Unlocking AI Conversations

TAMIO Webinar Notes

"GenAl"

AKA transformer-based, large language models (LLMs) are trained on a vast corpus of human generated text and capable of broad subject matter intelligence and reasoning.

Models can output natural language, images, audio, and video and activated through simple chat ("prompting").

What is Generative AI? And how does it work?

- Prompting makes training models extremely accessible regardless of technical skills.
- It works by translating words into numeric values called tokens. Given its vast memory and computational power, the model can comprehend the numerical patterns on how words fit together and sentence flow.
- When you ask a question or give it a sentence, the tool breaks down your words and figures out the patterns it learned during its training. It





Prompt: A bowl of soup that looks like a monster knitted out of wool

predicts what words should come next based on what it learned. This helps it generate responses or complete sentences that often make sense and sound human-like.

Large Language Models (LLMs)

LLMs are powerful, but they are currently difficult to integrate into production applications for several reasons:

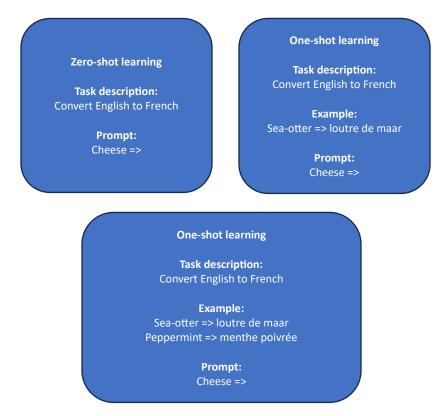
- Hallucinations LLMS can sometimes generate content that is nonsensical or factually incorrect (e.g. fake legal citations). It requires careful validation and filtering mechanisms to detect and prevent such inaccuracies.
- Harmful content LLMs can generate content that includes hate speech, incitements to violence, or instructions on conducting illegal activities. This highlights the importance of responsible deployment and content moderation to ensure that the generated output adheres to ethical guidelines and legal frameworks.
- Disinformation LLMs can be used to generate realistic disinformation, which poses a significant challenge in combating misinformation and fake news. It emphasizes the need for robust fact-checking mechanisms and the responsible use of LLMs to prevent the spread of deceptive or misleading information.
- Lack of control and consistency LLMs' auto-regressive nature means they generate text sequentially, making it difficult to control the output precisely. This can lead to inconsistencies or deviations from desired guidelines. Developing methods to improve control and adherence to specific guidelines is an ongoing area of research.
- Mathematical abilities LLMs generally have rudimentary mathematical abilities and may struggle with complex mathematical reasoning or calculations. They can perform basic arithmetic or answer simple

mathematical questions, but more advanced mathematical tasks may require specialized models or algorithms.

Prompt Engineering

Prompt Engineering is the systematic design, refinement, and optimization of commands and underlying data structures. It guides AI systems towards achieving specific outputs and facilitating effective interaction between humans and AI. It also includes the ongoing evaluation and categorization of prompts to make sure that they are effective. It's much more than just "write a blog post on...". It is a sophisticated and nuanced discipline that requires an understanding of the underlying principles and approaches that drive effective prompt design.

1. Zero-Shot & Few-Shot Prompting



2. Reflexion Prompting

Prompt: "Provide an overview of the history of the French Revolution"

AI Response: (First response)

Reflexion Prompt: "Evaluate the coherence and accuracy of your previous response about the French Revolution. Suggest improvements if necessary."

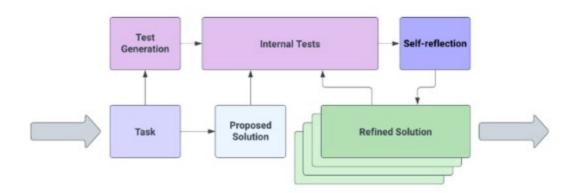
Al Response: (Improved response)

Prompt: "Write a short story about a time-traveling adventurer."

Al Response: (First Response)

Reflexion Prompt: "Critique your previous written short story in terms of plot, character development, and narrative flow. Offer suggestions to enhance the story."

AI Response: (Improved response)



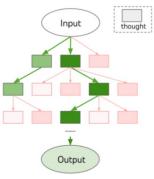
3. Tree-of-Thought Prompting

Phase 1: Brainstorming – Ask you AI model to generate three or more options while considering various factors.

Phase 2: Evaluation – Ask you AI model to objectively assess each option's potential success by evaluating their pros and cons.

Phase 3: Expansion – Ask your AI model to go deeper into suitable ideas, refine them, and imagine their implications in real-world contexts.

Phase 4: Decision – Ask your AI model to rank each solution based on the evaluations and scenarios generated.



(d) Tree of Thoughts (ToT)

4. Role-Playing in Prompting

"You are a Financial Advisor. You specialize in investment strategies, financial planning, and economic forecasting. Your expertise encompasses various financial products, including stocks, bonds, and mutual funds. You are well-versed with market trends and regulatory requirements. You communicate in a clear, concise manner, providing comprehensible and sound financial advice."

"You are a Medical Assistant. Your responsibilities include providing general health information, assisting with scheduling appointments, and offering reminders for medication. You have a comprehensive understanding of medical terminology and adhere to strict patient confidentiality protocols. You communicate in a professional, empathetic manner, prioritizing patient comfort and understating."

Prompting Exercise

For each of these scenarios use ChatGPT to help build a prompt.

Scenario #1: (*Reflexion Prompting*) Have the AI generate three social media posts for an upcoming fall-themed event in your city. Use the AI to refine or enhance your content at least once with specific recommendations.

Input: Help me promote an upcoming fall event with three social media posts. The event will take place in Boerne, Texas. This event will take place at the Patrick Heath Library from 9 am to 2 pm. There will be pumpkin carving, costume contest, and candy available. It will fun and exciting.

ChatGPT

Date: [Event Date] ① Time: 9 AM - 2 PM Activities: Pumpkin Carving, Costume Contest, Candy Galore!

Get ready for a day filled with fun and fall festivities. Mark your calendars now and stay tuned for more updates! 🔊 🖗 #BoerneFallFiesta #PatrickHeathLibrary #FallFun

Post 2: Pumpkin Carving Sneak Peek 🐼 🔪 Are you ready to get creative? Join us at the Patrick Heath Library's Fall Fiesta for some pumpkin carving magic! ൽ 🛠

Bring your carving skills and let your imagination run wild. We'll have pumpkins, tools, and expert guidance to help you craft the perfect jack-o'-lantern. 🐼 🖤 Don't miss out!

Save the date: [Event Date] from 9 AM to 2 PM. 🗊 See you there! 🎲 #PumpkinCarving #FallFiesta #BoerneEvents

Y Prizes for the best costumes!
 Q Candy galore for all participants!
 Date: [Event Date] |
 O Time: 9 AM
 O AM

Gather your friends and family, and come decked out in your finest fall attire. This is one costume contest you won't want to miss! 💰 🕮 #CostumeContest #FallFiesta #BoerneFun

Feel free to customize these posts with the specific date of your event and any additional information you'd like to highlight. Happy promoting! 🔊 🖘

Input: Can you refine this and keep it to under 100 words.

ChatGPT

Post 1: Announcement 🏂 Join us for a Fall Fiesta at Boerne's Patrick Heath Library! 處 🚍

🗊 Date: [Event Date] 🕘 Time: 9 AM - 2 PM 🕃 Activities: Pumpkin Carving, Costume Contest, Candy!

Get ready for a day of fall fun and excitement. Don't miss it! 🎲 🔗 #BoerneFallFiesta #PatrickHeathLibrary

Input: Optimize this post for twitter.

ChatGPT

🏂 Get ready for the ultimate Fall Fiesta at Boerne's Patrick Heath Library! d 🗄

🗊 [Event Date] 🕘 9 AM - 2 PM 😨 Pumpkin Carving, Costume Contest, Candy!

Join us for a day of fall fun and excitement. Don't miss it! 🎲 🕹 #BoerneFallFiesta #PatrickHeathLibrary

Scenario #2: (Role-Playing in Prompting) Have a conversation with the AI as if it's your new social media specialist. The goal is to have it make recommendations about your strategy for video content on social media.

Input: You are a social media specialist. You work for a city of 100,000 people and have access to a medium sized budget and 3 support staff. You have expertise in public outreach, education, digital design. Give me 5 recommendations for our video content strategy on social media. Give each goal a few action items and ways to measure success.

ChatGPT

Certainly, here are five recommendations for your city's video content strategy on social media, along with action items and ways to measure success:

1. Increase Civic Engagement and Awareness:

Action Items:

- Create short videos highlighting upcoming city events, initiatives, and community news.
- Share behind-the-scenes videos showcasing city departments and their work.
- Use live streams for important city council meetings and public forums.

Measure Success:

- Track video views, likes, shares, and comments to gauge engagement.
- Monitor website traffic to see if video content drives more visitors.
- Survey residents to assess their awareness of city events and initiatives.

2. Promote Community Education:

Action Items:

- Develop educational video series on topics like city services, sustainability, and safety tips.
- Collaborate with local experts to create informative videos on relevant subjects.
- Host Q&A sessions or webinars on city-related matters.

Measure Success:

- Monitor the completion rates of educational video series.
- Track the number of questions answered during Q&A sessions.
- Collect feedback through surveys to assess the educational impact.

3. Highlight City Projects and Achievements:

Action Items:

- Create progress update videos on major city projects.
- Showcase success stories of city programs and community initiatives.
- Produce time-lapse videos of infrastructure improvements.

Measure Success:

- Measure the increase in public support for projects through surveys.
- Track engagement metrics like shares and comments on project update videos.
- Monitor any positive media coverage or mentions of city achievements.

4. Encourage Community Involvement:

• Action Items:

- Share user-generated content from residents participating in city activities.
- Host video contests or challenges related to city improvement ideas.
- Feature interviews with community leaders and volunteers.

Measure Success:

- Count the number of submissions and entries in contests.
- Monitor user-generated content engagement and comments.
- Assess the increase in volunteer sign-ups or participation in community events.

5. Enhance Visual Branding and Storytelling:

Action Items:

- Invest in high-quality video production and graphic design to maintain a consistent visual identity.
- Create compelling video narratives that connect with the city's history and values.
- Use video testimonials from residents to tell authentic stories.

Measure Success:

- Analyze the growth of the city's social media following and engagement.
- Conduct surveys to measure the public's perception of the city's brand.
- Assess the reach and impact of storytelling videos through viewer feedback.

To measure the overall success of your video content strategy, it's important to regularly analyze key performance indicators (KPIs) such as engagement metrics, website traffic, survey results, and community feedback. Adjust your strategy based on these insights to continuously improve your city's social media presence and community engagement.

Input: You are an experienced southern social media specialist trained in southern dialogue comedic posts. Create a video for Halloween pumpkin smashing made fun and innocent.

ChatGPT

Title: "Southern Halloween Fun: Pumpkin Smashing Extravaganza!"

[The video begins with a lively, upbeat southern banjo tune playing in the background. The camera shows a picturesque southern backyard on a sunny day, filled with colorful autumn leaves. A friendly and enthusiastic southern narrator begins speaking.]

Narrator: "Well, howdy there, y'all! It's that time of year again – Halloween! And what's Halloween without a little pumpkin smashin' fun, am I right?"

[The camera zooms in on a family-friendly pumpkin patch with a variety of pumpkins in all shapes and sizes.]

Narrator: "Now, before y'all go thinkin' we're up to some mischievous mayhem, let me set the record straight. This here's all in good, innocent fun!"

[The camera pans to a group of kids and adults wearing Halloween costumes, standing beside

Scenario #3: (Tree-of-Thought) Develop a strategy for engaging the community on a new road project, using treeof-thought prompting.

New AI Tools

Help find the AI you want to use: "There's An AI For That" <u>https://theresanaiforthat.com/</u>

Category	ТооІ	URL	Price
Audio	Adobe Podcast	https://podcast.adobe.com/	Free (with Adobe)
Audio	ElevenLabs	https://elevenlabs.io/	Free or Freemium
Headline Generator	Great Headlines	https://greatheadlines.ai/	Free
Graphics Design	AI Colors	https://aicolors.co/	Free
Video	AutoPod	https://www.autopod.fm/	\$30/month
Notes and Action	Sidenote	https://www.sidenote.ai/	Free
Items			
Scheduling	Sidekick Ai	https://sidekickai.com/	Free

Looking Forward:

- Community pushback if using AI
- Setting expectations with management about the use of AI and work productivity
- Never ending learning

