

Rise of the Machines

Artificial Intelligence is Here Now

Kevin McNulty

NetWeave Social Networking



What do these
people have in
common?

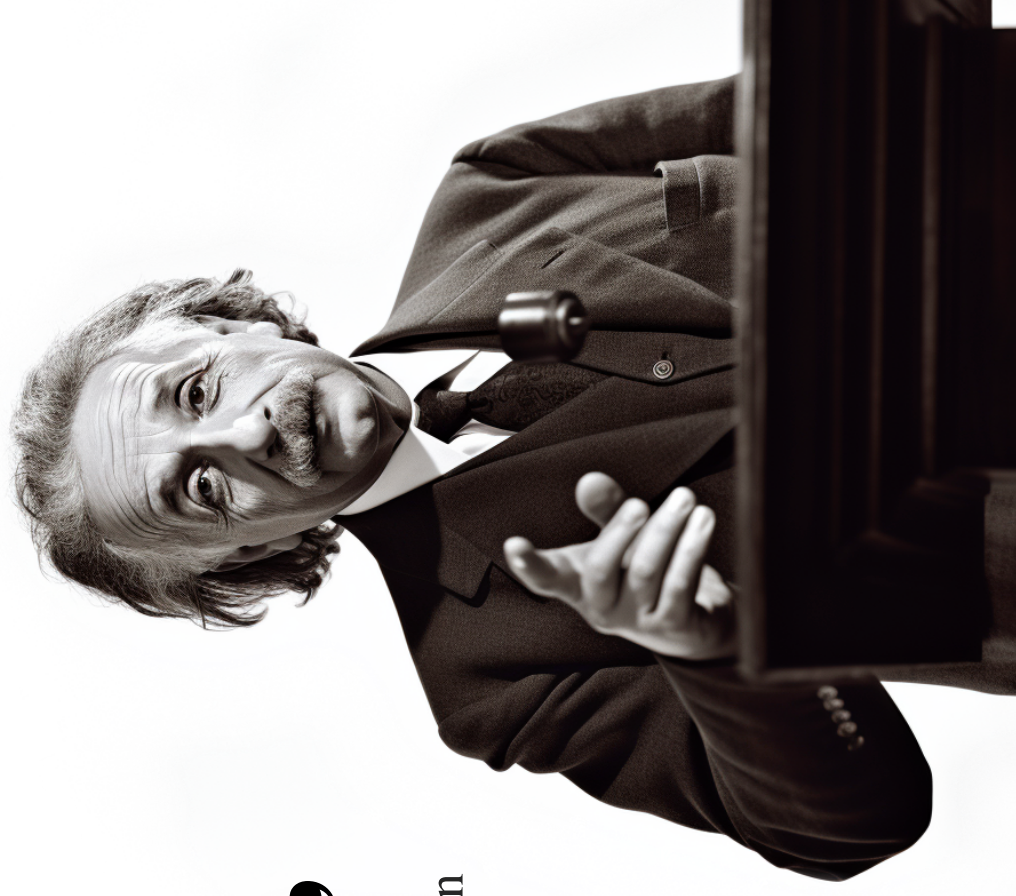


None of
them
ever
existed



“The measure of
intelligence is the
ability to change.”

— Einstein



What is Artificial Intelligence

What is AI? Meet Emma

INSIGHTS ON ARTIFICIAL INTELLIGENCE



What is AI?

- *Changes nature of human-computer relationship.*
- Humans used to have to solve a problem first, so we could tell the computer how to do it.
- With AI, you can simply give a problem to a computer and ask it to see what solutions it can come up with.



Types of AI: General AI

- Human-like cognitive abilities.
- Understanding, learning, reasoning, applying knowledge across wide range of tasks.
- Level of intelligence \geq human.
- Can perform any intellectual task a human can.
- Possesses self-awareness and consciousness.
- Doesn't require constant human supervision to function effectively.



Types of AI: Narrow AI

- Perform specific task/solve particular problem.
- Do not possess general knowledge or understanding beyond their predefined functions.
- Requires human intervention to operate outside its designated tasks.
- Has no self-awareness/consciousness.
- Cannot learn or adapt beyond its predefined capabilities.



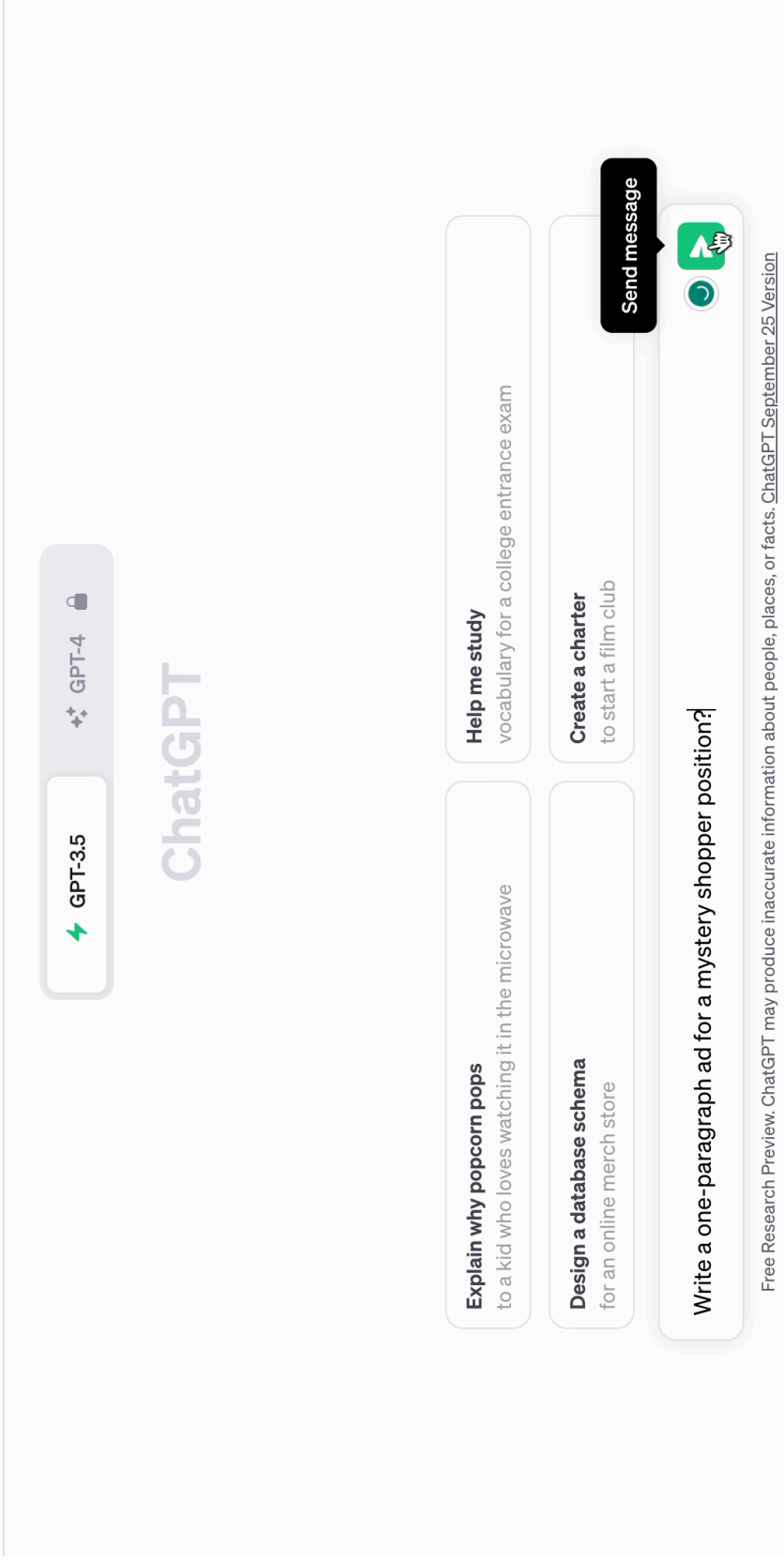
Generative AI

- Subset of narrow AI tools that create new content instead of analyzing existing data.
- Involves training a model usually on a HUGE dataset.
- Can generate images, text, music, videos, code, etc.
- Nearly 3000 generative AI tools have been released.



Generative AI Examples

- **Text generators:** ChatGPT, Google Bard, Claude, Pi.



The Chat GPT Rabbit Hole

- Chatbot component of GPT by Open AI.
- **Generative** because it generates text.
- **Pre-Trained** because it is trained before being released.
- **Transformer** because it has an “attention transformer.”



What is a Transformer

- Transforms attention... out of all the words I read, what words are more important to associate with each other than others?

The car used little gas because it was a hybrid.

The car used little gas because it was a short trip.

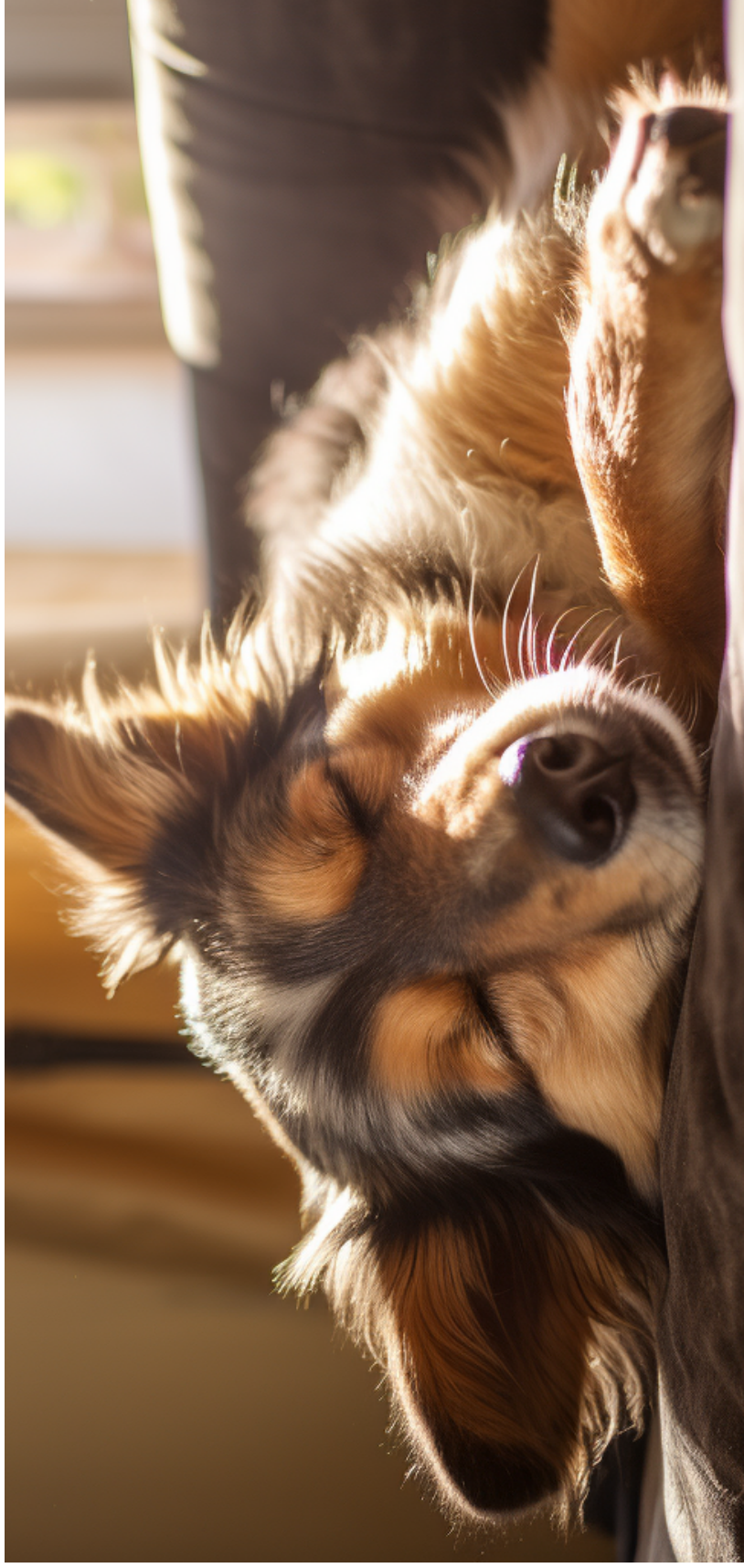
The Chat GPT Rabbit Hole

- Chatbot component of GPT LLM by Open AI.
- **Generative** because it generates text.
- **Pre-Trained** because it is trained before being released.
- **Transformer** because it has an “attention transformer.”
- Generates as much text in two weeks as mankind did up to 2022.
- Now has Voice & Vision



Generative AI Examples

- **Image Generators:** Midjourney, DALL-E, Stable Diffusion, Firefly.



Generative AI Examples

- **Audio Generators:** Eleven Labs, Mubert, Avia, Soundful.



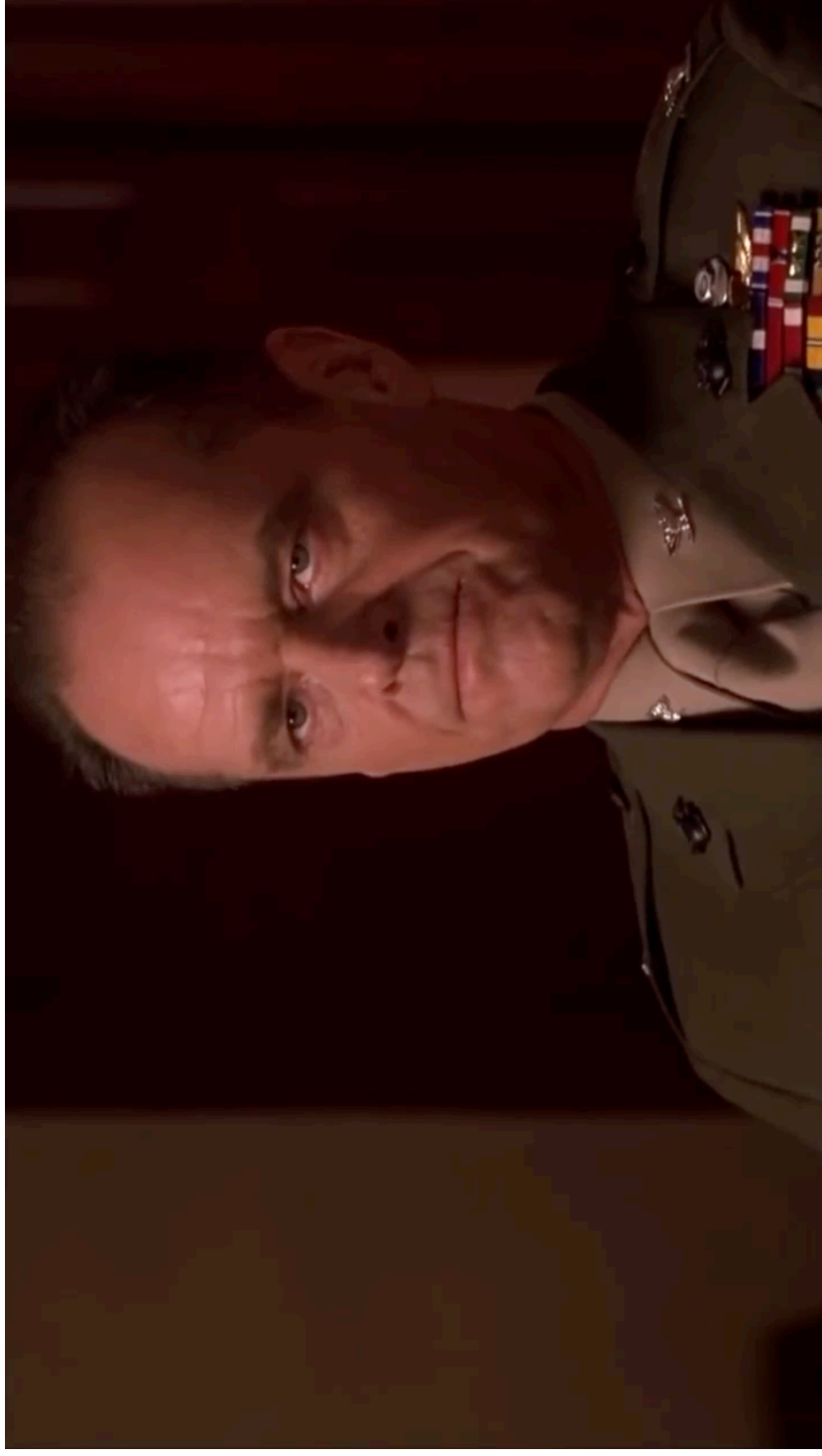
Generative AI Examples

- **Video Generators:** HeyGen, Synthesia, Rephrase.



Generative AI Examples

- **Video Generators:** HeyGen, Synthesia, Rephrase.

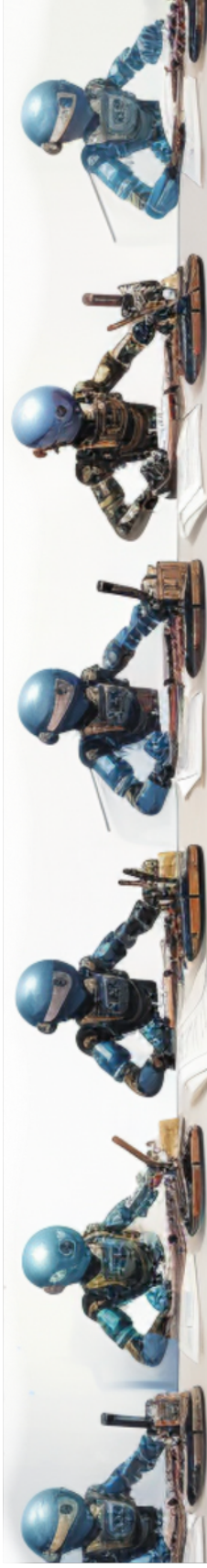


Generative AI Examples

- **Image Generators:** **Midjourney**, **DALL-E**, **Stable Diffusion**, **Firefly**.
- **Text generators:** **ChatGPT**, **Google Bard**, **Claude**, **Pi**.
- **Audio Generators:** **Eleven Labs**, **Mubert**, **Avia**, **Soundful**.
- **Video Generators:** **HeyGen**, **Synthesia**, **Rephrase**.
- **Video Editors:** **Munch**, **In Video**, **Pictory**.
- **Code Generators:** **GitHub Copilot**, **Alphacode**, **AutoGen**.
- **Keep up with futuretools.io!**



NET WEAVE
Social. Business.



“Learn to leverage AI
to benefit your life
before someone else
learns to leverage it to control
your life.”



— Joe Curcio

Founder of AI Media Group

Using AI The Prompt

It's All About the Prompt

- Most generative AI uses a prompt system.
- Provide enough detail to get what you want, but allow as much artistic freedom as you can for the AI to create.
- LLMs are zero-shot reasoners: without context, they can only attempt to respond by generalizing based solely on its preexisting knowledge and training.



It's All About the Prompt

- Providing “warm up” questions or statements in a “few shot” prompt leads to better results.
- ”Chain of Thought” prompts provide a more detailed and transparent response.
- Increased context reduces hallucinations.
- Don’t be afraid to iterate.
- Soft prompts = AI writes prompts
- Ask for sources.



It's All About the Prompt

1. Be specific.
2. State intent.
3. Use correct spelling and grammar.
4. Define your output format.



ChatGPT

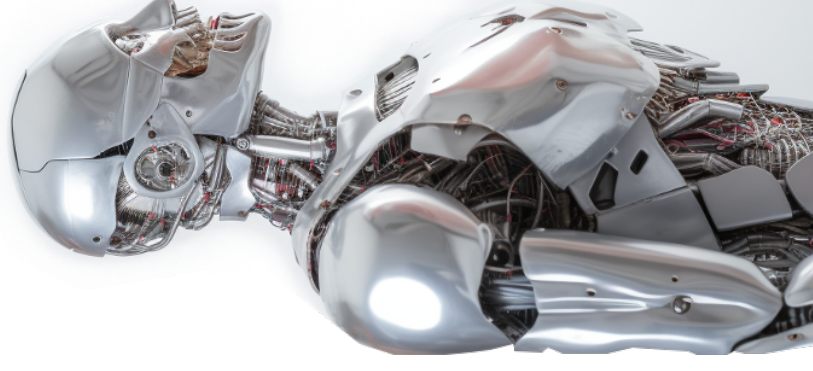
Can you explain quantum physics in four bullet points of one sentence each ▶

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. [ChatGPT August 3 Version](#)

Using AI
Things to Think About

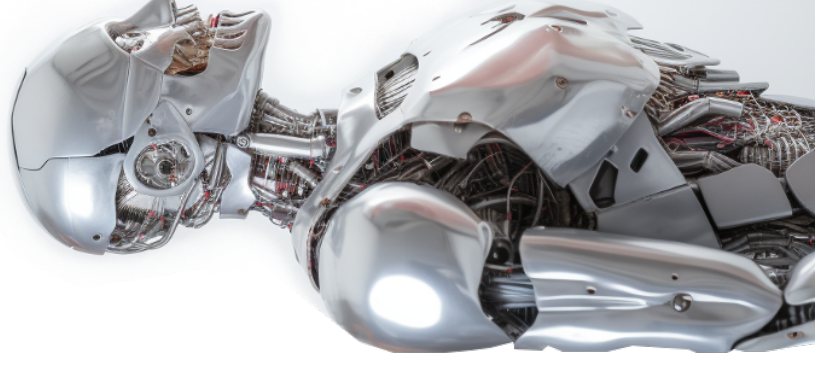
Challenges of AI

- You must be able to fact check output.
- Count the fingers & toes.
- Be aware of copyright issues.
- If training or fine-tuning your own AI tools, consider source training data.
- Though there are guardrails, inappropriate content is still possible.



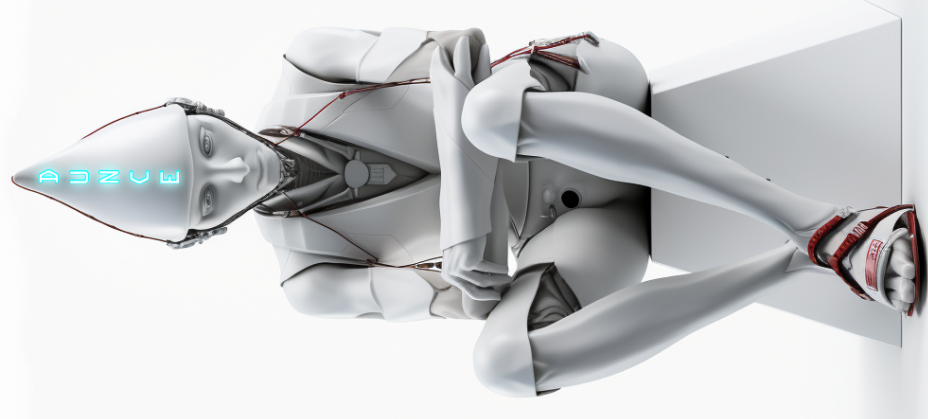
Challenges of AI

- Trying to keep up with new developments can be tough.
- AI advancing faster than understanding of controls and safety measures.
- Ethical concerns regarding misuse and copyright.
- What happens when AI's best interest no longer aligns with our own?



Limitations of AI

- Lack of common-sense understanding.
- Sensitivity to input data, leading to biases.
- Overconfidence in the face of uncertainty.
- High computational requirements.
- Limited long-term coherence.
- Hallucinations that are poorly understood.
- We don't fully understand how they work.
- **NOT A SEARCH ENGINE.**



Using AI Getting Started

Now What?

- Start using it now.
- Focus on productivity savings & quality improvement.

According to a study by Harvard Business School:

- Using ChatGPT = +25% in speed.
- Using ChatGPT = +40% in quality.
- Using ChatGPT = +12% in tasks completed.
- Eventually, AI will be integrated into your traditional tools –
be prepared with experience.

Questions?

Kevin McNulty

kevin@netweaveonline.com

