GENERATIVE AI

IS AI RIGHT FOR YOU?

WHAT IS GENERATIVE AI?

Generative AI is a subset of artificial intelligence that uses generative models to produce text, images, videos, and other forms of data

Generative AI systems learn the underlying patterns and structures of large datasets, enabling them to create new data

Generative AI typically starts with a prompt that could be in the form of text, an image, a video, a design, or any input that the AI system can process. Various AI algorithms then return new content in response to the prompt.

COMMON GENERATIVE AI SYSTEMS

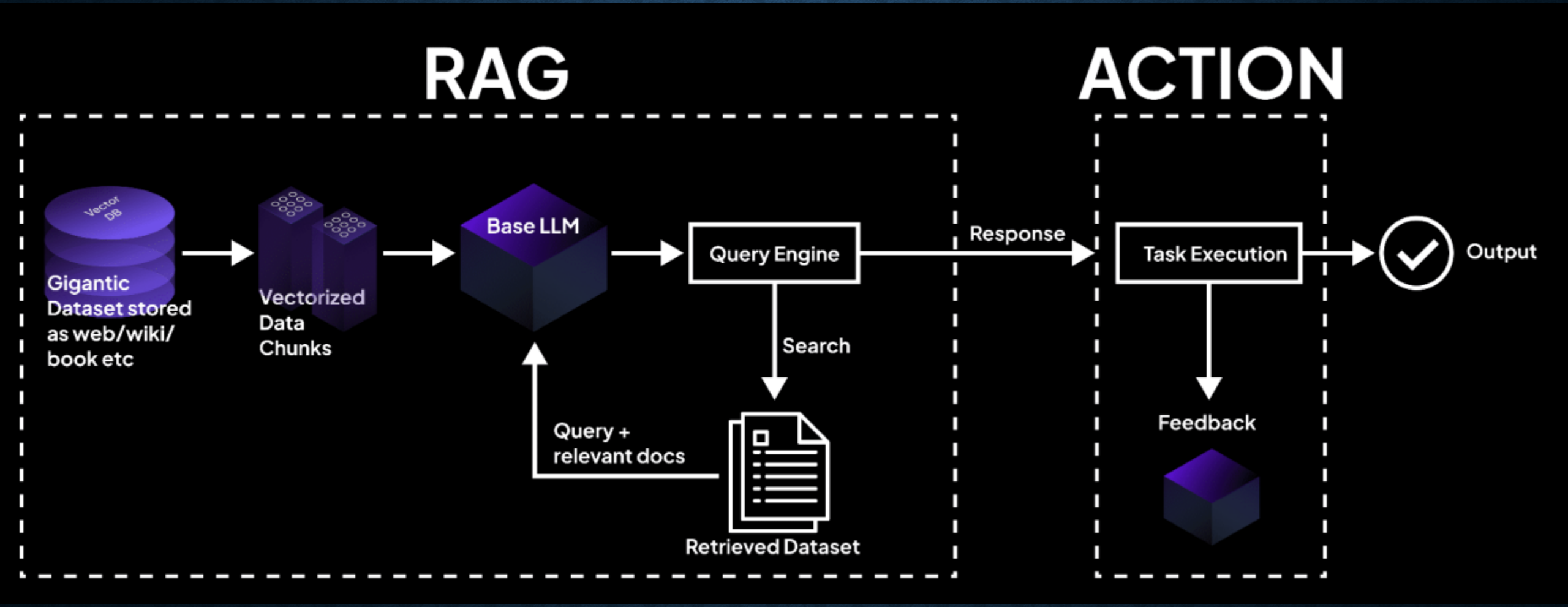
HOW DO GENERATIVE AI SYSTEMS WORK?

Data Collection and Training: They learn from large sets of specific data, like text, images, or code samples, to understand patterns and rules.

Content Generation: They start with random noise and refine it based on what they've learned from the data, gradually creating more meaningful output.

Assessment and Improvement: The generated content is checked for quality, and the model keeps learning and getting better based on feedback.

By continuously learning and refining, these tools create higher-quality content over time.


RAG
ACTION
Vector DB
Gigantic Dataset stored as web/wiki/ book etc
Vectorized Data Chunks
Base LLM
Query Engine
Response
Task Execution
Output
Search
Query + relevant docs
Retrieved Dataset
Feedback

Copilot

New chat

Copilot

Stay informed

What's the latest from person , organized by emails, chats, and files?

Sharpen your writing

Analyze the text in the following and make suggestions on how to improve it: [text]

Monitor industry news

Prepare a daily brief of news from the [finance] industry regarding [cryptocurrency]

Understand the main points

List key points from file

Copy-edit this

How's this grammar? [insert content here]

What does it mean?

Explain [Blockchain Technology] in simple terms.

View prompts

Message Copilot

Add content

Search

3:38 PM
4/30/2025

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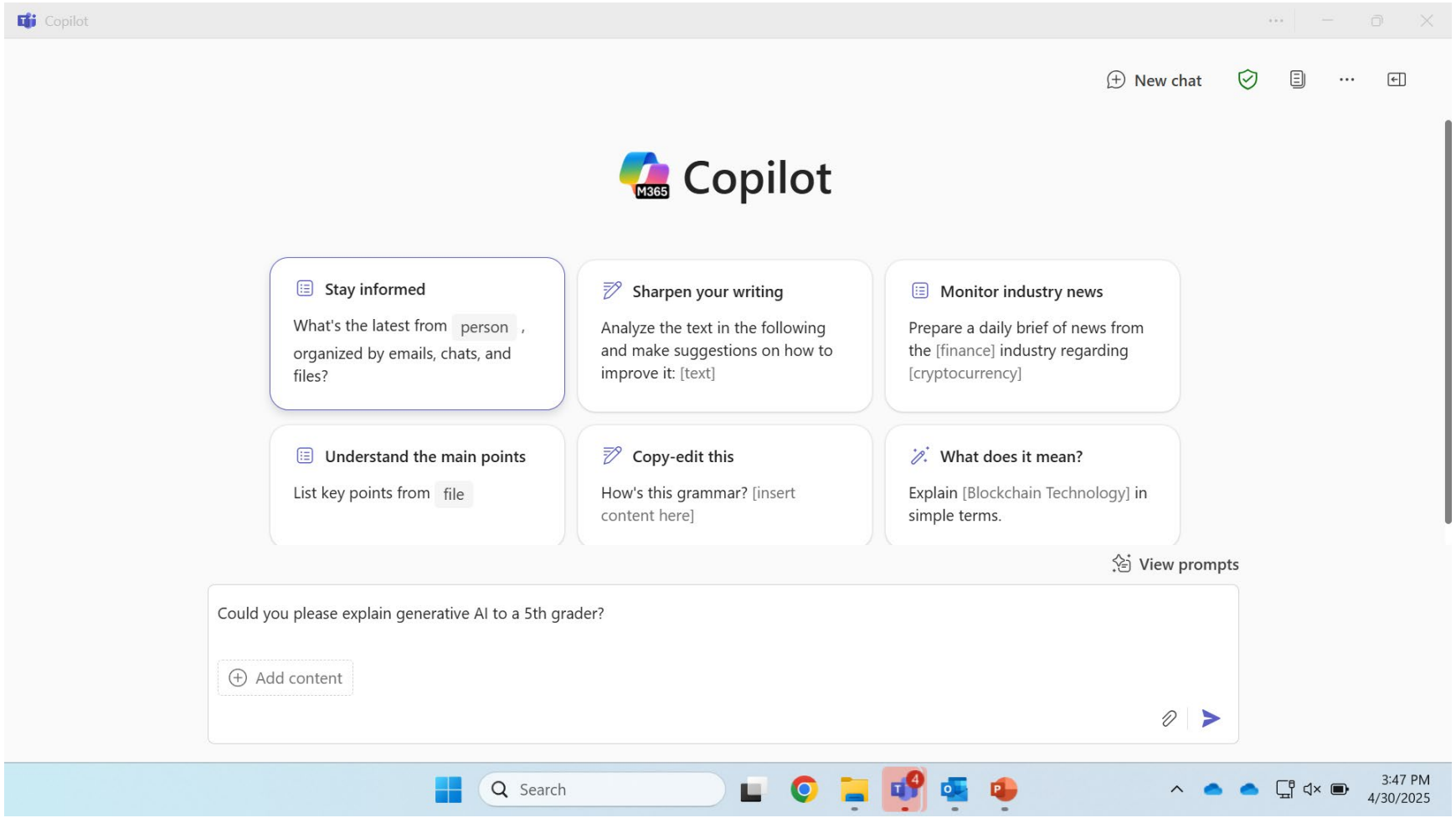
Copilot
New chat
Copilot
M365
Stay informed
What's the latest from person , organized by emails, chats, and files?
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Understand the main points
List key points from file
Copy-edit this
How's this grammar? [insert content here]
What does it mean?
Explain [Blockchain Technology] in simple terms.
View prompts
Could you please explain generative AI to a 5th grader?
Add content
Search
3:47 PM
4/30/2025

Sure! Imagine you have a magical robot friend who loves to create things. This robot can write stories, draw pictures, and even make up songs. Generative AI is like that magical robot friend, but it's a computer program. It learns from lots of examples, like reading many books or looking at lots of pictures, and then it can create new things that are similar to what it learned. So, if you ask it to write a story about a dragon, it can come up with a brand-new story just for you! Cool, right? 😊

Do you have any other questions about generative AI or anything else?

Title: The Adventures of Generative AI!

Illustration: *Draw a classroom with colorful desks and a cheerful teacher at the front. The kids are looking curious and excited.*

Panel 1:
A classroom with kids sitting at their desks. The teacher, Ms. Tech, stands at the front.

Ms. Tech: "Today, we're going to learn about something super cool called Generative AI!"

Illustration: Draw Ms. Tech holding a picture of a friendly robot with a glowing lightbulb above its head, indicating a bright idea.

Panel 1:
A close-up of a curious student, Alex, raising their hand. Illustration: Show Alex with a big smile, raising their hand eagerly.

Alex: "What's Generative AI, Ms. Tech?“

Panel 2:
Ms. Tech holds up a picture of a robot with a lightbulb above its head.

Ms. Tech: "Generative AI is like a super-smart robot that can create new things all by itself!"

Panel 1:
The robot is drawing a picture of a cat. Illustration: Show the robot holding a pencil and drawing a cute cat on a piece of paper.

Ms. Tech: "For example, it can draw pictures, write stories, or even make music!“

Panel 2:
The robot is writing a story on a computer. Illustration: Draw the robot typing on a computer with a story appearing on the screen.

Ms. Tech: "It learns from lots of examples, like how we learn from books and teachers."

Panel 1:
Alex and friends are amazed, with stars in their eyes. Illustration: Show Alex and their friends with wide eyes and big smiles, looking amazed.

Alex: "Wow! So, it's like a robot artist and writer?“

Panel 2:
Ms. Tech nods and smiles. Illustration: Draw Ms. Tech nodding with a warm smile.

Ms. Tech: "Exactly! It uses what it has learned to create something new and unique."

Panel 1:
The robot is surrounded by books, music notes, and art supplies. Illustration: Show the robot with books, music notes, and art supplies floating around it, representing creativity.

Ms. Tech: "Generative AI can help us in many ways, like making video games, designing clothes, or even helping doctors!“

Panel 2:
The kids are excited and talking to each other. Illustration: Draw the kids chatting excitedly with each other, some holding video game controllers, books, and art supplies.

Kid 1: "I want to make a video game with Generative AI!“

Kid 2: "I want to write a book with it!"

Panel 1:
Ms. Tech looks proud. Illustration: Show Ms. Tech looking proud and happy.

Ms. Tech: "With Generative AI, the possibilities are endless. It's like having a super creative friend!“

Panel 2:
The robot waves goodbye as the class ends. Illustration: Draw the robot waving goodbye with a friendly smile as the kids leave the classroom.

Ms. Tech: "Remember, you can be creative too, just like Generative AI!"

MNIT RESPONSE TO AI https://mn.gov/mnit/government/policies/security/ai-standard/

CONCERNS WITH GENERATIVE AI

What are the concerns surrounding AI use?

AI refers to the simulation of human intelligence processes by computer systems. If an application can independently perform tasks that would otherwise require human intelligence, such as understanding natural language, recognizing patterns, making decisions, or interpreting complex data, it likely uses AI.

Publicly available AI services can be helpful for a variety of tasks. People can input questions into publicly available AI-enhanced services. The responses mimic humans but because the AI service is not a human subject matter expert it is at a risk of providing responses that are inaccurate or incomplete. Current AI services do not understand questions, they generate word patterns that mimic content they have been trained to use.

Additionally, when you submit data to an AI service, it leaves a copy of the submitted data with the service. This may pose security and privacy risks. These risks are magnified if the AI service automatically incorporates submitted data into responses shared with other users as part of the data they are trained to use.

For these reasons, it is important to use these services responsibly and consider potential legal, practical, security, and privacy issues. The content produced by available AI services should be consistently and skeptically reviewed.

State of Minnesota staff and contractors should follow this standard when using AI services to protect information according to MNIT Security Policies and Standards.

What can I help with?

Summarize Publicly available AI services can be helpful for a variety of tasks. People can input questions into publicly available AI-enhanced services. The responses mimic humans but because the AI service is not a human subject matter expert it is at a risk of providing responses that are inaccurate or incomplete. Current AI services do not understand questions, they generate word patterns that mimic content they have been trained to use. Additionally, when you submit data to an AI service, it leaves a copy of the submitted data

Create image | Surprise me | Brainstorm | Get advice | Help me write | More

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Publicly available AI services can assist with various tasks by generating responses to user queries. However, these services, while mimicking human-like responses, lack true understanding and may provide inaccurate or incomplete information. AI systems generate responses based on patterns in the data they have been trained on, rather than genuine expertise.

Additionally, submitting data to AI services can create security and privacy concerns, as the data may be stored or used in future training. This risk increases if the AI service shares data with other users or integrates it into its responses.

Given these risks, it's essential to use AI services responsibly, being mindful of legal, security, and privacy issues. Content produced by these systems should always be reviewed critically.

Message ChatGPT

ChatGPT can make mistakes. Check important info.

can you create an image of my pet?

I'd love to create an image of your pet! Could you describe your pet's appearance to me? Feel free to include details like its species, color, size, and any other features that would help me create an accurate and adorable representation!

Abby is a smallish black English Labrador with big brown eyes, a white patch under her chin, and a lavender collar

Abby sounds adorable! I can definitely create an image of her based on your description. Would you like her to be depicted in a specific pose or setting? For example, resting, playing, or in her favorite spot by the fire, as you mentioned earlier?

I would like her to be resting awake on a beige couch

ChatGPT can make mistakes. Check important info.

Here's Abby, comfortably resting on a cozy beige couch! I hope this captures the calm and relaxed vibe you were envisioning. Let me know if there's anything else you'd like to adjust!

LIVE DEMO:

Should I Use AI To Create Specs and Special Provisions?

HUMANS ARE RESPONSIBLE… THAT'S YOU

ANSWER SECTION

It depends

It can probably create a workable rough draft

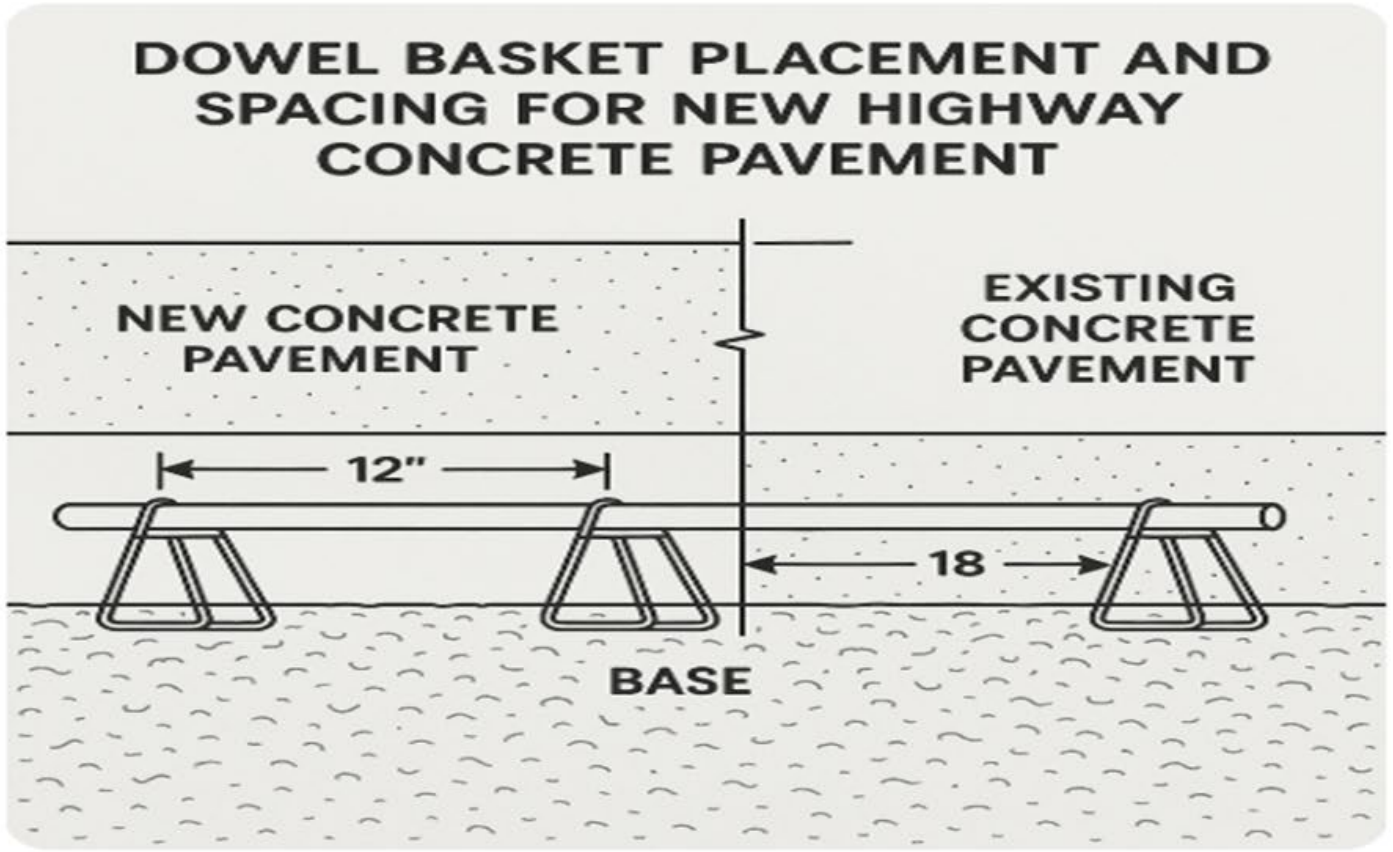
I think accepting the output without thorough review and editing poses serious ethical issues such as duty of competence and being in responsible charge of engineering

How you ask question will influence your result

AI can “hallucinate” answers

create a drawing showing dowel basket placement and spacing for new highway concrete pavement

Image created



GOOD USES

- Automating quantity takeoffs and/or verifying schedules of estimated quantities against plans
- Reviewing contractor schedules and predicting delays
- Available in BIM and project management software
- Reviewing contractor submissions for potential false claims?

THANK YOU

Angie Forsythe
James Cownie
Chat GPT
Microsoft Copilot Chat