

An illustration of a person with glasses sitting at a desk, looking at a computer monitor. The background is filled with various data visualizations, including line graphs, bar charts, and flowcharts. There are also several bubbles floating around the scene. The overall color palette is dark blue and brown.

# BE CURIOUS

*MIKE KUTZKE*

*MIKE KUTZKE@GMAIL.COM*

**How are you  
currently  
using AI**



Navigation, searches, Siri, Alexa  
Text, image, and music generation

Virtual assistants

Chatbots, real-time translation, editing

Fraud detection, algorithmic trading,  
risk assessment

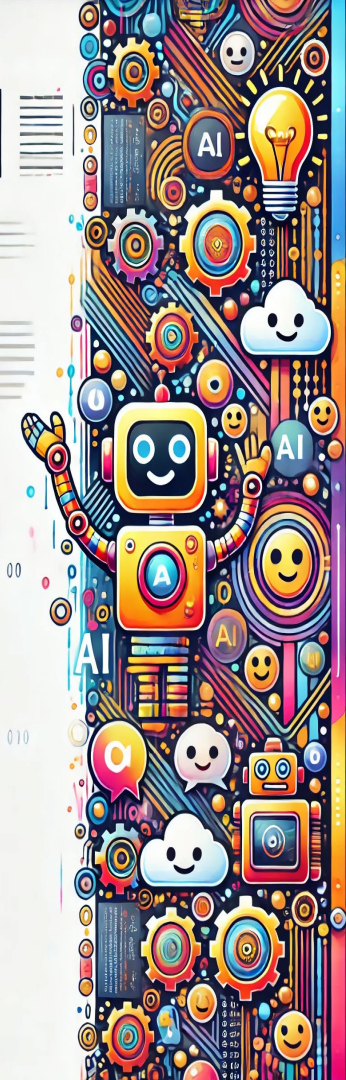
Personalized learning platforms

Threat detection, behavioral analytics

Demand forecasting, inventory  
management

Immersive experiences, training  
simulations

AI



AI

# Fun Facts:

- Following its release in November 2022, ChatGPT reached over a million users in five days and 100 million users within two months. This made it the fastest-growing consumer app ever at the time ([Statista, 2023](#))
- Existing AI technologies can automate tasks that absorb between 60% and 70% of workers' time today ([McKinsey, 2023](#))
- By 2025, as many as 97 million people will work in the AI space

## Fun Facts:

- AI market size is expected to grow by at least 120% year-over-year
- 83% of companies claim that AI is a top priority in their business plans
- Netflix makes \$1 billion annually from automated personalized recommendations
- 48% of businesses use some form of AI to utilize big data effectively

# AI literacy:

- The ability to understand, engage with, and effectively utilize artificial intelligence technologies. It encompasses knowledge of AI concepts, principles, and applications, as well as the skills to critically evaluate AI-driven systems and their impact on society



## **Generative AI**

Creates new content or data that mimics real-world examples. This can include text, images, music, and other forms of media (synthesizing realistic images, generating music, creating text-based content)

## **Predictive AI**

Predicts outcomes based on historical data. Its primary focus is forecasting future events or behaviors based on past patterns (stock market predictions, customer behavior forecasting, risk assessment)

# Agentic AI

Artificial intelligence systems that exhibit agency, meaning they can act autonomously to achieve specific goals or perform tasks without direct human intervention. These systems are designed to make decisions, learn from their environments, and take actions that align with their programmed objectives.

# Conversational AI





# AI Opportunities/Applications

- Summarize information
- Personalized learning and education
- Productivity enhancement
- Creative projects
- Chat Bots (customer support automation)
- Marketing and content creation
- Data analysis and decision making



# Tools

- ChatGPT
- Copilot
- Dall-E
- Claude
- Grammarly





# Prompt engineering

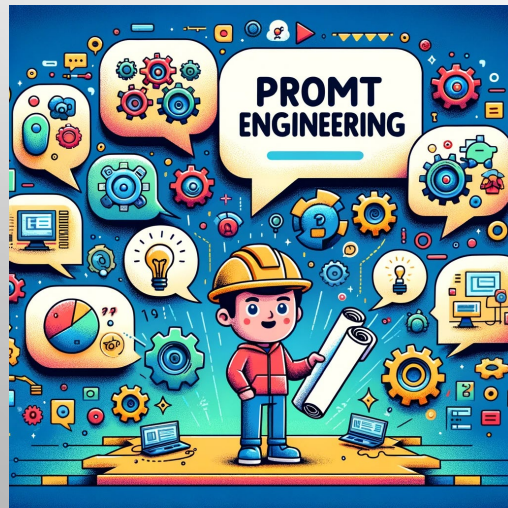
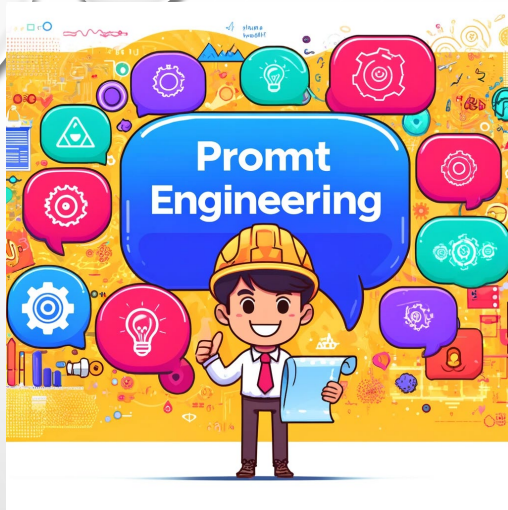
The art and science of crafting inputs or queries to AI models to shape their responses or outputs according to predefined criteria or goals. It entails experimenting with different prompt structures, lengths, and phrasings to optimize performance and enhance the AI's ability to generate relevant, contextually appropriate outputs



# My refined prompt:

Please create a word cloud image for a powerpoint slide with only the following terms : large language model, LLM, small language model, SLM, hallucinations, chatbot, deep learning, machine learning, ML - do not include any other terms or words in the image





# Prompt Engineering Strategies

- Define role
- State intention clearly
- Provide relevant information
- Ask specific questions
- Consider tone and style
- Clarify misunderstandings
- Reflect on results

# Text to image

**Prompt:** Please create a cool graphic image to represent text to image capabilities of AI to be used in a PowerPoint slide



# Challenges

- Radio pioneer Lee DeForest said in 1926: “While theoretically and technically television may be feasible, commercially and financially I consider it to be an impossibility...a development of which we need waste little time dreaming.”
- Mel Torme shared his thoughts about rock and roll in the 1950’s, “I think this wild, debauching stuff is a frightening trend. I have two young children and when I think of their growing up exposed to it, I feel ill.
- Thomas Watson, president of IBM, 1943, “I think there is a world market for maybe five computers.”



# Challenges

- Misinformation and hallucinations
- Hallucinations occur when AI models produce outputs that contain inaccuracies, distortions, or fabricated information not grounded in reality
- Replacing manual knowledge work (repetitive)





# Ethical/responsible AI usage

- Human validation, privacy, ethical decision-making
- Beware of accidentally summoning offensive or harmful content
- Avoid biased or inappropriate content
- Academic cheating
- Copyright and intellectual property discussion



Your comfort  
zone





**Try some  
new stuff  
and have  
some fun!**



# BE CURIOUS

*MIKE KUTZKE*

*MIKE.KUTZKE@GMAIL.COM*