



# LIMITATIONS OF GENERATIVE AI IN MENTAL HEALTH

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# ABOUT NORTH RANGE BEHAVIORAL HEALTH

North Range Behavioral Health provides quality, comprehensive care for people who face mental health and substance use disorder challenges. Our integrated, comprehensive treatment programs provide accessible and convenient therapy, substance use disorder treatment, and behavioral healthcare options that have helped people maintain, restore, and repair wellbeing for over 50 years.

As the community mental health center for Weld County, we serve children, youth, adults, and families, across a wide spectrum of needs and economic status. We also provide critical services such as 24/7/365 mobile crisis teams and immediate screening and risk assessment. Our Certified Community Behavioral Health Clinic (CCBHC) designation requires us to adhere to standards that create easier access to care and enhanced services for those who need mental health and substance use treatment.





# WHAT IS ARTIFICIAL INTELLIGENCE?

## Artificial Intelligence (AI)

Computer systems mimicking human intelligence.

## Machine Learning (ML)

Subfield of AI enabling machines to learn from data.

## AI + ML

Powerful combo for automation, recommendations, and decision - making.

## Generative AI

The use of AI and ML to generate creative content



# GENERATIVE AI



Enables machines to generate new and original content.



Leverages advanced algorithms and neural networks.



Autonomously produces diverse outputs: images, music, text, virtual worlds.



Goes beyond data analysis and pattern recognition.



Empowers machines to create, innovate, and explore uncharted territories.



# The Growth of AI Art

Version	Release Date
V1	February 2022
V2	April 12, 2022
V3	July 25, 2022
V4	November 5, 2022
V5	March 15, 2023



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# CHAT GPT



Is a text-based AI using Natural Language Processing (NLP)

Utilizes NLP techniques and algorithms to process and generate human language

Can understand and generate text-based conversations, making it a practical application of NLP in the context of chat-based interactions





# PUBLIC ACCESS TO CHAT GPT

2018

Development  
started

MARCH 2022

First general  
public release  
(GPT 3.5)

MARCH 2023

Newest release  
including a paid  
version (GPT 4)





# CHAT GPT

understands a prompt and generates a response by using a complex neural network trained on a vast amount of text data.

1

You give Chat GPT the prompt: "Create a poem about nature."

2

Chat GPT analyzes the prompt, breaks it down into different components, and tries to understand the underlying meaning and context.

3

Chat GPT uses its knowledge of language and patterns learned from the training data to generate a response.

4

Chat GPT predicts the most likely next words based on the given prompt and generates coherent and creative responses.

5

Chat GPT generates a meaningful and contextually appropriate poem about nature by drawing on its understanding of language, grammar, and poetic structures learned during training.







# PROMPT: CREATE A POEM ABOUT NATURE

Amongst the trees so tall and grand,  
Where gentle breezes softly land,  
Nature's beauty in every hue,  
A symphony of life, vibrant and true.

- Chat GPT



# CHALLENGES AND LIMITATIONS OF AI-GENERATED CONTENT



Lack of Creativity

Lack of Intention and Emotional Depth

Originality and Authenticity

Lack of Copyright

Bias and Reinforcement

Factual Errors





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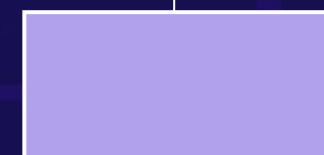
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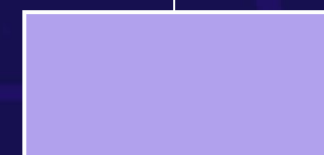
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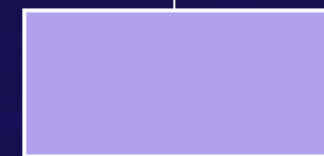
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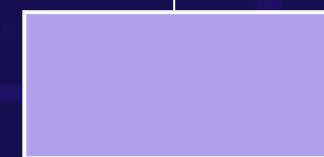
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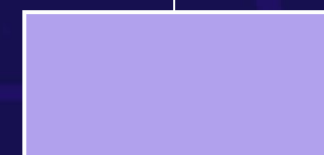
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# INDUSTRY AI

## Bells AI

“Contextual recommendations for compliance and reimbursement, proofing grammar and spelling, checking clinical vocabulary.”

## Eleos

“Secure ambient in-session data collection enables the digitization of conversations between clinicians and consumers.”





# NORTH RANGE BEHAVIORAL HEALTH STATEMENT ON GENERATIVE AI

We believe that compassion, deep connection, and clinical expertise are key to providing high quality, ethical client care. To maintain the all-important human connection North Range provides to our clients, we ask that AI-generated solutions or information NOT be used for clinical or client-facing purposes at this time.



# Recommended Usage

Coding

Process Description


Brainstorming

Editing

Translation







AI will not rule the world. People  
who use AI will rule the world.

- Random guy on Threads



# Ethical Usage

"The true measure of artificial intelligence's advancement lies not in its ability to mimic human creativity, but in its potential to inspire and augment our own. Let us tread the path of ethical innovation, where AI becomes a catalyst for human ingenuity, fostering collaboration, empathy, and a harmonious coexistence between the realms of technology and humanity."

- Dr. Aurora Wellspring, AI Ethicist and Visionary







# Questions?



# Resources

- Aituts.com: Midjourney Versions
  - [aituts.com/midjourney-versions/](https://aituts.com/midjourney-versions/) <https://chat.openai.com/>
- Chat.openai.com
- HBR.org: What do we do about the biases in AI?
  - [hbr.org/2019/10/what-do-we-do-about-the-biases-in-ai](https://hbr.org/2019/10/what-do-we-do-about-the-biases-in-ai)
- Forbes: The Top 10 Limitations of ChatGPT
  - [forbes.com/sites/bernardmarr/2023/03/03/the-top-10-limitations-of-chatgpt/?sh=6515ecf98f35](https://forbes.com/sites/bernardmarr/2023/03/03/the-top-10-limitations-of-chatgpt/?sh=6515ecf98f35)
- BusinessInsider: Tech Site Issued Corrections After AI Writing Got Facts Wrong
  - [businessinsider.com/tech-site-issued-corrections-after-ai-writing-got-facts-wrong-2023-1](https://businessinsider.com/tech-site-issued-corrections-after-ai-writing-got-facts-wrong-2023-1)
- McKinsey.com: What is Generative AI?
  - [mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai](https://mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai)







# Thank you!

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