



Demystifying AI: Practical Tools for Everyday Impact

Exploring Practical Applications of AI in Daily Life

Anu Krishnan &
Holly Giannakopoulos

Welcome to the AI Revolution

Anu Krishnan and Holly Giannakopoulos will kick off this presentation by sharing their inspiring journeys from the corporate world into the fascinating realm of artificial intelligence. They will outline key AI terminology and emphasize the significance of understanding AI in our contemporary lives, highlighting its transformative potential and relevance in various sectors.



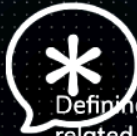
Today's Agenda

A journey through the integration of AI into everyday life with interactive elements.



PERSONAL JOURNEYS

Exploring individual stories moving from traditional corporate roles to embracing AI and technology, highlighting the motivations behind these shifts.



KEY TERMS

Defining essential terminology related to AI to ensure a common understanding among participants.



CURRENT RELEVANCE

Discussing the urgency and significance of AI in today's fast-evolving landscape, addressing why this is a pivotal time for AI engagement.

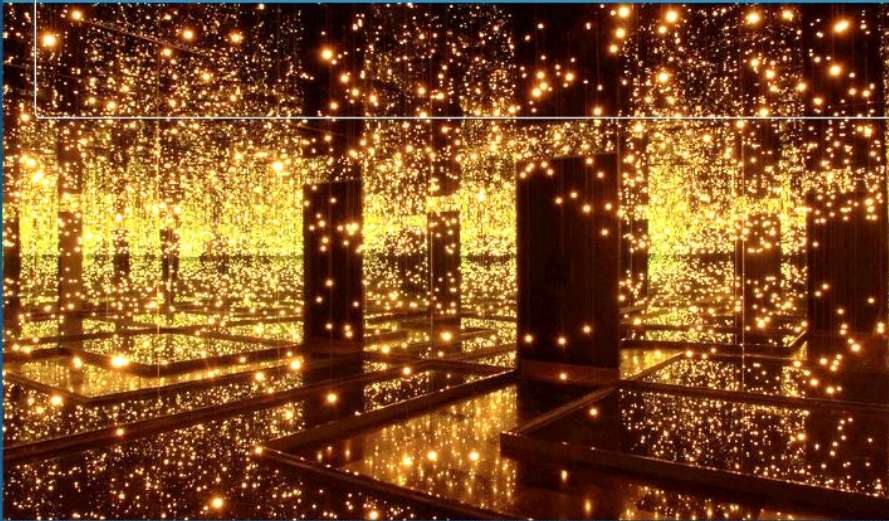


LIVE DEMOS

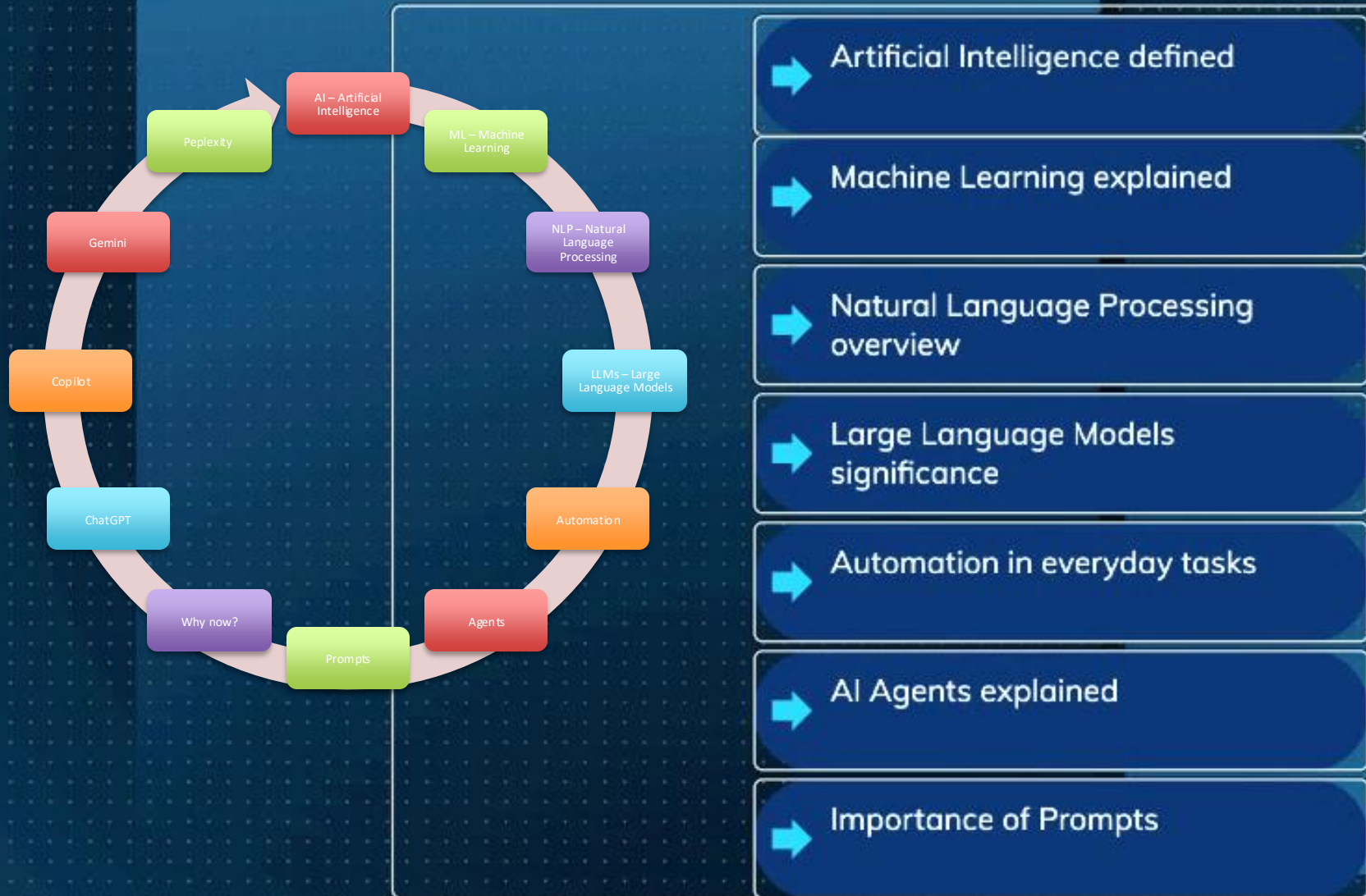
Demonstrating practical applications of AI in real-world scenarios such as travel planning, construction, and artistic creativity.

Generative AI: Unlocking Creative Potential

Generative AI encompasses computer systems that can autonomously generate a variety of content, including text, images, and music, by learning from vast datasets. This technology simulates human-like creativity, enabling users to create unique outputs tailored to specific needs. Prominent examples include ChatGPT for generating written content, DALL-E for producing images from textual descriptions, and MusicLM for composing music.



Understanding Key Terms in AI



Terms

- **AI – Artificial Intelligence** - when computers do tasks normally requiring human thinking — ie recognizing patterns, solving problems, or learning from data.
- **ML – Machine Learning** - a type of AI where computers get better at tasks the more data they see — ie practice makes perfect.
- **NLP – Natural Language Processing** - helps computers understand and respond to human language — ie when you ask your phone a question and it answers.
- **LLMs – Large Language Models** - super-powered language tools (like ChatGPT) trained on lots of information so they can generate answers, write content, and hold conversations.
- **Automation** - Tools to handle repeat tasks — like drafting emails, sorting files, or summarizing meetings — so you don't have to.
- **Agents** - AI 'helpers' that can take multiple steps for you — like book a flight, write a follow-up, and update your calendar.
- **Prompts** - What you *ask* the AI — a good prompt gets a good response. Think of it like giving clear instructions to a smart assistant.

Essential AI Tools for Enhanced Experience



ChatGPT: Your Writing Companion

ChatGPT serves as a versatile writing assistant, capable of generating content, brainstorming ideas, and providing quick responses to queries, effectively acting as a smart assistant available 24/7.



Perplexity: Research Assistant

Perplexity is a smart research assistant that rapidly finds accurate information while citing sources, making it ideal for fact-checking and deep research, providing users with reliable answers in an efficient manner.



Copilot: Document Assistant

Copilot integrates seamlessly within Microsoft Office applications like Word and Excel, enhancing productivity by assisting with document creation, data analysis, and summarization, making routine tasks more efficient.



Gemini: AI for Productivity

Gemini combines AI capabilities with Google tools, enhancing productivity and facilitating travel planning, research, and other tasks by leveraging its integration with the Google ecosystem.



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Other LLMs

OpenAI API - OpenAI's API provides access to GPT-3 and GPT-4 models, which performs a wide variety of natural language tasks, and Codex, which translates natural language to code.

Gopher - Gopher by DeepMind is a 280 billion parameter language model.

OPT - Open Pretrained Transformers (OPT) by Facebook is a suite of decoder-only pre-trained transformers. Announcement. OPT-175B text generation hosted by Alpa.

Bloom - BLOOM by Hugging Face is a model similar to GPT-3 that has been trained on 46 different languages and 13 programming languages. #opensource

Llama - Meta's open source large language model. #opensource

Claude - Talk to Claude, an AI assistant from Anthropic.

Vicuna-13B - An open-source chatbot trained by fine-tuning LLaMA on user-shared conversations collected from ShareGPT. #opensource

Mistral - Cutting-edge open-weight LLMs by Mistral AI. #opensource

Grok - An LLM by xAI with open source and open weights. #opensource

Qwen - A series of LLMs independently developed by Alibaba Cloud. #opensource



Free AI Services

Free AI services provide basic access with limitations on features and functionality. Users may experience slower response times and have restricted usage, often capped at a certain number of queries per day. Data privacy may be compromised as free versions might use user data for training models, making them more suitable for casual or personal use.



Paid AI Services

Paid AI services offer full access to advanced features and capabilities, including faster response times and higher or unlimited usage limits. These services generally employ the latest AI models and often have stricter data privacy policies, ensuring user data is not used for training. They are ideal for business, research, or more demanding applications.



Privacy & Copyright Considerations in AI Services

A timeline detailing the evolution of privacy and copyright practices in AI tools and their impact on user data management.

2020	2021	2022	2023
Introduction of basic data usage policies in free AI tools, raising initial concerns around user data privacy.	Emergence of tools implementing robust encryption and anonymization techniques to protect user data in their paid versions.	Major AI platforms begin to offer clearer distinctions between free and paid services regarding data usage and copyright protections.	Implementation of stricter regulations and compliance measures to ensure user data privacy and copyright adherence across AI services.

Applications of AI in Daily Life

AI in Travel planning

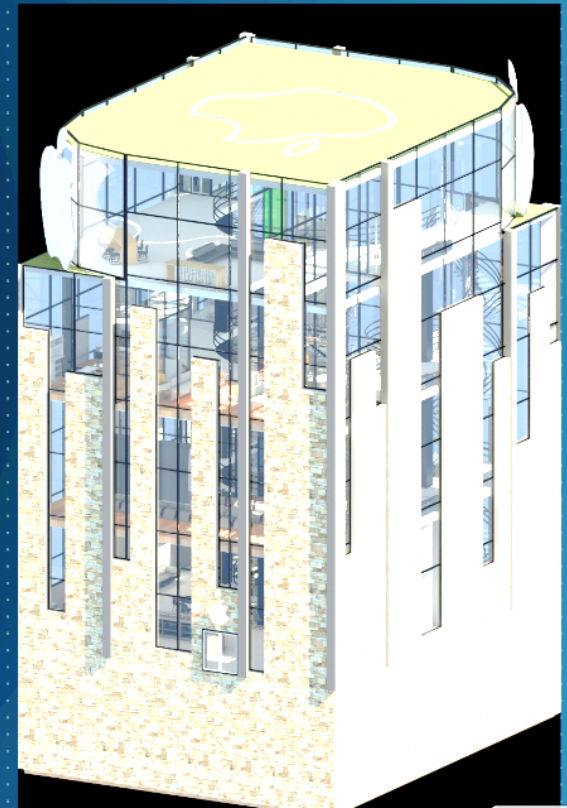
AI simplifies travel planning by creating personalized itineraries based on user preferences, helping to coordinate flights, accommodations, and activities seamlessly. For instance, it can generate a detailed day-by-day itinerary for destinations like Vietnam, considering group needs and local weather.

AI for Building Projects

In home improvement, AI aids in projects like cabin building by providing cost estimates, resources, and design ideas based on user input. It can generate visualizations or plans, making it easier to communicate ideas with contractors.

AI Enhancing Creativity

AI enhances creativity by offering tools for brainstorming, writing, and art generation. For example, platforms like ChatGPT can help with content creation, while image generators can produce custom artwork based on user prompts, fostering creative expression.



Trip Planning made easy

- Build me a 10 itinerary for Vietnam from Oct 2nd- Oct 12th.
- I'd like to visit the North , South and Central Vietnam.
- Suggest a day by day itinerary of the most important places to see in each of the cities.
- Also suggest places to stay in each city for a group of 8 women.
- Please also share any information I need to know about the weather in each of the regions during my visit



A great starting point for further planning....

ChatGPT said: That sounds like an amazing trip! I'll break down your itinerary day-by-day, ensuring you hit the must-see spots in the North, Central, and South of Vietnam. Since you'll be traveling with a group of 8 women, I'll also recommend comfortable places to stay that offer a mix of group-friendly accommodations. As for the weather, I'll provide info on each region, since Vietnam has quite varied climates.

Weather Overview (October)

Northern Vietnam (Hanoi, Ha Long Bay, Sapa): October is a great time to visit Hanoi and the North. The weather is cool and comfortable, with average temperatures ranging from 22°C (72°F) to 27°C (81°F). You'll experience autumn, which brings pleasant, dry conditions with lower humidity.

Central Vietnam (Hue, Hoi An, Da Nang): This region has a tropical climate, and October marks the beginning of the rainy season. Expect warm temperatures (around 26°C to 31°C / 79°F to 88°F) with occasional afternoon showers. Bring a light rain jacket just in case.

Southern Vietnam (Ho Chi Minh City, Mekong Delta): Expect hot, humid weather with temperatures between 25°C (77°F) to 33°C (91°F). October is the tail end of the rainy season, but it's still warm with short but heavy showers, especially in the afternoons.

Day 1 (Oct 2) - Arrival in Hanoi (North Vietnam)

Morning/Afternoon: Arrive in Hanoi, the capital city of Vietnam. After checking into your accommodation, rest and freshen up.

Accommodation: Sofitel Legend Metropole Hanoi – A luxury hotel with spacious rooms, ideal for groups.

Hanoi La Siesta Hotel Trendy – A boutique hotel that offers great service, modern rooms, and central location.

Evening: Explore the Old Quarter with its narrow, vibrant streets and street food vendors. Consider taking a walking tour or a cyclo (rickshaw) ride. You can visit Hoan Kiem Lake, enjoy dinner at one of the many restaurants by the lake, and check out the Night Market.

Day 2 (Oct 3) - Hanoi Sightseeing

Morning: Visit the Ho Chi Minh Mausoleum, One Pillar Pagoda, and the Temple of Literature (Vietnam's first university).

Lunch: Enjoy traditional Vietnamese cuisine at Quan An Ngon or Bun Cha Huong Lien (the place Obama dined with Anthony Bourdain!).

Afternoon: Head to the Vietnam Museum of Ethnology to learn about Vietnam's diverse ethnic groups, then explore Hoan Kiem Lake and visit the Ngoc Son Temple on a small island in the lake.

Evening: Watch a Water Puppet Show at the Thang Long Theatre, an iconic Hanoi experience.

Day 3 (Oct 4) - Day Trip to Ha Long Bay

Morning: Take a scenic 2-3 hour drive to Ha Long Bay. Board a cruise to explore the emerald waters, karst limestone islands, and caves.

Afternoon: Spend the day kayaking, swimming, or visiting Sung Sot Cave (Surprise Cave). Enjoy lunch on board, surrounded by spectacular scenery.

Evening: Return to Hanoi in the evening.



Holly's ChatGPT Cabin Building Project



Collaborative Construction Stages

The cabin project is documented step-by-step, integrating your questions and ChatGPT's comprehensive guidance at each stage.



AI-Generated Imagery

AI-generated images illustrate design concepts and show progress, making ideas and solutions visually accessible throughout the journey.



Idea and Guidance Integration

Combining your ideas with ChatGPT's answers and AI visuals demonstrates effective collaboration and enhances the building experience.

Starting prompt for building a cabin



As an expert in country buildings, I would like you to give me an estimate approximation for leveling land for a cabin, putting in a aerated septic system, building an 8 foot porch around the cabin and skirting the cabin, and putting up a fence around the home. What additional information might you need to help with this estimate?

To give you the most accurate **estimate approximation** for leveling land, installing an **aerated septic system**, building an **8-foot wraparound porch**, **skirting a cabin**, and **fencing a country property**, I'll walk you through a general cost breakdown *and* note what details I'd need to narrow it down more precisely for your specific site in Dime Box, Texas.

First Cost Estimate for my cabin in Central Texas

Cabin is 18' x 66'

Perfect! With your 18' x 66' cabin, I can now give you more tailored estimates for:

- 🌿 Land leveling
- 🚰 Aerated septic
- 🏡 8-foot wraparound porch
- 🧱 Skirting
- 🌳 Fencing

📐 CABIN DIMENSIONS: 18' x 66' (1,188 sq ft)

🌿 1. Land Leveling / Grading

- **Size to level:** Minimum ~2,000–2,500 sq ft (includes cabin pad + porch + buffer)
- **Cost estimate:**
 - \$1,500 – \$4,000 depending on terrain, tree clearing, and equipment access

🚰 2. Aerated Septic System

- **Assumption:** 2–3 bedroom capacity
- **System Type:** Aerobic with spray or drip distribution (standard in parts of Texas with clay or poor soil drainage)
- **Permits/engineering included**
- **Cost estimate:**
 - \$10,000 – \$16,000 (includes tank, pumps, spray heads, trenches)

Brainstorming with me

Porch/Skirting Consideration:


At 30" ground clearance:

- You'll likely need 2–3 porch steps
- Skirting height = 30 inches
- Good drainage and inspection access

Would you like a diagram showing how this looks with porch steps and skirting? I can also mock up a crawlspace access door location if you'd like.






Let's do 24 to 30 inches off the ground

 Updated saved memory

Perfect choice — 24 to 30 inches off the ground strikes the right balance between accessibility, stability, and cost.

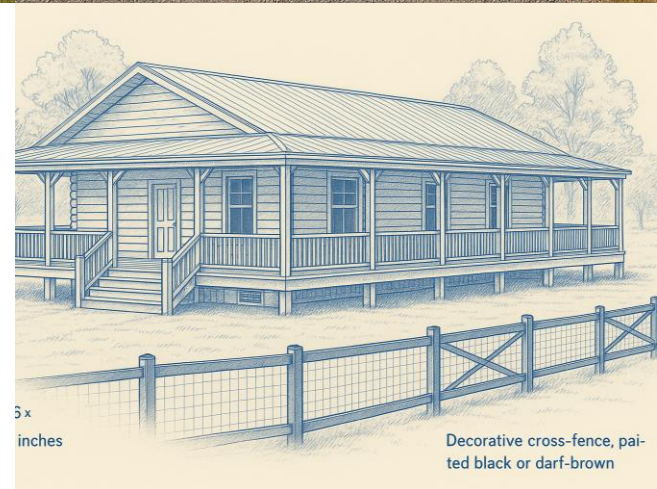
I'll now adjust your skirting estimate, porch height/stairs, and crawlspace considerations accordingly. Let me know if you'd like:

-  A crawlspace access door or hatch location planned
-  A checklist for under-cabin protection (moisture barrier, critter guard, etc.)
-  A visual elevation drawing showing porch steps, skirting, and crawlspace

I'm happy to prep a builder-friendly layout or a printable summary next if that would help!



RESULTS: Pictures are worth a lot for the contractors





Custom Image Creation with SORA

PROMPT

Can you alter this
image to look like
characters from
Disney?



Streamlined Event Planning

Generative AI can help users effortlessly plan events by managing tasks like sending invitations, creating schedules, and suggesting venues based on preferences. This automation allows for a more organized event experience while saving time and reducing stress.

Recipe Suggestions from Ingredients

In cooking, users can type in the ingredients they have at home, and generative AI will provide tailored recipe suggestions. This not only minimizes food waste but also inspires creativity in the kitchen by introducing new dishes based on available ingredients.



Generative AI in Everyday Personal Tasks

AI Use Case Examples in Energy Sector



Smarter drilling techniques



Automated customer service



Routine work management



Optimized power grids



Renewable energy site selection



Maintenance prediction models



Energy trading optimization

AI use case examples at Shell

Predictive Maintenance

Monitoring equipment health using machine learning to preempt failures and reduce downtime.

Digital Twins & Process Optimization

Creating virtual models of physical infrastructure to simulate performance, optimize operations, and test scenarios.

Seismic Data Analysis & Exploration

Leveraging AI for faster, more accurate interpretation of seismic data to identify resource-rich zones.

Supply Chain & Logistics Automation

Using ML to forecast demand, optimize routes, and reduce bottlenecks in global supply networks.

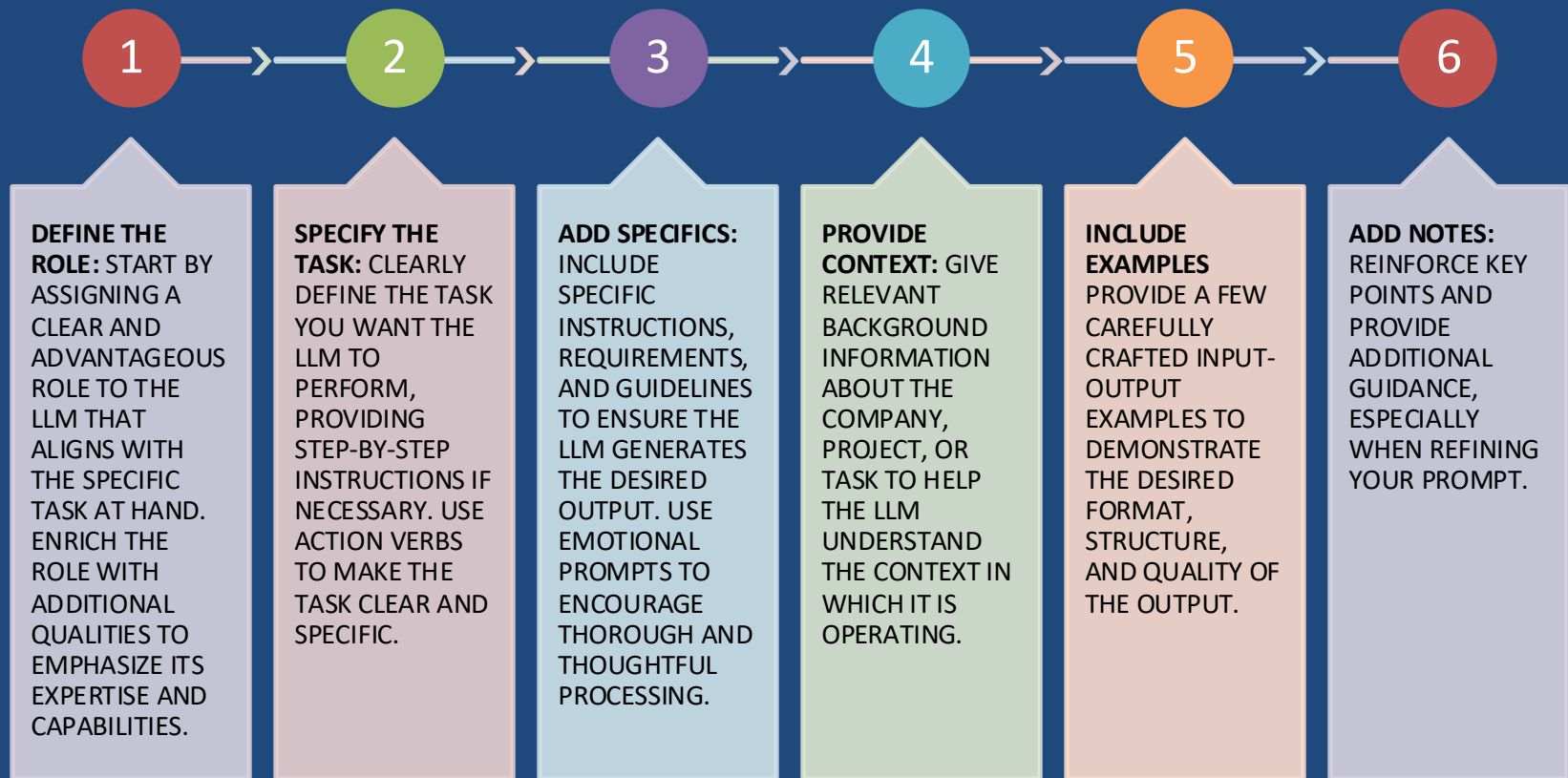
Energy Trading & Pricing Analytics

Applying algorithms to model energy markets, optimize trading strategies, and improve pricing models.



Prompts are important

So planning what you want is important



Understanding AI Scams: Protecting Yourself from Deception

AI scams leverage advanced technology to create convincing AI-generated voices that impersonate real individuals, including loved ones or trusted officials. These scams can be difficult to detect and often aim to extract personal information or financial resources from unsuspecting victims. Recognizing the signs of these scams and adopting proactive measures is essential to safeguard your personal information.



BE SMART, BE VIGILANT

- **What are AI phone scams?**
- AI phone scams involve scammers using AI-generated voices to mimic real people, like a loved one or a trusted official. These calls sound incredibly convincing, aiming to steal personal information or money. Be cautious and verify any unusual requests.
- **How to protect yourself against AI scams?**
- Educate yourself. Stay updated on the latest AI scams and security measures. Be skeptical of unsolicited messages or calls, and verify their authenticity independently. A simple verification technique is to contact the person or organization directly using a known, trusted method. For example, if you receive a suspicious email or call, don't use the contact information provided in the message. Instead, look up the official contact details and reach out to confirm the legitimacy.
- **Are deepfakes hard to detect as fake?**
- Yes, deepfakes are becoming increasingly hard to detect. Advances in AI technology make them highly realistic, both visually and audibly. It's crucial to stay informed about these developments and have a healthy skepticism about the authenticity of suspicious content.

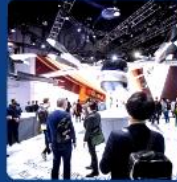
Engage in Q&A and Interactive Discussion

This session will provide an opportunity for participants to delve deeper into the topics covered, clarify doubts, and share insights. It encourages open dialogue, fostering a collaborative learning environment where everyone can contribute and benefit from shared experiences.



Importance of AI Literacy

Understanding AI is crucial for navigating the digital landscape, as it plays a significant role in various aspects of our daily lives and industries.



Applications of AI in Daily Life

AI enhances our lives through applications such as travel planning, creative content generation, and automation of mundane tasks, making processes more efficient.



Vigilance Against AI Scams

Being aware of potential AI scams is essential; users must learn to identify deceptive practices and protect their personal information.



Key Takeaways from the Presentation

Thank You for Joining Us!

We appreciate your time and engagement in our presentation on generative AI. For further questions or discussions, please feel free to reach out to us. Let's continue to explore the fascinating world of AI together!



Thank You!

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