0AOiW8 tree from above, isolated, vector drawing - @HemisphereDesign

https://s.mj.run/6huh_0AOiW8 tree from above, isolated, vector drawing - @HemisphereDesign

(relaxed)



U1

U2

U3

U4



V1

V2

V3

V4



✓ BOT

Midjourney Bot https://s.mj.run/6huh_0AOiW8 bush from above, isolated, vector drawing - @Hem



Midjourney Bot ✓ BOT 10/05/2023 8:52 AM

https://s.mj.run/6huh_0AOiW8 bush from above, isolated, vector drawing - Variations (Strong) by @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4



✓ BOT

Midjourney Bot https://s.mj.run/6huh_OAOiW8 shrub from above, isolated, watercolor, artistic - V2

Midjourney Bot ✓ BOT 10/05/2023 10:01 AM

https://s.mj.run/6huh_OAOiW8 shrub from above, isolated, watercolor, artistic - Variations (Strong) by @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4


Midjourney Bot https://s.mj.run/6huh_0AOiW8 shrub from above, isolated, watercolor, artistic - @


Midjourney Bot https://s.mj.run/6huh_0AOiW8 10/05/2023 9:59 AM


https://s.mj.run/6huh_0AOiW8 shrub from above, isolated, watercolor, artistic - Image #2

@HemisphereDesign



 Vary (Strong)

 Vary (Subtle)

 Vary (Region)

 Zoom Out 2x

 Zoom Out 1.5x

 Custom Zoom



Web 



✓ BOT

Midjourney Bot https://s.mj.run/6huh_0AOiW8 shrub from above, isolated, watercolor, artistic - @



Midjourney Bot ✓ BOT 10/05/2023 9:58 AM

https://s.mj.run/6huh_0AOiW8 shrub from above, isolated, watercolor, artistic - Variations

(Strong) by @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

Midjourney Bot ✓ BOT Today at 10:18 PM

https://s.mj.run/6huh_OAOiW8 shrub from above, purple leaves, isolated, watercolor, artistic -
@HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

<https://s.mj.run/psBNo1RroxU> shrub from above, pruple leaves, isolated, watercolor, artistic -

@HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

<https://s.mj.run/psBNo1RroxU> shrub from above, small purple leaves, isolated, watercolor, artistic - @HemisphereDesign - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

<https://s.mj.run/psBNo1RroxU::2> shrub from above::2, plan view, small purple leaves, isolated, watercolor, artistic - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

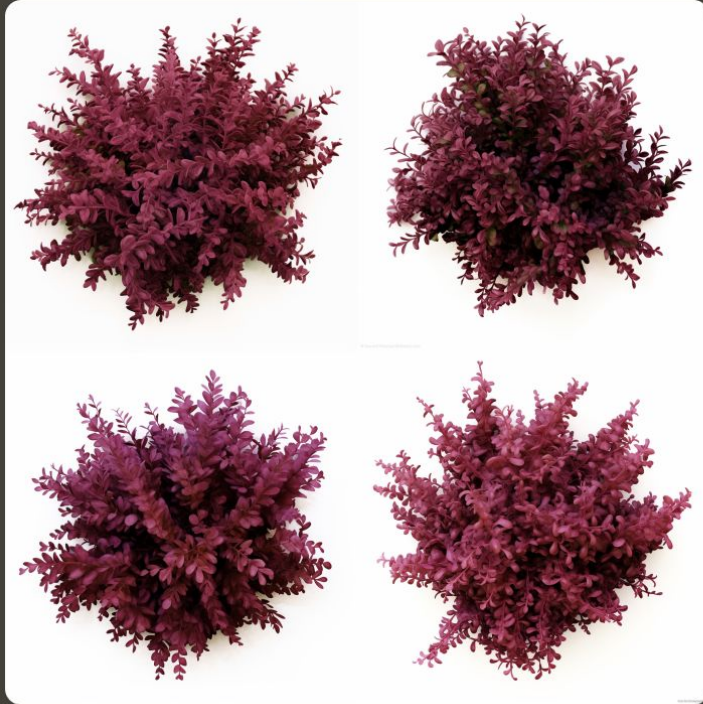
V2

V3

V4

Midjourney Bot ✓ BOT Today at 10:28 PM

<https://s.mj.run/psBNo1RroxU> shrub from above, plan view, small purple leaves, isolated, watercolor, artistic - [@HemisphereDesign](#) (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4

<https://s.mj.run/WaZhw9xTqCU> boxwood shrub from above, plan view, small green leaves, isolated, watercolor, artistic - @HemisphereDesign (relaxed)



U1

U2

U3

U4



V1

V2

V3

V4



✓ BOT Midjourney Bot <https://s.mj.run/WaZhw9xTqCU> boxwood shrub from above, plan view, small greer



Midjourney Bot ✓ BOT Today at 4:11 PM

<https://s.mj.run/WaZhw9xTqCU> boxwood shrub from above, plan view, small green leaves, isolated, watercolor, artistic - Variations (Strong) by [@HemisphereDesign](#) (relaxed)



U1

U2

U3

U4



V1

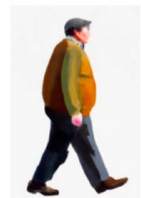
V2

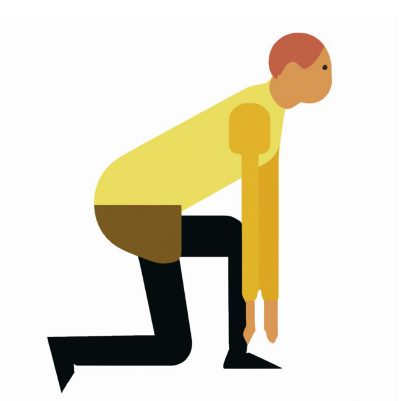
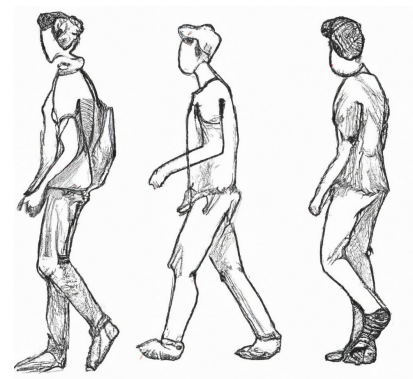
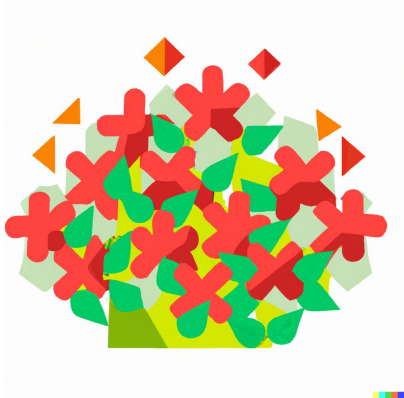
V3

V4



STYLIZATION







Limitations

- Lack of spatial awareness
- Data constraints, particularly with site specificity
- Variable accuracy/authenticity (hallucination)
- User and Model get lost in translation (linguistic/semantic constraints)
- Monotony
- Currently not many “few shot” capabilities for landscape architecture (this could change quickly)



AI Tools by Design Task

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