February 2024
GPTs & Business

USE GPT STORE TO BOOST PRODUCTIVITY
FOR SMALL BUSINESS
A Message From the Editor

Having the opportunity to dive into the newest AI technologies every day, exploring the revolutionary developments in the space that seemingly happen every day has been exhilarating in itself. However, being a part of AI Core, being connected with readers and audience members from our workshops gives purpose to the technology. What Artificial Intelligence is going to evolve into isn’t about the science or math required for it to work, but about the people that it empowers – the people that connect over it, the conversations it sparks, and the people we share it with. I am incredibly excited to introduce this month’s edition of The Prompt and for AI Core’s future in connecting humanity through AI.

Enjoy!

Jackson Grove
Editor & AI Engineer
About AI Core

AI Core is a unique student engagement program at the University of Arizona that is creating jobs in the realm of Artificial Intelligence by employing students and pairing them up with real-world, early prototype and exploratory projects.

How it works:

Industry sponsors or UArizona faculty bring a project or challenge to the AI Core where our growing workforce of student employees are constantly exploring and developing with cutting-edge AI products, platforms, and techniques as they emerge from industry. In 2024 that means GPT development with OpenAI, Llama 2 for chatbots, and tools like Adobe Firefly, Runway.Ml, Blockade Labs and more for media and XR.

Our teams function in a hybrid, post-pandemic, work environment. Our physical office, a workspace we call "The Bench" is home to 8 in-person workstations and program leadership. But online via Discord our numbers swell 10X. In Summer of 2024 we are anticipating the AI Core Summer Internship (in partnership with the University of Arizona's Student Engagement & Career Development) to swell to almost 70 students!
The AI Core also holds regular, free-to-the-public workshops in AI at the CATalyst Studios on the University of Arizona campus. Held on Tuesday evenings from 5:30 - 7:00, plan on meeting other AI enthusiasts and learning the latest techniques and insights from our AI Core student workforce. Why not grab a meal on the gorgeous University of Arizona campus while you're at it? Workshop topics feature Generative AI for Marketing, Navigating the GPT Store, and new discoveries as we make them.

Register online at https://events.trellis.arizona.edu/en/f44INu67/ai-core-spring-workshops-5a3U6R2I6nM/overview
**GPT Store**

The hub for all custom GPTs.

1. Navigate to ChatGPT and open the GPT Store.

2. Search for what you are trying to achieve

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**ChatGPT Plus Plan Required**

NOTE: You will not be able to access GPTs without a subscription
Find the best GPTs for your specific use case.

1. Go to GPT Finder
   https://chat.openai.com/g/g-XE5JkV5gd-gpt-finder

2. Describe what you are trying to achieve
   Be descriptive on the details of your use case. The more descriptive, the better!

3. Explore Custom GPTs & refine prompting
   Check out the results and if you don’t find exactly what you’re looking for, prompt again!

Keep in Mind...

Custom GPTs excel with additionally uploaded data.
Some are updated with recent data, making them perform better than the normal GPT-4 base model. Non-updated GPTs are virtually the same as the base model.
GPT Spotlight: Market My Site

A powerful tool to refine marketing strategy and website design.

1. Go to Market My Site
   https://chat.openai.com/g/g-1jKOpO3qF-market-my-site

2. Ask for SEO advice on your business’s website.

   Make sure to link the URL!

3. Watch the GPT dive deep with insightful feedback.

Market My Site

Market My Site Controls

Would you like to perform additional analysis?

- Analyze Additional Pages
- Generate Promotional Images
- Deep SEO Analysis & Strategy
- Generate Stock Photos
- Generate SEO-friendly Articles
- Identify Knowledge Gaps
- Boost Keyword Density
- Create Social Media Content

Need more feedback?

Market My Site provides 8 additional options for analysis.

It covers everything from deeper analysis to social media content creation.
GPT Spotlight: Video Maker- by invideo AI

A powerful tool to generate videos from a document in just minutes.

1. Go to VideoMaker - by invideo AI.

2. Upload a document or describe an idea. The more content it has, the better.

3. Allow the GPT to talk to invideo AI.

4. Click the link to invideo AI, wait for the video to generate, then watch the finished result!
GPT Spotlight: Unreal Engine 5 Expert

Navigate Unreal Engine 5.3 like a Pro

**UE5 is evolving just as fast as ChatGPT is!**

**Capabilities:**
The same helpful conversational intelligence that GPT-4 brings to coding works in the GameDev world as well!

[https://chat.openai.com/g/g-f52QYAJK1-unreal-engine-5-expert](https://chat.openai.com/g/g-f52QYAJK1-unreal-engine-5-expert)

**Notable Examples:**
We quickly learned to import HDRI skyboxes for realistic scene lighting and to apply .MP4 video to textures. No more knowledge cuttoff dates!

Keep up with the technology and learn by doing. No more knowledge-cutoff dates!
INSANE DEMO OF THE MONTH

Research paper to informational video with Video Maker - by invideo AI

1. Go to VideoMaker - by invideo AI.
   https://chat.openai.com/g/g-h814uLHFQ-videomaker-by-invideo-ai

2. Upload a paper to analyze and generate a video based on its contents.

We created a 3 minute informational video of our paper in just a matter of minutes!
Text to Image Generation

Adobe Firefly Image 2

Great for getting started creatively and making a vision from your Mind's Eye come to life.

Best Workflow: ChatGPT x DALL·E 3 or Firefly

1. Open Adobe Firefly at firefly.adobe.com and click Text to Image on the bottom left (or alternatively use the text box on the landing page).

2. Type what you would like generated, then press Generate.
3. You’re all done! Tweak the settings on the sidebar to the right for different styles and effects.

Try generating photos too!
Text to Image Generation

Bing Image Creator

Great for getting started creatively and making a vision from your Mind's Eye come to life.

Best Workflow: ChatGPT x DALL-E 3 or Firefly

1. Open Bing Image Creator at bing.com/create and create an account if you don’t have one already.

2. Type what you want generated and hit Create. With this model you can really be descriptive.
3. See your results!
Character Creation

Creating Characters with ChatGPT & DALL·E 3
Great for maintaining brand identity and fine-tuning an image to keep specific elements while adding new details.

Best Workflow: Keep your original prompt handy, upload the reference image, and tell ChatGPT to specifically use the reference image.

1. Open ChatGPT at chat.openai.com and create an account if you don’t have one already. You will need the paid ChatGPT Plus plan for this.

2. On the top of the sidebar click Explore. You will be seeing a list of custom pre-prompted GPTs made by OpenAI. Scroll down and click on Hot Mods.
3. Upload one or more images to the Hot Mods GPT and ask it to alter your image.

4. Watch ChatGPT prompt DALL-E 3 autonomously and generate your image reimagined.
The role of AI in decarbonizing the chemical industry.

By Florian Goeltl

Today, many chemicals are produced from fossil fuels and the chemical industry is a major source of greenhouse gas emissions worldwide. Decarbonizing this industry would allow for significant advances towards a carbon neutral or carbon negative future. In particular shifts in feed-stocks from fossil fuels to CO2 or biomass and energy inputs from natural gas to electricity or solar energy are promising routes to reduce the carbon footprint of this industry. However, changing these process parameters require the development of new materials to facilitate these reactions, separate products, or store reactants and products. At the same time, developing new materials experimentally is time consuming and requires trial and error. Today, AI based tools play a crucial role in accelerating materials discovery and performance optimization. Using AI based tools it is possible to screen the materials space to discover promising materials compositions with favorable reaction rates or selectivities, it is possible to develop metal organic frameworks with up until know unknown node-linker combination to enable novel chem-istries, or it is possible to identify new synthetic pathways to arrive at molecules with desired properties. It will be exciting to see how these technologies will help to improve processes at an industrial scale and how this will allow to lead the chemical industry to a more sustainable future.