YOU & I WITH AI

Rinki Suryavanshi, Ph.D.

Digital Learning and Academic Innovations



Objectives



Provide an overview of Al.



Discuss optimization of prompts.



Discuss the privacy and ethical considerations of Al.

slido

Please download and install the Slido app on all computers you use



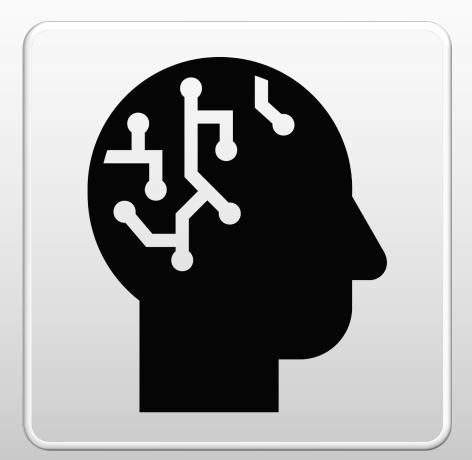


What comes to your mind when you hear about AI?

3967065 https://app.sli.do/event/m9wE6SnpvQ2zGqGFYp9FdH

i Start presenting to display the poll results on this slide.





Generative Al

What Is Generative AI?

Creates new content such as Text, Images, Music,
 Or Videos based on the patterns learned from existing data.

How Does It Work?

• Trained on large datasets to recognize patterns and then generate similar, original content.

Key Examples:

- Text Generation
- Image Generation

The Al Toolbox

The BIG 6 Generative AI tools (mid-2024)









Claude (Anthropic)





slido





How can Al help you in your work?

i Start presenting to display the poll results on this slide.

Create A Free ChatGPT Account (Optional)



Go to https://chat.openai.com in your web browser.



On the homepage, click the "Sign Up" button.



Input your email address and click "Continue".



Choose a secure password, then click "Continue".

- 1. Verify your email
- 2. Agree to terms (enter personal information)
- 3. Verify your phone number
- 4. Start using chatgpt!

After completing these steps, you can now start interacting with chatgpt for free!



Some settings are surprising, let's walk through them together!

So - What Is Prompt Engineering?

The process of designing and refining questions or instructions (called prompts) that you give to an Al system to get accurate and useful responses.



Why is it important?

The quality of the Al's response depends on how well the prompt is crafted. A clear, detailed prompt can lead to better, more relevant answers.



Why learn prompt engineering?

It helps you maximize Al's potential, making it easier to get exactly what you need for tasks like writing, coding, or creative projects.

Write Clear Instructions — Framework For Prompt Engineering

Use **precise**, **unambiguous language** to guide the Al in generating the right response.

Avoid vague terms; instead, define exactly what you need.

Example: Instead of "Define communication," try "Define communication for college students taking an introductory communication course."



Anatomy of a Prompt — Let's try it!

Original

"Create an image of a cat eating food at a school's campus."

Response





Is it clear?

Step 1 - Write Clear Instructions: Is the language used precise and unambiguous? Does it define exactly what you need?

Provide a Reference Task— Framework For Prompt Engineering

Offer examples or context to help the Al understand the desired output.

Reference previous tasks or models of what a good response looks like.

Example: "Summarize [this article] in 200 words, similar to the way a journal abstract summarizes key points."





Anatomy of a Prompt – Let's try it!

Original

"I am representing my office to attend the conference hosted by X company. Your email has mentioned to reach out to the you directly, do you have any information about it, I can see the agenda but would like to know more about hotel recommendations etc."

Response

I hope this message finds you well. I am representing my office at University and will be attending the conference. I received this information via the email sent through Campus announcement, which mentioned reaching out to you directly for more details. While I can see the agenda for the event, I would appreciate any additional information you could provide—particularly around hotel recommendations or any other logistics that might be helpful.

Does it provide a reference task?

Step 2 - Provide a Reference Task: Is an example or context provided to help the Al know how to write the response?

Split Complex Tasks into Simple Subtasks— Framework For Prompt Engineering

Break down large or complex requests into manageable steps.

Guide the ai through each step to avoid confusion or incomplete answers.

Example: Instead of "Write about [a research question]," use: "First, summarize [the research question]. Then, provide three key findings, followed by a conclusion."





Anatomy of a Prompt — Let's try it!

Original

"Provide some ideas for student activities to enhance student interactions at the university campus."

Response

- 1. Cross-campus conversations
- 2. Culture & cuisine
- 3. Peer mentorship mixer
- 4. Creative collaboration nights
- 5. Skills share night

Is the prompt too complex?

Step 3 — Split Complex Tasks: Is this prompt too complex? Should it be split into multiple, manageable steps?

Allow Time for Models to Reason— Framework For Prompt Engineering

Give the Al time to generate more thoughtful responses by requesting reflection or reasoning steps.

Use prompts like "think step-by-step" or "analyze before answering" to encourage deeper reasoning.

Example: "Before providing a recommendation, list the pros and cons of each option."





Anatomy of a Prompt — Let's try it!

Original

"Provide interview questions for admin assistant, think before you provide the answer, it is important for me."

Response

- 1. Describe a time when you had to manage multiple tasks with tight deadlines. How did you prioritize, and what tools or strategies did you use to stay organized?
- 2. As an administrative assistant, you'll often be the first point of contact for faculty, students, and external parties. Can you describe a time when you had to communicate an important message clearly and professionally.

More time to process?

Step 4 – Allow Time for Models to Reason: Should the AI be prompted to take its time generating a thoughtful response?

Audience Persona: Act as Person X

Flipped Interaction: I would like you to ask me questions to achieve X

Question Refinement: Suggest a better version of the question to use

Further prompt modifications



Ethical Challenges and Concerns



Privacy and Security



Bias



Academic Integrity



Student Learning



Responsible Use



Incorrect or made-up information

slido

Please download and install the Slido app on all computers you use





How confident do you feel in using Al for your work?

i Start presenting to display the poll results on this slide.



Let's Try Chatgpt!!

CHATGPT

Conclusion

Chatgpt is a tool that would help you become more engaged with the learning process.

By adhering to best practices and addressing challenges, we can unlock the full potential of Al through well-crafted prompts.

Sources

https://www.tamucc.edu/library/dlai/faculty/teaching-with-ai.php

https://platform.openai.com/docs/guides/prompt-engineering

https://www.ibm.com/think/topics/shedding-light-on-ai-bias-with-real-world-examples

