

# Leveraging Digital Tools (ChatGPT) for Student Success

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ChatGPT

# Three Objectives

- How are you helping students build skills for future jobs requiring AI skills?
- How will your students use AI in future jobs?
- How have you adjusted assignments to include or exclude ChatGPT use?

# Outline



- Overview about AI & ChatGPT
- Preparing students to be ethical consumers of AI
- Discipline specific applications of AI
- Use of ChatGPT in assignments

# ChatGPT

G= generative

P= pretrained

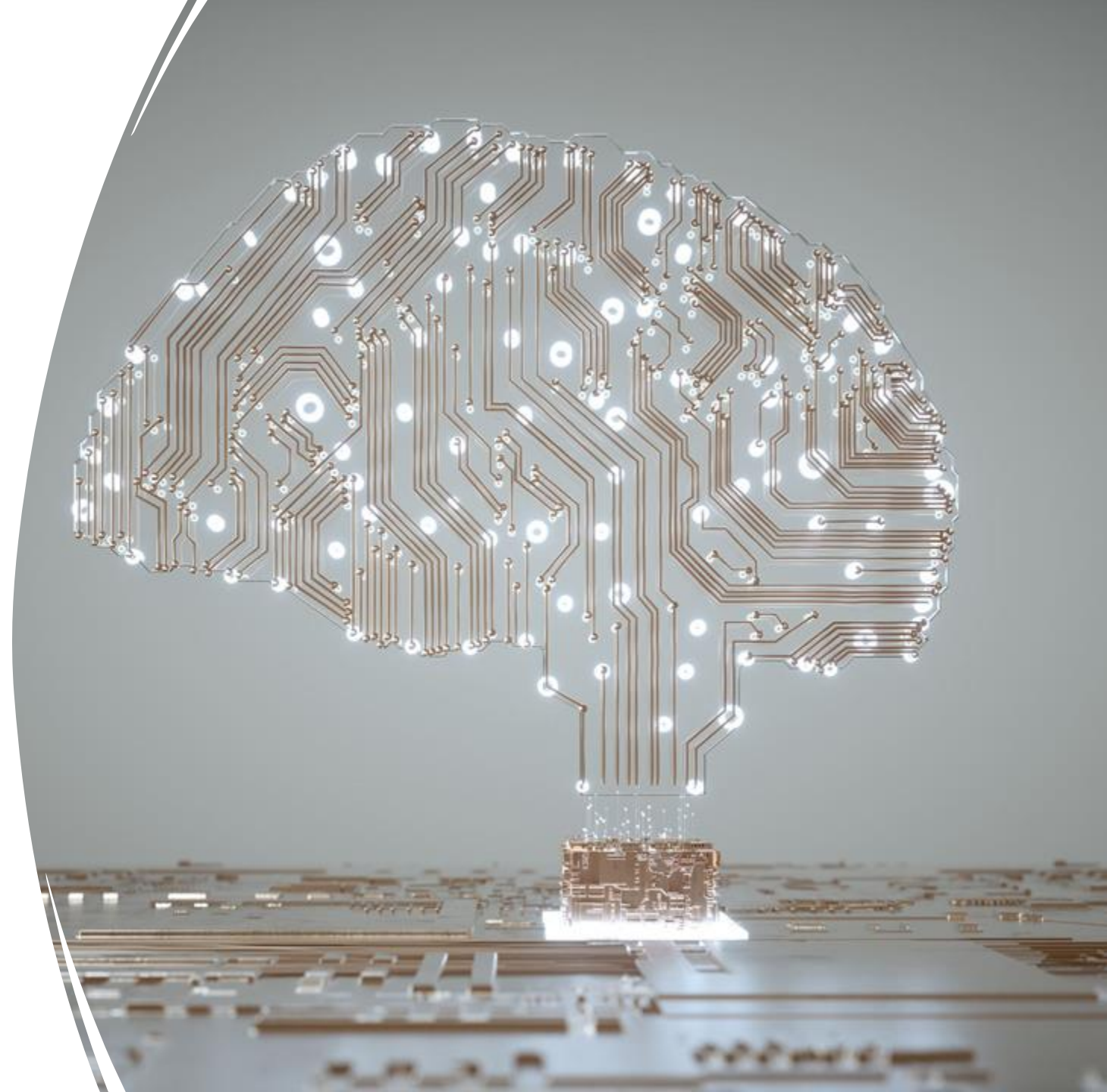
T= transformer



# Design Overview

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- Uses Artificial Intelligence (AI) and Natural Language Processing (NLP)
- Uses Machine Learning which enables systems to learn from data and improve their performance over time.
- In ChatGPT, ML is used to train the system on large amounts of text data and enable it to generate human-like responses to text-based queries.



# ChatGPT Tutorial



## Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



## Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



## Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021





MA Can you explain the concept of linear regression



Sure, linear regression is a statistical method used to model the relationship between two continuous variables, usually called the independent variable (X) and the dependent variable (Y). The goal of linear regression is to find a straight line that best describes the relationship between X and Y. This line is called the regression line or line of best fit.

Linear regression assumes that there is a linear relationship between X and Y, meaning that as X increases or decreases, Y changes by a constant amount. The regression line is determined by calculating the slope and intercept that minimize the difference between the predicted values of Y and the actual values of Y.

The slope of the regression line represents the change in Y for every one unit increase in X. The intercept represents the value of Y when X is zero. The equation of the regression line is:

$$Y = a + bX$$

Where Y is the dependent variable, X is the independent variable, a is the intercept, and b is the slope.

Linear regression can be used for many purposes, such as predicting the value of the dependent variable based on the value of the independent variable or determining the strength and direction of the relationship between the two variables. Linear regression can also be extended to multiple linear regression, where there are more than one independent variables, and non-linear regression where the relationship between X and Y is not linear.

Regenerate response

MA

Write me a 5 day workout plan to get me big muscles



As an AI language model, I cannot make personalized workout plans, since I don't have enough information about your fitness level, medical history, and specific goals. However, I can give you some general guidelines on how to design a five-day workout plan that can help you build muscle mass effectively. Please keep in mind that building muscle requires not only a well-designed workout plan but also a proper diet, enough rest and recovery, and consistency in your training.

Day 1: Chest and Triceps

- Barbell bench press (4 sets of 8-10 reps)
- Incline dumbbell press (3 sets of 10-12 reps)
- Dumbbell flies (3 sets of 12-15 reps)
- Close-grip bench press (3 sets of 8-10 reps)
- Triceps pushdown (3 sets of 10-12 reps)

Day 2: Back and Biceps

- Barbell deadlift (4 sets of 6-8 reps)
- Pull-ups (3 sets of 10 reps)
- Seated cable rows (3 sets of 10-12 reps)
- Barbell curls (3 sets of 10-12 reps)
- Hammer curls (3 sets of 12-15 reps)

Regenerate response

MA

Write a haiku about ethics



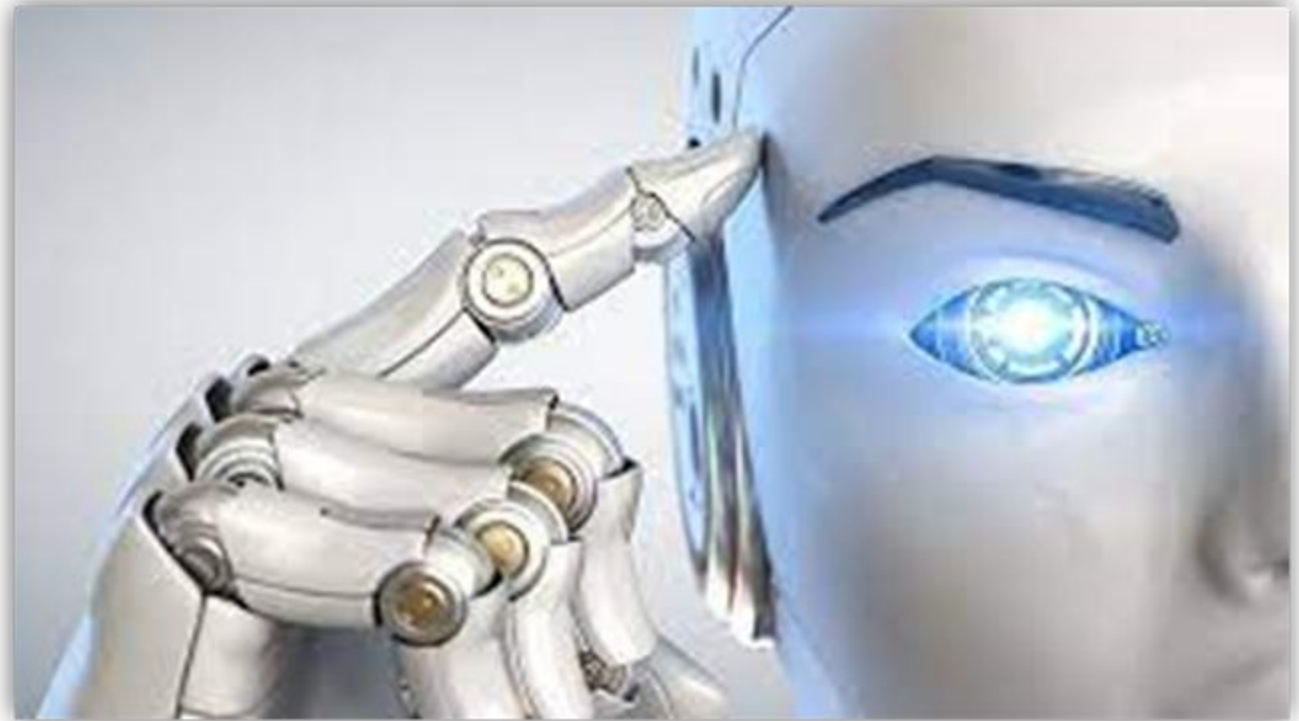
Decisions we make,  
Guided by our moral code,  
Ethics shapes our fate.

# ChatGPT Tutorial

# Preparing Students to Be Ethical Consumers of AI

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- Knowledge
- Application
- Critical Analysis





# Academic Challenges

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- ChatGPT is forcing educators to reexamine teaching and learning.
- ChatGPT could be utilized as a tool and layout of writing assignments but there's potential for abuse, cheating and plagiarism.



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# Florida Southern College Policy & AI

Academic dishonesty is any act of cheating, assistance in cheating, plagiarism, academic theft, falsification, or misrepresentation.

- Cheating
- Plagiarism
- Fabrication
- Multiple submission
- Misrepresentation of academic records
- Facilitating academic dishonesty
- Failure to report academic dishonesty
- Unfair advantage

Florida Southern College Honor Code, Section I.B. Definition of Academic Dishonesty (pp. 56-57)



# How to Cite ChatGPT

When given a follow-up prompt of “What is a more accurate representation?” the ChatGPT-generated text indicated that “different brain regions work together to support various cognitive processes” and “the functional specialization of different regions can change in response to experience and environmental factors” (OpenAI, 2023; see Appendix A for the full transcript).

## Reference

OpenAI. (2023). *ChatGPT* (Mar 14 version) [Large language model].

<https://chat.openai.com/chat>

- In-text parenthetical citation:  
....(OpenAI, 2023)
- In-text narrative citation:  
OpenAI (2023)....

# Discipline Specific Applications

- [Examples in Healthcare](#)
- Examples in Education
- Examples in Business and other STEM fields

Turn and Talk about AI/ChatGPT positive uses in your field



# Health Care Applications

- Clinical decision support (cancer diagnosis and treatments)
- Medical recordkeeping (dictation of assessment findings and prompting)
- Medical translation
- Disease surveillance





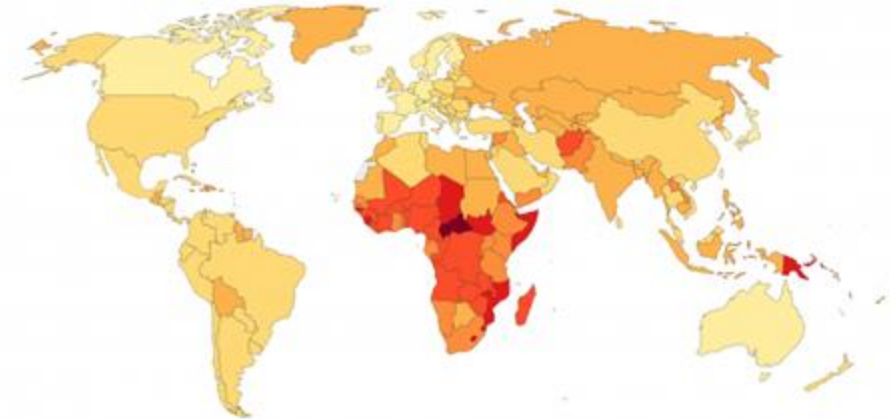
# Using ChatGPT in course assignments

- Semester long project- Critical Analysis of Global Burden of Disease:
  - Review Big Data for Disease and Disability in a Specific Global Region
  - Identify Possible Interventions
  - Develop a Health Campaign
  - **Write a Targeted Advocacy Letter**

## Burden of disease, 2017

Disability-Adjusted Life Years (DALYs) per 100,000 individuals from all causes. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.

Our World  
in Data



No data 0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000 >100,000

Source: IHME, Global Burden of Disease

Note: To allow comparisons between countries and over time this metric is age-standardized.  
OurWorldInData.org/burden-of-disease • CC BY

# Using ChatGPT for Course Management

- Generating Instructions from Ideas
  - Draft assignment instructions
  - Including differentiation or student choices
- Identifying common points of misunderstanding
  - Build instruction and assignments that reduce confusion
- Recommendations for assessments (e.g., essay, exam, project)
  - and recommendations for the spacing of assignments
- Create or revise objective statements or learning outcome statements
- Developing Rubrics from Assignment descriptions
  - Demonstration

# Activity

## Option 1

- Review an existing class assignment from your syllabi and Identify a way that ChatGPT can be incorporated into the assignment
- Discuss the integration with a partner

## Option 2

- Go to <https://chat.openai.com/> and open a new ChatGPT chat
  - To use ChatGPT, you will need to make an account
- Enter the prompt:
  - Please create a rubric with 5 criteria from the following assignment description. Each row is worth 5 points. Include three columns total, one for Excellent, one for Satisfactory, and one for Needs Improvement. Include a row for Total Points.



# ChatGPT -

A joke about professors as Jerry Seinfeld



You know college professors are something else. They've got this incredible power to make a 3-hour lecture feel like a 10-minute nap – or maybe that's just their secret plan to solve insomnia! And what's with the constant urge to erase the chalkboard like they're erasing their past mistakes? I mean, I've never seen someone so committed to cleaning while they talk. It's like they're part-time teachers, part-time chalkboard artists!

# References

- **Online mental health company uses ChatGPT to help respond to users in experiment — raising ethical concerns around healthcare and AI technology**
- <https://www.usatoday.com/story/news/education/2023/02/21/vanderbilt-apologizes-chatgpt-email-msu-shooting/11314144002/>
- <https://spectrum.ieee.org/in-2016-microsofts-racist-chatbot-revealed-the-dangers-of-online-conversation>
- <https://www.interceptinghorizons.com/post/the-black-box-problem-when-ai-makes-decisions-that-no-human-can-explain>
- <https://homeworksforstudents.com/chat-gpt-and-ai-the-future-or-downfall-of-writing/>
- <https://www.npr.org/sections/money/2023/01/17/1149206188/this-22-year-old-is-trying-to-save-us-from-chatgpt-before-it-changes-writing-for>

## AI-Related Resources



## This PPT Presentation

