# **AI Simplified**

# A Primer on the Usage of Artificial Intelligence



# **Seminar Logistics**

Where: Missoula Public Library - 4th floor Cooper Room (Side A)

When: Wednesday, November 8, 2023, 6:30-7:30pm

Presenter: Dan Hubing

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Welcome	"Welcome to the "Al Simplified" Seminar. In the next hour, your expanded knowledge of Al will help you understand how Al can benefit yourself, humanity, and the earth itself.  That's a bold statement, for sure. But why not? There's a high probability it may be true. That's because Al systems output its highest probability of an answer.
Introductions:	Dan Hubing – Never stop learning.
"What is AI?"  Ask 3 attendees	Al systems optimize and solve very complex and repetitive tasks. Like zapping weeds in a cabbage field in California, from a platform pulled by a tractor. (This startup was recently purchased by John Deere.)  Al Chatbots answers questions with "probable" answers. Therefore, the outputs are sometimes identified as "hallucinations": which are false results.
What is generative AI?	It is a chatbot AI system that "generates" a response from prompts. Some AI applications can create artwork, sounds, or computer code; all in a response to prompts or other inputs.  Types of AI Systems: Traditional AI: is referred to Narrow or Weak AI Traditional AI systems are primarily used to analyze data and make predictions. Like playing chess.  Generative AI: creates something new from a prompt. It will create new data similar only to its training data. Like ChatGPT.  General AI (GAI) or Artificial General Intelligence (AGI): are referred to Strong or Strict AI, because it's expected to be equally as smart as a human without any human intervention. Like ???

# **Objectives for this Seminar**

- 1: When to use ChatGPT?
- 2: Improve Prompt writing to return more precise results
- List four Al apps that are commonly used in personal and business settings

## Objective 1: When to use ChatGPT?

## Generative Al

**GPT** stands for **Generative Pre-Trained Transformer Developed by OpenAl (<u>www.openai.com</u>)** 

This means that it learns what to say by capturing information from the internet and then uses this text to "generate" or predict the next work in response to a prompt.

## OpenAl "changed the world" on November '22, 2023

https://openai.com/chatgpt

(ChatGPT is a variant of GPT3, a newer version GPT4 is also available.

# Microsoft's Al "Bing"

www.bing.com

(Bing is native in Edge. Use the "Microsoft Bing Search Engine" extension for other browsers. Bing is also an Android or iOS app.)

#### Google's Al "Bard"

https://bard.google.com/

#### **Art and Images**

DALL·E can create realistic images and art from a description in natural language. <a href="https://openai.com/dall-e-3">https://openai.com/dall-e-3</a>

#### Music

Ask your Alexa to play "AI Piano".

or: https://music.amazon.com/albums/B0BVS9PZVJ

# When use ChatGPT?

(or other generative Als)

- Provide a more well-rounded answer to a "standard" internet search.
- Have a little fun with a casual conversation with an Al.
- Need assistance in: Proofreading, Researching, Debugging, Brainstorming or Clarity on complex concepts



Give me the top 5 reasons to use chatgpt

ChatGPT answers this question...

Certainly! Here are the top 5 reasons to use ChatGPT:

- 1. **Versatility**: ChatGPT can assist with a wide range of tasks, from answering questions and generating content to providing suggestions and brainstorming ideas.
- 2. **Convenience**: It's available 24/7, providing instant help whenever you need it, without the need to wait for human assistance.
- 3. **Efficiency**: ChatGPT can quickly generate text, saving you time and effort when drafting emails, reports, or any other written content.
- 4. Anonymity: You can discuss sensitive or personal topics without the fear of judgment, as ChatGPT ensures your privacy.
- 5. Language Support: ChatGPT can communicate in multiple languages, making it a valuable tool for users around the world.

Remember, while ChatGPT is a powerful tool, it's important to critically evaluate its responses and use it as a supplement to human expertise when needed.

# Objective 2: Improve Prompt writing to return more accurate results.

# Prompt Engineering

When prompting for an internet search, you sometimes needed to rephrase your prompt to improve your response.

"The probability of getting a desired output is based on the quality of the prompt."

A <u>perfect prompt</u> should contain many of these characteristics:

- Clear, concise, specific
- Measurable, achievable, use action words
- No ambiguity, test and improve your prompt

#### **Prompt improvement Tips:**

**Contextual prompting**: Provide <u>background context</u> before asking a question. Example: "I'm planning a trip to Paris. What are the top 3 tourist attractions I should visit?"

**Explicit instruction**: Clearly specify the <u>type of answer</u> or format you want. Example: "Summarize the key events of WWII in a bulleted list."

**Step-by-step instruction**: Break down <u>complex requests</u> into smaller, simpler questions. Example: *Ask about losing weight first, then building muscle.* 

## Learning about "Prompt Engineering":

Want to standout at work?

https://www.worklife.news/technology/learning-chat-gpt/?

MIT Announced Prompt Engineering is top AI skill:

https://www.cnbc.com/2023/09/22/tech-expert-top-ai-skill-to-know-learn-the-basics-in-two-hours.html?

https://www.coursera.org/learn/prompt-engineering

https://www.freecodecamp.org/news/how-to-communicate-with-ai-tools-prompt-engineering/

https://thenextweb.com/news/openai-free-class-prompt-engineering-devs

**Tip**: HR Recruiters are now looking for employees

with "Prompt Engineering" course experience or background.

# Objective 3: List four Al apps that are commonly used

Al apps in use now	(Note: There are many more than four)  - Digital Assistants: Alexa, Siri, Google search  - Google Lens: for camera search for like objects/information  - Voice Translators: to convert words between languages  - Smart cars: Tesla for example  - Advanced Gaming programs  - Healthcare & Financial management
Al application sites	Art: <a href="https://dream.ai/">https://dream.ai/</a> Doodle: <a href="https://clipdrop.co/stable-doodle">https://clipdrop.co/stable-doodle</a> Need A Friend: <a href="https://replika.ai">https://replika.ai</a> Text to Video: <a href="https://www.youtube.com/watch?v=8HpQgEEhbC4">https://www.youtube.com/watch?v=8HpQgEEhbC4</a> Project Management: <a href="https://height.app/">https://height.app/</a> ?
Empower employees	Small or Large Business uses of AI: https://www.entrepreneur.com/leadership/6-ways-small-businesses-can-use-ai-more/455569  Some learning institutions are assembling task forces, hosting webinars, and organizing information sessions to educate instructors and administrators about this technology.  The head of one such task force shared: "we begin every meeting not with slides, but by pulling up ChatGPT on a screen and experimenting with it live. I watch jaws drop. Once they've seen the tool, the discussion is very different."  • We urge instructors and administrators who haven't yet done so, to try ChatGPT or similar tools, like Google Bard or Bing Chat. Ask it to write you an essay on your own thesis topic, or brainstorm answers to a key question in your course. Ask ChatGPT how you can integrate it into your class. Find ways for it to assist you with your own work; early experimenters are lesson planning, creating custom activities, and outsourcing administrative tasks.  Al Jobs for older employees: https://theaging.ai/articles/ai-older-workers/  Using ChatGPT in Business: https://tech.co/news/10-ways-businesses-using-chatgpt

# How is Al transforming lives? People with Disabilities Those with **speech impediments**. Applications like Voiceitt can analyze unique speech patterns of individuals and transcribe speech in real-time, allowing for seamless inclusion of those with even severe speech impediments in voice calls and live interactions. Those needing enhance vision. A multitude of AI tools now can convert visual data into a variety of other formats, including audio. Many tools can also make images more interpretable through easy-to-use contrast and quality resolution features. Those who struggle to <u>hear</u>. All has substantially improved voice and video transcription speed and accuracy. Other tools, such as Whisper, can reduce background noise significantly so the user can more clearly hear the voice or primary sound. Those with **mobility issues**. New, Al-enabled mobility assistants have been equipped with groundbreaking technology which allows for easier control. This includes voice-controlled wheelchairs and prosthetics which can more accurately detect fine-grained nerve inputs. **Khan Academy:** has added *Khanmigo*, its Al powered curriculum: Home https://www.khanacademy.org/khan-labs? Schooling **ChatGPT for Teachers:** YouTube has many videos to help teachers

and students understand how ChatGPT can help.

## Al Terminology sites

- https://www.coursera.org/articles/ai-terms
- https://www.techrepublic.com/article/artificial-intelligence-cheat-sheet/
- <a href="https://www.ibm.com/blog/ai-vs-machine-learning-vs-deep-learning-vs-neural-networks/?c=Artificial%20intelligence">https://www.ibm.com/blog/ai-vs-machine-learning-vs-deep-learning-vs-neural-networks/?c=Artificial%20intelligence</a>

## Stay up to date "Ride the Wave"

#### Newsletters:

https://www.therundown.ai/subscribe?

https://www.bigbraindaily.com

https://tldr.tech/

Learn AI systems: <a href="https://www.datacamp.com/blog/how-to-learn-ai">https://www.datacamp.com/blog/how-to-learn-ai</a>
Educational curriculum and resources: <a href="https://ai-4-all.org/resources/">https://ai-4-all.org/resources/</a>

Learning Blog: https://blog.coursera.org

Help at work: <a href="https://www.worklife.news/technology/learning-chat-gpt/">https://www.worklife.news/technology/learning-chat-gpt/</a> Work smarter using AI tools (includes listening mode): <a href="https://every.to">https://every.to</a>

MIT free online courses: <a href="https://ocw.mit.edu/search/?q=Ai">https://ocw.mit.edu/search/?q=Ai</a>

#### Report from the 1'st ever Al Engineer Summit:

https://swizec.com/blog/ai-engineer-summit-report/?

#### Set your December calendar:

Three CHRISTMAS LECTURES will be shown on BBC, by Mike Wooldridge, Professor of AI at Oxford University and Director for AI at The Alan Turing Institute in London:

https://www.rigb.org/explore-science/explore/blog/truth-about-artificial-intelligence-be-revealed-christmas-lectures-ri

# For your business?

Websites to help implement AI: <a href="https://ae.studio">https://ae.studio</a>

## 6 Examples of successful businesses:

https://www.zdnet.com/article/how-ai-is-transforming-organizations-everywhere/#ftag=CAD-03-10abf5f

### Example use case of ChatGPT in psychology on a job situation.

https://every.to/chain-of-thought/ai-assisted-decision-making?

#### 24 Startups utilizing & benefiting from Al

https://www.geekwire.com/2023/we-asked-24-startups-in-the-new-techstars-seattle-class-about-how-ai-is-impacting-their-business/

#### It's getting easier to create an Al system for your business

https://youai.ai/?utm\_sourcet=therundownai&utm\_medium=newsletter&utm\_campaign=mind studio&utm\_content=20231017

# Al Tips and Information:

#### **Ethical Al**

Most Al Models, generally get their input data from **the internet** and anything that's mostly in public web spaces. This can lead the Model onto the untrue, wrong, or dangerous areas since there is a lot of incorrect information in public spaces.

Biases toward gender, race, privacy, human rights, and authority are often stated but not regulated. Don't forget about other issues that arise:

- Hallucinations (outputs of Al are in "high probability" but still be untrue)
- Copyright infringement (how much of a change from original is needed)
- Privacy issues
- Chaos if left unchecked (fake news, deepfake videos, manipulation of population)

#### An article discussing ethics:

https://research.aimultiple.com/ai-ethics/

An online course in Al Ethics.

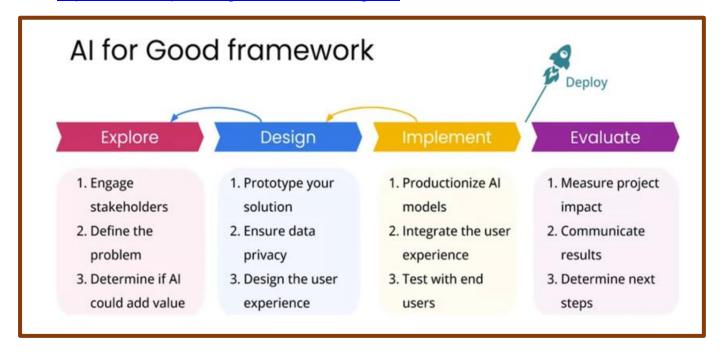
https://www.coursera.org/learn/ai-ethics-analysis?trk ref=globalnav

#### Bill Gates's discusses his hope for Al in this website article:

https://www.gatesnotes.com/The-risks-of-Al-are-real-but-manageable?

#### A course on Al For Good.

https://www.deeplearning.ai/courses/ai-for-good/?



#### Various Al platform Sites to check out:

http://rovioai.com https://super tools.therundown.ai

#### Why Tesla's Humanoid Robot Matters:

https://scobleizer.blog

### How to improve your writing with Google's Bard:

https://www.youtube.com/shorts/CkjkgH8pIBc

#### Al Roles for 2023 - The Top 8 Emerging Jobs

https://www.bigbraindaily.com/p/big-brain-premium-1?

#### **Use ChatGPT to create Charts:**

# II How to craft perfect charts with ChatGPT

ChatGPT can create visually stunning charts for you— without touching Excel or writing a line of code.

**Step 1:** Open ChatGPT and select 'Advanced Data Analysis' (previously Code Interpreter)

**Step 2:** Upload your data by attaching a file or pasting it into a prompt such as "Please create a visually stunning chart that best displays the following data." For this example, we used a <u>dataset</u> of how long it took various services to reach 1M users.

**Step 3:** If you have specific customization requests, add them to your prompt or ask ChatGPT to refine. Preferences can include chart type, color scheme, layout, etc.

That's it! All it takes are a few simple steps to get a customized, data-driven chart just by speaking in natural language with ChatGPT.

Try it out for your next presentation before reaching for Excel!



# Lifelong Learning Center's Introduction to Al

An in-person Al introduction class right here in Missoula...

