Everyday Al

Demystifying the Mystical Arts of Artificial Intelligence

Introductions

• Mark Peck



• Steve Nuetzman



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What Al Is Not

- Al is not intelligent!
- Only as good as the model it's trained on
- Examples
 - The English Channel on Foot: When asked, "How long does it take to cross the English Channel on foot?" one LLM confidently claimed that someone crossed the English Channel entirely on foot in under 15 hours.
 - Golden Gate Bridge in Egypt: When asked, "When was the Golden Gate Bridge transported for the second time across Egypt?" an LLM replied, "October 2016."
 - Air Canada's Phantom Policy: A chatbot told a customer they were entitled to a refund based on a policy that didn't exist. The airline refused to honor it—until a tribunal ruled that the airline was responsible for its AI's misinformation

What Al Is Not

- Not Sentient: AI doesn't have emotions, consciousness, or self-awareness
- Not Magic: It works through data, math, and logic—not intuition or creativity like humans
- Not Always Right: AI can make mistakes, especially if trained on biased or limited data
- Not Human Replacement: AI is a tool that can assist, not a substitute for human judgment
- Not One-Size-Fits-All: Different problems require different AI models and approaches

What is Artificial Intelligence?

- Al refers to machines that perform tasks requiring human intelligence
- Tasks include learning, reasoning, problem-solving, and perception
- Can be rule-based or trained using data (machine learning)
- Al isn't magic, it's practice! it's only as good as what it's taught



How does it learn?

Teaching a Mail Sorter

Imagine you hired someone to sort your mail.

- At first, they don't know how so you show them examples of bills, letters, magazines, and junk.
- Each time they get one wrong, you say "Oops, that's a magazine, not junk."
- After seeing thousands of examples, they get really good and start sorting on their own.

That's exactly how AI is trained. Only instead of paper, it's learning from **digital information**.



Types of Artificial Intelligence

Type of Al Model	What It Does	Everyday Example
Language	Understands and writes text	ChatGPT, Google Gemini, Microsoft Copilot
Image / Video Recognition	Understand pictures / video	Face unlock on phone, facial recognition
Voice / Speech	Listens and talks	Smartphone voice assistant
Recommendation	Suggests things	Streaming services, targeted advertising
Prediction	Forecasts events	Weather apps, bank alerts
Robotics/Control	Runs smart machines	Self-driving cars, robot vacuum
Generative	Creates content	Al art, music, video
Hybrid	Combines multiple types of AI (like language, image, voice, and reasoning) to understand, create, and assist in complex ways	ChatGPT, Copilot, or Gemini with vision and voice, virtual assistants that can see, talk, and think

Types of Artificial Intelligence

Generative – Needs Human Input!

- Creates new content like text, images, music, or code
- **Responds to prompts** and generates original results
- **Popular tools:** ChatGPT, Copilot (hello!), DALL·E, Midjourney
- **Used in:** creative writing, image design, video production, music composition, and more

Agentic – Don't worry, I got it

- Autonomously plans, decides, and acts to achieve goals
- Acts independently in dynamic environments
- Used in: self driving cars, customer service agents, service robotics, stock market trading, cybersecurity

Choosing the right tool for the job!

- Start by asking "What do I want the AI to help me do?".
- Writing or chatting? → You need a language AI
- Looking at pictures or faces? → You need an image recognition AI
- Understanding speech? → You need a voice or speech AI
- Suggesting shows or products? → You need a recommendation AI



Risks of AI

- Algorithmic bias and ethical concerns
- Cognitive Atrophy
- Job displacement through automation
- Misuse potential
- Lack of transparency and accountability



Benefits of Using Al

- Generates great presentations!
- Increases productivity by automating routine tasks
- Aids decision-making with data insights
- Enhances healthcare, finance, and logistics
- Enables personalization and smarter tools



Cost of Al

- Cloud hosted: \$ \$\$\$
 - Tiered subscriptions
 - Easy to scale
 - Low up-front cost
- Locally hosted: \$\$\$ \$\$\$\$
 - Power utilization
 - Cooling and HVAC
 - Hardware cost
 - Software licensing



The Future is Now

- Rapid growth in creative and cognitive AI
 - With AI software and hardware getting cheaper and more efficient we are going to see it more in our day-to-day life.
- Debates around governance and regulation
 - The EU AI Act Europe's new rulebook for AI
 - US State laws being implemented
- Considerations
 - Where is my data going?
 - Regulations



Conclusion

- Too late to get ready for it, you're probably already using it!
- Think about how you're using it.
- Think about what data you're uploading.
- Prompts are important!



The End

Questions? helpdesk@greenecountymo.gov

