



# Artificial Intelligence 101: What Texas IR Practitioners Need to Know

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# Pre-Workshop Quick Quiz

1. What does NLP stand for, and what is its primary purpose in the realm of artificial intelligence?

- A) Natural Language Processing; to enable computers to understand, interpret, and generate human language.
- B) Neural Language Processor; to facilitate communication between different AI systems.
- C) Nonlinear Linguistic Programming; to model human behavior using linguistic patterns.
- D) Neurological Learning Process; to simulate human brain functions for language acquisition.

2. Which of the following is NOT a common use case of NLP technology?

- A) Sentiment analysis in social media monitoring.
- B) Machine translation for language localization.
- C) Facial recognition for identity verification.
- D) Text summarization for document analysis.

3. True or False: AI and NLP are interchangeable terms, referring to the same technology.

- A) True
- B) False

4. What is the significance of "word embedding" in Natural Language Processing (NLP)?

- A) It represents words as vectors to capture semantic relationships.
- B) It converts words into phonetic representations.
- C) It analyzes the syntactic structure of sentences.
- D) It translates words between languages.

5. What is the purpose of "tokenization" in NLP?

- 1. A) To convert words into vectors.
- 2. B) To analyze the sentiment of a text.
- 3. C) To break down text into smaller units for analysis.
- 4. D) To translate text between languages.

# WHY THIS TOPIC? WHY NOW?

**AI in Education: Will We Need Humans Anymore?**

**Dartmouth Employs AI Virtual Assistant to Support Students and Faculty**

**Trust and Transparency Are Key Factors When Using AI in Academia**

**University of Illinois Uses AI Chatbot to Grow Student Recruitment for Online MBA Program**

**Virtual TA Boosts Student Success at Georgia State University**

**The Dark Side of ChatGPT: 6 Generative AI Risks to Watch**

**Turnitin AI Detection Rates: 3.3% of 65M Papers Reviewed Were Flagged as Majority AI Writing**

**USC Initiative to Integrate AI and Digital Literacy Skills for All Students**

**Institutions Must Plan for AI to Go Mainstream, Says 2023 Educause Horizon Report**

**More than Half of Students Will Use AI Writing Tools Even if Prohibited by Their Institution**

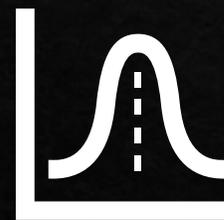
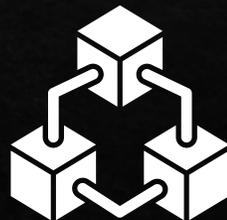
**NSF Announces 7 New AI Research Institutes at Universities Nationwide**

# THE UNT DEFINITION OF DATA LITERACY

noun: talent, skill, or proficiency in a particular area.

“the ability to read, write and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case, application and resulting value.”

Gartner, 2021



# WHY YOU SHOULD CARE ABOUT AI/ML DATA LITERACY





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**HOW CAN WE  
DEVELOP OUR  
AI/ML MINDSETS?**

# **MINDSET** (NOUN)

- 1. A fixed mental attitude or disposition that predetermines a person's responses to and interpretations of situations.**
- 2. An inclination or a habit.**
- 3. A way of thinking; an attitude or opinion, especially a habitual one.**

# **AN AI/ML MINDSET** (NOUN)

- 1. A willingness to be open to change, learn new things, and commit to self-improvement even when it is uncomfortable.**
- 2. A set of attitudes and behaviors that enable ourselves and others to see how data, machine learning, algorithms, and AI methods opens new possibilities.**
- 3. A recognition that our work is increasingly dominated by data-intensive and automated technologies.**
- 4. A balanced view of the promise and potential perils of these methods and approaches.**

# AI is Already All Around Us

**Virtual Personal Assistant**

**Commute Time Prediction**

**Video Surveillance**

**Search Engine Result Refinement**

**Social Media Services (people you know, facial recognition)**

**Email Spam and Malware Filtering**

**Online Customer Support**

**Product Recommendations**

**Online Fraud Detection**

**Intelligent Gaming**

**Self-Driving Cars and Automated Transportation**

**AI for Dangerous Jobs (bomb disposal, etc.)**

**Environment Protection**

**Home Security and Smart Homes**

**Mood Analysis in Music Streaming**

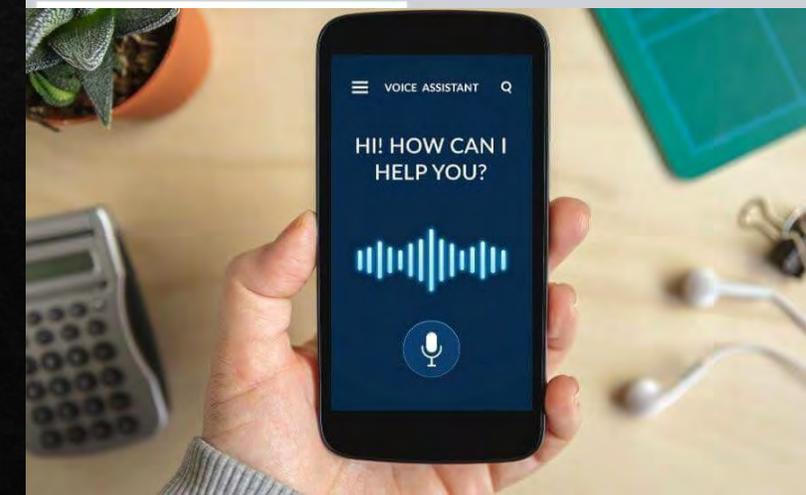
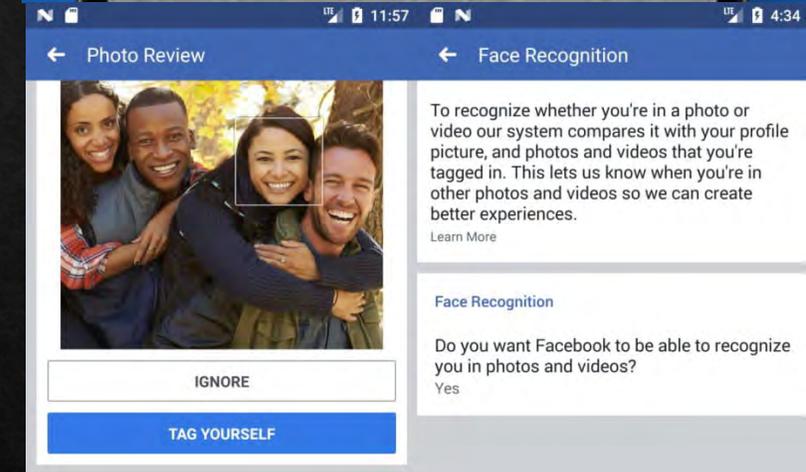
**Music Composition**

**Predictive Text and Autocorrect**

**Automated Language Translation**

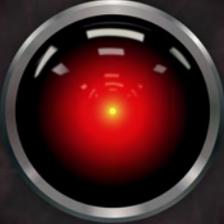
**Medical Diagnosis and Imaging Analysis**

**Automated Captioning for Images and Videos**



# GENERATIVE ARTIFICIAL INTELLIGENCE 101

AI has been in the popular media for a long time



1



4



8



12



2



5



9



13



3



6



10



7

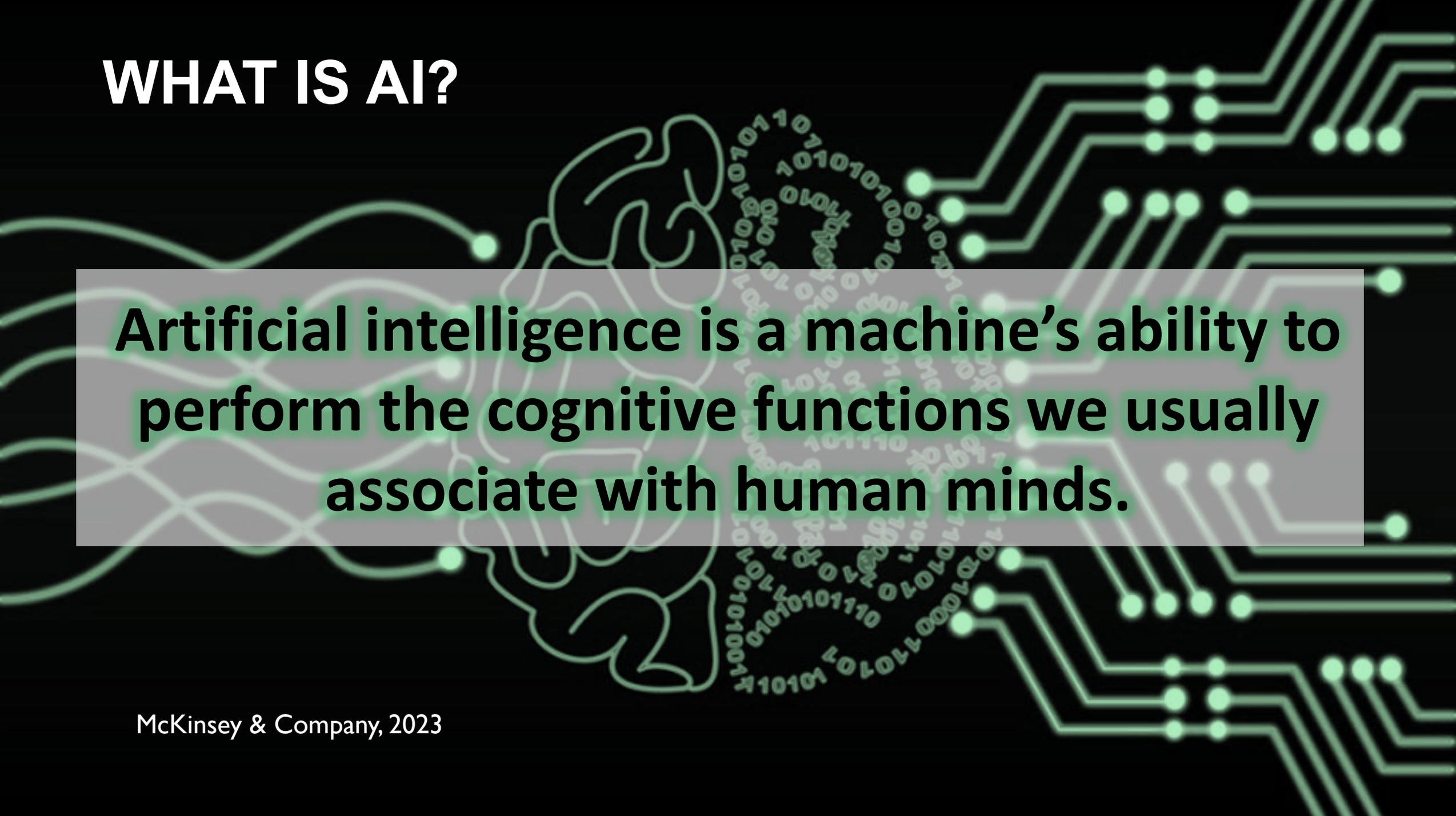


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14

# WHAT IS AI?

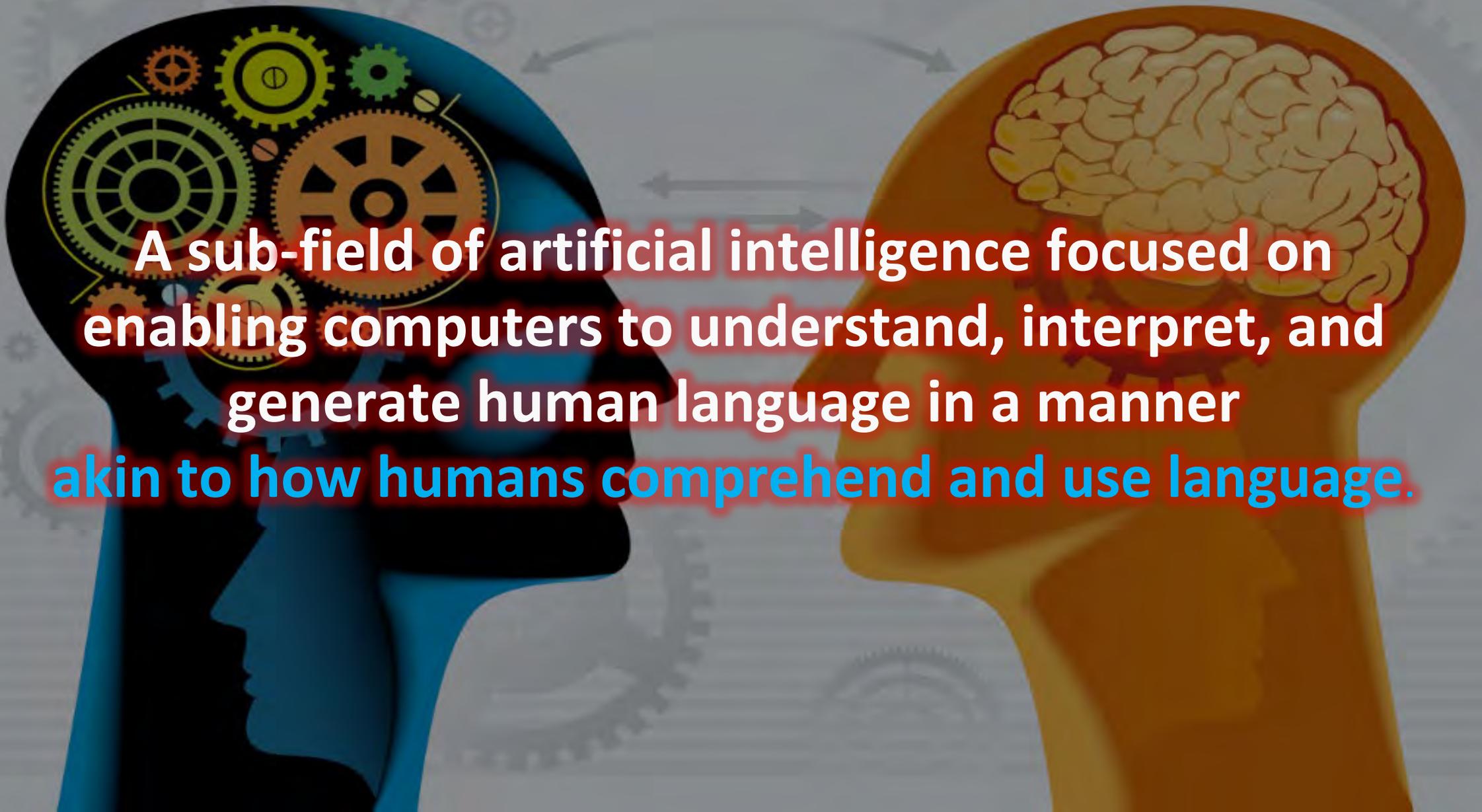


**Artificial intelligence is a machine's ability to perform the cognitive functions we usually associate with human minds.**

# What is Generative AI?

Als that can identify and highlight relationship in very large sets of complex training data, then based on what it learns, triggers the creation of **new data.**

# What is Natural Language Processing?

An illustration comparing human and artificial intelligence. On the left is a blue silhouette of a human head in profile, filled with various colored gears (green, orange, yellow) of different sizes, representing mechanical or artificial thought processes. On the right is a yellow silhouette of a human head in profile, filled with a realistic, textured brain, representing natural human thought. In the background, there are faint, light-colored gears and double-headed arrows, suggesting a connection or comparison between the two types of intelligence.

A sub-field of artificial intelligence focused on enabling computers to understand, interpret, and generate human language in a manner akin to how humans comprehend and use language.

# Generative AI – Key Terms for IR



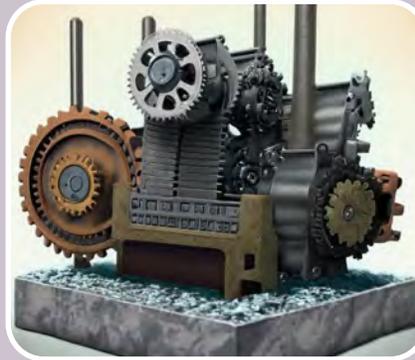
**Large Models  
(LMs)**

Considered  
the Power  
House or  
Main Engines  
of Generative  
AI



**Large  
Language  
Models  
(LLMs)**

Text Focused



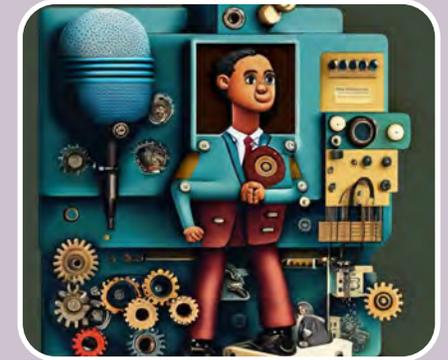
**Foundation  
Models  
(FMs)**

LMs That Do  
Many Things  
and Be  
Customized  
to Create New  
Applications



**Multimodal  
Capable**

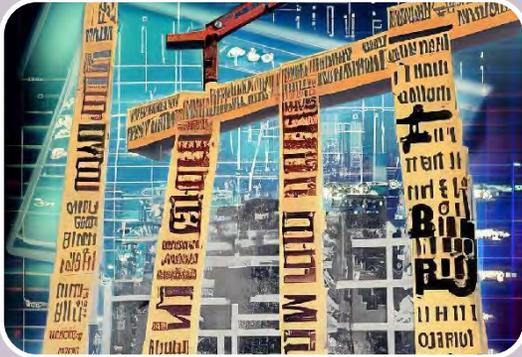
Text from  
Text, Music,  
or Visuals  
From Text



**Reinforcement  
Learning From  
Human  
Feedback  
(RLHF)**

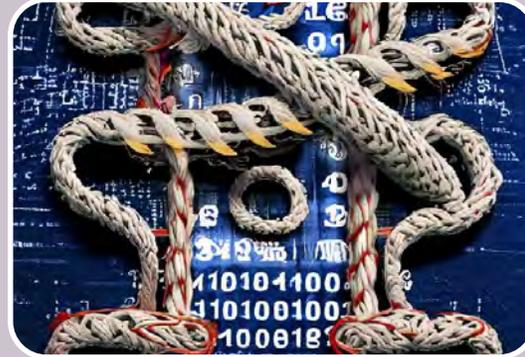
Technique to  
Refine FMs to  
Reward  
Desired  
Outcomes

# Generative AI – Key Terms for IR



## Prompt-Design Engineering

Systematic development of words organized into prompts to cause FM model output



## Embeddings

Data as strings of numbers and vectors showing dimensionality & relationships in LM models



## Fine Tuning

Hyper customizing LMs by feeding it massive amounts of entirely new data to impact weights



## Parameter Efficient Tuning

Less expensive process that optimizes FMs via new data to inform outputs but not re-training



# WAYS IR LEADERS CAN USE GENERATIVE AI

(E.G. CHAT GPT, CLAUDE, BARD, ETC.)

AI/NLP as Hiring  
Support Staff

AI/NLP as  
Software  
Coach/Teacher

AI/NLP as  
Qualitative  
Researcher

AI/NLP as  
Literature  
Reviewer

AI/NLP as  
Copy Editor

AI/NLP as IR  
Coding Coach

AI/NLP as  
Travel Agent

AI/NLP as a  
Grant Writer  
Editor

AI/NLP as  
Technical Jargon  
Interpreter

AI/NLP as  
Statistical  
Methodology  
Coach

AI/NLP as an IR  
Graphic  
Designer

AI/NLP as  
Critic or  
Rater

# Generative AI Examples to Expand Our Thinking

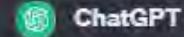


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# Conference Session Proposals

You are a senior researcher who has studied extensively the data maturity, analytic maturity, and uses of Hispanic/LatinX data at Tier 1 Research universities. You conducted a survey of institutional researchers at these highly specialized universities and out of the 21 recognized institutions 17 responded. You are now being asked to present your findings at a national conference of campus executives, presidents, researchers, and institutional researchers. You are tasked with writing a 1,000 word description of your session where you will present your main findings about the patterns of data usage and the stages of analytic maturity across these 17 institutions. Your job is to share information in such a way that you help these campus leaders base their expectations around data availability and usage within a realm of actual facts and reported data norms. The following guidelines were designed by the conference organizers to consider in this assignment. Note this will be in an information-session format. Purpose of the session and what participants can expect

- Who might benefit most from this session (intended audience)
- An indication of whether the session is informative, interactive, a workshop, an ideation session, meeting, etc.
- Other information that might enhance participant self-selection and overall participation



## Session Agenda:

### \* Introduction (5 minutes):

- \* Welcome attendees and provide an overview of the session's objectives.
- \* Briefly introduce the speakers and their expertise in assessment and higher education.

### \* Roots of the System (10 minutes):

- \* Explore the origins of the assessment system, tracing its development from inception to its foundational principles.
- \* Discuss the initial goals and objectives that shaped the framework.

### \* Evolution Over Time (15 minutes):

- \* Dive into the evolution of the system, highlighting key milestones and transformative moments.
- \* Discuss the incorporation of outcome tracking, wellness components, and marketable skills assessment into the framework.
- \* Illustrate the progression towards a more comprehensive and dynamic assessment model.

### \* Integration of Data Points (10 minutes):

- \* Examine how individual student swipe data from over 100 programs, events, and services per year are integrated into the assessment process.
- \* Highlight the significance of these data points in providing insights into student engagement and experiences.

### \* Technical Functionality Requirements (5 minutes):

- \* Provide an overview of the technical functionalities needed to support the assessment system.
- \* Discuss the infrastructure and tools required for data collection, analysis, and reporting.



# PowerPoint Creation from Prompting

Can you take this conference outline and create a PPT template using VBA code?



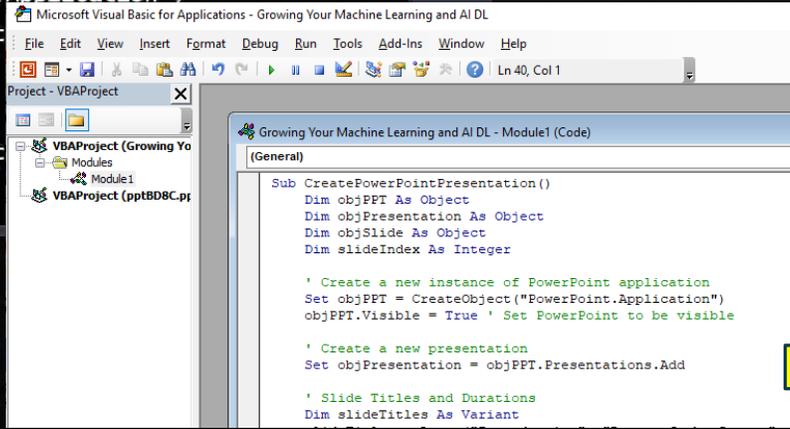
ChatGPT

Certainly! Below is a VBA code snippet that replicates the XML structure provided for creating a PowerPoint presentation:

```
vba Copy code
Sub CreatePowerPointPresentation()
  Dim objPPT As Object
  Dim objPresentation As Object
  Dim objSlide As Object
  Dim slideIndex As Integer

  ' Create a new instance of PowerPoint application
  Set objPPT = CreateObject("PowerPoint.Application")
  objPPT.Visible = True ' Set PowerPoint to be visible

  ' Create a new presentation
  Set objPresentation = objPPT.Presentations.Add
```



## Introduction

- Greet the audience and introduce yourself.
- Provide a brief overview of the session's agenda.
- Emphasize the importance of understanding culture in data governance initiatives.

## Understanding Culture's Role in Data Governance

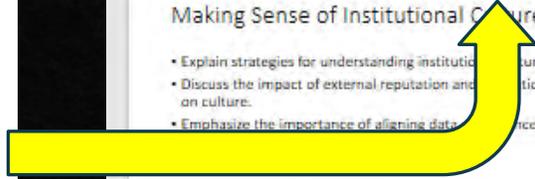
- Recap the challenges institutions face in establishing effective data governance programs.
- Highlight the quote: 'Culture eats strategy for breakfast' by Peter Drucker.
- Explain why culture is often overlooked but crucial for successful data governance.

## Exploring Culture in Higher Education

- Discuss the unique cultural landscape of higher education institutions.
- Introduce Robert Birnbaum's concept of interconnected cultural systems within colleges and universities.
- Emphasize the need for a holistic perspective on culture in data governance.

## Making Sense of Institutional Culture

- Explain strategies for understanding institutional culture.
- Discuss the impact of external reputation and institutional missions on culture.
- Emphasize the importance of aligning data governance efforts with



# Qualitative Analysis Support

You are a senior level institutional researcher with 30+ years of qualitative research experience at a major Research University. You are familiar with best practices with qualitative theme analysis and theme categorization. You have special abilities in being able to develop patterns from seemingly diverse views. Your institution conducted a short survey of institutional researchers from around the country who work at Hispanic serving institutions and are also Tier 1 Research universities on their assessment of data efforts on their campus. The following responses are to the question "Given your current data ecosystem, what are some common pain points you experience related to HSI data?" I want you to analyze this specific responses and create a table with three columns, in the first column indicate the name of the theme and in column 2 how many times words, phrases, or responses apply to this general theme across all comments and in column three 2-3 short verbatim comments that supports this theme count.

Theme	Frequency	Verbatim Comments
Data Definitions and Requirements	6	"Clear understanding of data definitions and requirements", "Clear data definitions and guidance", "Matching raw self-reported race and ethnicity data with centralized imputed data for reporting"
Data Integration and Sharing	5	"Data inconsistency among departments", "Data silos between Student Affairs, Academic units, and central administrative units", "Need for expanded capacity for building and analyzing data sets"
Data Accessibility and Tools	4	"Uneven access to data across the organization", "Age of computing system inhibits timely analysis", "Lack of comprehensive tools for data integration"
Confidentiality and Disaggregated Data	3	"Difficulty in sharing data due to small cell sizes and confidentiality concerns", "Disaggregated data not readily available from federal agencies", "Challenges in analyzing small student populations"
Data Literacy and Governance	3	"Low levels of data literacy among staff and faculty", "Weak data governance", "Lack of internal understanding of what is possible with data"
Detailed Demographic Information	3	"Collecting more detailed demographic information", "Lack of granular detail about student backgrounds", "Limited data representation beyond 'Hispanic' identifier"

# Meta Analysis of Research Publications

You are a 20 year expert in the history, evolution, and impact of artificial intelligence on society. You speak broadly about trends and are highly sought out for your expertise in being able to translate complex AI-related trends into concise and relevant findings that can help your audience better understand this powerful and emerging set of technologies. You have been invited to one of the nation's premiere institutions of higher education and the room will be filled with higher education experts from a broad array of fields and disciplines. You have been asked to give a talk on the top future trends in AI for 2024. As part of your preparation you have reviewed the text pasted below. Your role is to conduct an informal meta-analysis of these writings and distill from them your top 10 themes. Looking for patterns across the text create a table that has the the top theme number in column 1, the distilled theme name in column 2, and 2-3 sentences about the theme in column 3 that justifies its inclusion. Write in a professional tone but one that is not filled with technological jargon. The text is:



ChatGPT

Based on the provided text, I've conducted a meta-analysis to identify the top 10 themes regarding future trends in AI for 2024. Here's a table summarizing these themes along with their brief justifications:

Theme Number	Distilled Theme Name	Justification
1	Larger, More Powerful AI Models	Emphasis on scaling up AI models, such as GPT-5, indicating a trend towards larger, more powerful models trained on extensive datasets, influencing various AI applications.
2	AI Influence in Political Processes	The utilization of generative AI for impacting elections, spreading misinformation, and creating deepfakes, expected to be a significant societal concern in 2024, affecting political landscapes.
3	Generative Design	Adoption of generative AI in product design tools like Autodesk, facilitating rapid prototyping, and enhancing innovation and efficiency in designing various products and services.
4	Generative Video	Rise of AI-powered tools enabling cost-effective creation of professional-grade video content, revolutionizing content creation across industries and creative domains.
5	Multi-Modal AI	Advancement toward AI capable of understanding and responding to various modes of expression like text, ↓ visuals, and speech, expected to become prevalent.

# SQL Code Generation and Problem Solving

Using a standard implementation of Oracle Peoplesoft develop a SQL statement /code to pull in a full list of students who enrolled in a given term. Outline where the coder needs to replace specific fields with institution-specific variable names and provide a common language explanation of what the code does after generating the code.



Expand this code to then return the classification and academic plan for the students.



```
SELECT <institution_specific_fields>
FROM PS_STDNT_ENRL
WHERE TERM_ID = '<term_id>';
```

Explanation:

1. `SELECT <institution_specific_fields>`: This part of the code selects the fields you want to retrieve from the database. You need to replace `<institution_specific_fields>` with the actual fields you want to fetch. These could include student ID, name, enrollment status, course details, etc.
2. `FROM PS_STDNT_ENRL`: This specifies the table from which to retrieve the data. In this case, `PS_STDNT_ENRL` is likely the table where student enrollment records are stored in your institution's PeopleSoft database. You might need to replace this table name with the actual table name if it differs.
3. `WHERE TERM_ID = '<term_id>'`: This part of the code filters the results to only include students enrolled in the specified term. You need to replace `<term_id>` with the identifier of the term you're interested in. For example, if you want to retrieve students enrolled in the Fall 2023 term, you would replace `<term_id>` with the corresponding term identifier for Fall 2023.

After replacing the placeholder variables with actual values, this SQL code will fetch all the necessary student enrollment information for the specified term from the PeopleSoft database.

```
sql Copy code
SELECT
  <institution_specific_fields>,
  SE.CLASS_STUDENT_LEVEL,
  ACAD_PLAN_DESCR
FROM
  PS_STDNT_ENRL SE
JOIN
  PS_STDNT_CAR SC ON SE.EMPLID = SC.EMPLID
JOIN
  PS_ACAD_PLAN AP ON SC.ACAD_PLAN = AP.ACAD_PLAN
WHERE
  SE.TERM_ID = '<term_id>;
```

Explanation:

1. `SELECT <institution_specific_fields>, SE.CLASS_STUDENT_LEVEL, ACAD_PLAN_DESCR`: This part of the code selects the fields you want to retrieve from the database. In addition to the institution-specific fields, it also includes the student's classification (`CLASS_STUDENT_LEVEL`) and the description of their academic plan (`ACAD_PLAN_DESCR`).
2. `FROM PS_STDNT_ENRL SE`: This specifies the primary table from which to retrieve the data, which is the student enrollment table.
3. `JOIN PS_STDNT_CAR SC ON SE.EMPLID = SC.EMPLID`: This joins the `PS_STDNT_ENRL` table with the `PS_STDNT_CAR` table on the student ID (`EMPLID`). This is to link student enrollment records with their academic career records, which contain information such as classification.
4. `JOIN PS_ACAD_PLAN AP ON SC.ACAD_PLAN = AP.ACAD_PLAN`: This joins the `PS_STDNT_CAR` table with the `PS_ACAD_PLAN` table on the academic plan code (`ACAD_PLAN`). This is to retrieve the description of the academic plan associated with each student.
5. `WHERE SE.TERM_ID = '<term_id>'`: This part of the code filters the results to only include students enrolled in the specified term, as in the previous code snippet.

# Software Teacher and Coach

You are an expert in Adobe premier with over 10 years of experience using, and teaching others this powerful software. You have been asked by your boss to teach a new hire the tool yet the challenge is that this person has no real background not experience in doing video editing or production. Your task is to outline a basic curriculum to teach this person the skills needed to create a project, import a diverse array of media file types, conduct audio optimization, editing of scenes and transitions, and apply finishing touches like music and titling. Create a program where your student spends two hours per week learning. Outline a syllabus, include free resources (articles, you tube videos, and other educational content) all of these resources should lead to actual, and factual, websites, etc. that you have validated. Be sure to include key learning markers and be intentional in the design of a strong learning program.

Resource Name	Resource Author/Creator	Website
Adobe Premiere Pro CC Tutorial - Beginner to Advanced (Free Course)	Jordy Vandeput, Cinecom.net	<a href="https://www.cinecom.net/cinema-tutorials/premiere-pro-tutorial-beginner-to-advanced/">https://www.cinecom.net/cinema-tutorials/premiere-pro-tutorial-beginner-to-advanced/</a>
Premiere Pro 2021 - Full Tutorial for Beginners in 20 MINUTES!	Chris' Tutorials	<a href="https://www.youtube.com/watch?v=UkP6xWOYUvg">https://www.youtube.com/watch?v=UkP6xWOYUvg</a>
Adobe Premiere Pro Tutorial: The Complete Tutorial	Justin Odisho	<a href="https://www.youtube.com/watch?v=3CmW7OvJXhl">https://www.youtube.com/watch?v=3CmW7OvJXhl</a>
Adobe Premiere Pro CC Tutorial - MasterClass Training	FilmVentureStudios	<a href="https://www.youtube.com/watch?v=F5x6Uk-1bZw">https://www.youtube.com/watch?v=F5x6Uk-1bZw</a>
How to Use Adobe Premiere Pro CC: A Beginner's Guide	Jason Boone, No Film School	<a href="https://nofilmschool.com/how-to-use-adobe-premiere-pro-cc">https://nofilmschool.com/how-to-use-adobe-premiere-pro-cc</a>

These free resources are chosen based on their quality and comprehensiveness in teaching Adobe Premiere Pro. The resources include video tutorials, written tutorials, and full courses that cover the basics and more advanced techniques of using Adobe Premiere Pro. They are all hosted on reputable websites or channels and are regularly updated to reflect changes in the software.

The new hire can use these resources to supplement their learning and reinforce the concepts taught in the course. They can also use these resources as a reference when working on their video projects outside of the course.



# Tour Guide and Local Dining Expert

You are a 15 year veteran of the travel and tourism board for Houston Texas. You have lived there your entire life and genuinely enjoy helping others experience the city. Craft an unforgettable three-day itinerary for exploring Houston, Texas, blending iconic attractions with hidden gems and culinary delights. Your task is to design an itinerary that showcases the city's vibrant culture, rich history, and diverse culinary scene. Include must-visit landmarks, museums, parks, and local eateries that capture the essence of Houston's spirit. From savoring authentic Tex-Mex cuisine to immersing in the arts scene, create a journey that promises an unforgettable experience for travelers seeking the best of what Houston has to offer.



Take all the dining recommendations and put them in a 3 column table. Column 1 has name of restaurant, column 2 is phone number to call for reservations, and column three is the website, column four is whether or not they are on Yelp or Open Table



Restaurant Name	Phone Number	Website	Yelp/OpenTable
The Breakfast Klub	(713) 528-8561	<a href="https://thebreakfastklub.com">https://thebreakfastklub.com</a>	Yelp
Goode Company BBQ	(713) 529-1901	<a href="https://www.goodecompany.com">https://www.goodecompany.com</a>	Yelp/OpenTable
Brennan's of Houston	(713) 522-9711	<a href="https://www.brennanshouston.com">https://www.brennanshouston.com</a>	OpenTable
The Kitchen at The Dunlavy	(713) 360-6477	<a href="https://www.dunlavyhouston.com/kitchen">https://www.dunlavyhouston.com/kitchen</a>	OpenTable
Xochi	(713) 400-3330	<a href="https://www.xochihouston.com">https://www.xochihouston.com</a>	OpenTable

## Day 1: Discover Houston's Icons and Flavor

### Morning:

1. Start your day with a hearty Tex-Mex breakfast at The Breakfast Klub, renowned for its soulful dishes like chicken and waffles, and of course, breakfast tacos.
2. Head to Space Center Houston, where you'll embark on an out-of-this-world journey through interactive exhibits, space artifacts, and even a tram tour to NASA's Johnson Space Center.

### Afternoon:

3. Grab lunch at Goode Company BBQ for some authentic Texas barbecue. Sink your teeth into brisket, ribs, and sausage, paired with classic sides like baked beans and potato salad.
  1. Explore the Museum District, beginning with the Museum of Fine Arts Houston. Marvel at its extensive collection spanning thousands of years and diverse cultures.
- ### Evening:
5. Take a leisurely stroll through Hermann Park and admire the beauty of McGovern Centennial Gardens. Don't miss the chance to ride the Hermann Park Railroad for a scenic tour.
  1. Indulge in a dinner at Brennan's of Houston, a beloved institution serving up refined Creole cuisine. Savor dishes like crawfish étouffée and bananas foster while soaking in the elegant atmosphere.

## Day 2: Dive into History and Culture

Create a thanksgiving poem for higher education professionals who are also passionate about AI and the holiday

Can you reduce this down to 3 stanzas and maintain the emphasis?

Can you increase the emphasis on the thanksgiving holiday and feast



Prompt

An AI driven robot who is cooking a thanksgiving feast in a festive kitchen

## Creative Writing for LinkedIn via Chat GPT and Imagery via Adobe Firefly

### ChatGPT

In halls of learning, minds alight,  
Professionals merge, passion's height.  
Thanksgiving nears, their hearts embrace,  
Grateful for AI's forward pace.

As turkey scents the air, they gather 'round,  
Feast and learning, both renowned.  
Gratitude swells, a joyous link,  
Uniting hearts as ideas interlink.

For Thanksgiving's bounty, a cherished space,  
Where knowledge thrives, in a vibrant chase.  
Professionals soar, spirits fly,  
Grateful for the feast and wisdom high.



# Software Engineer to Transfer Grades to Main Grading Book

I have a set of grades in an excel workbook = in column 1 is the students unique ID number and in column 2 is the students latest grade on my midterm. Help me write code to transfer the grades from file one to the master grading sheet in excel document two.

```
python Copy code

import openpyxl

def transfer_grades(source_file, target_file):
    # Open the source Excel workbook
    source_wb = openpyxl.load_workbook(source_file)
    source_ws = source_wb.active

    # Open the target Excel workbook
    target_wb = openpyxl.load_workbook(target_file)
    target_ws = target_wb.active

    # Iterate through the rows in the source worksheet
    for row in source_ws.iter_rows(values_only=True):
        student_id = row[0]
        grade = row[1]

        # Find the row in the target worksheet corresponding to the student ID
        for target_row in target_ws.iter_rows(values_only=True):
            if target_row[0] == student_id:
                # Update the grade for the student in the target worksheet
                target_row[1] = grade
                break

    # Save the changes to the target workbook
    target_wb.save(target_file)

# Example usage:
source_file = "source.xlsx" # Replace with the path to your source Excel workbook
target_file = "target.xlsx" # Replace with the path to your target Excel workbook
transfer_grades(source_file, target_file)
```

vba

Copy code

```
Sub TransferGrades()
    Dim sourceWB As Workbook
    Dim targetWB As Workbook
    Dim sourceWS As Worksheet
    Dim targetWS As Worksheet
    Dim lastRowSource As Long
    Dim lastRowTarget As Long
    Dim i As Long
    Dim j As Long

    ' Open the source workbook
    Set sourceWB = Workbooks.Open("C:\Path\to\source.xlsx") ' Replace with the path to your source workbook
    Set sourceWS = sourceWB.Sheets(1) ' Assuming the data is in the first sheet

    ' Open the target workbook
    Set targetWB = ThisWorkbook ' Assumes the code is running in the workbook you want to transfer to
    Set targetWS = targetWB.Sheets(1) ' Assuming the data is in the first sheet

    ' Find the last row in the source worksheet
    lastRowSource = sourceWS.Cells(sourceWS.Rows.Count, "A").End(xlUp).Row

    ' Find the last row in the target worksheet
    lastRowTarget = targetWS.Cells(targetWS.Rows.Count, "A").End(xlUp).Row

    ' Iterate through the source data
    For i = 1 To lastRowSource
        Dim studentID As String
        Dim grade As Double

        ' Get the student ID and grade from the source worksheet
        studentID = sourceWS.Cells(i, 1).Value
        grade = sourceWS.Cells(i, 2).Value

        ' Search for the student ID in the target worksheet
        For j = 1 To lastRowTarget
```

Before running this script, you need to update the path to your source Excel workbook in the line `Set sourceWB = Workbooks.Open("C:\Path\to\source.xlsx")`.

This script assumes that both source and target data are in the first sheet of their respective workbooks. If they are in different sheets, you need to update the sheet index accordingly (`sourceWS = sourceWB.Sheets("SheetName")`).

To run the VBA script, press Alt + F11 to open the Visual Basic for Applications editor in Excel, then go to Insert > Module and paste the code into the module window. After that, you can run the `TransferGrades` subroutine from the Run menu or by pressing F5.

# Software Engineer to Create an Attendance Database

Can you design me a Microsoft Access Database to track attendance in my classes. I want to be able to setup multiple classes and sections as well as be able to adjust the dates by fall or spring term. I also want to be sure to capture the unique ids of all students who can swipe their id card at the front of the classroom to capture their ID, name, and date. Can you produce code to create these structures in Access?

## Tables:

### 1. Classes:

- ClassID (Primary Key)
- ClassName
- Term (e.g., Fall, Spring)

### 2. Sections:

- SectionID (Primary Key)
- ClassID (Foreign Key to Classes table)
- SectionName
- StartDate
- EndDate

### 3. Students:

- StudentID (Primary Key)
- StudentName
- StudentIDCard (Unique ID from their card)

### 4. Attendance:

- AttendanceID (Primary Key)
- SectionID (Foreign Key to Sections table)
- StudentID (Foreign Key to Students table)
- AttendanceDate

## VBA code to create tables:

vba

Copy code

```
Public Sub CreateTables()
    Dim db As DAO.Database
    Dim tdf As DAO.TableDef
    Dim fld As DAO.Field

    ' Open a database
    Set db = CurrentDb()

    ' Create Classes table
    Set tdf = db.CreateTableDef("Classes")
    Set fld = tdf.CreateField("ClassID", dbLong)
    fld.Attributes = dbAutoIncrField
    tdf.Fields.Append fld
    tdf.Fields.Append tdf.CreateField("ClassName", dbText, 255)
    tdf.Fields.Append tdf.CreateField("Term", dbText, 50)
    db.TableDefs.Append tdf

    ' Create Sections table
    Set tdf = db.CreateTableDef("Sections")
    Set fld = tdf.CreateField("SectionID", dbLong)
    fld.Attributes = dbAutoIncrField
    tdf.Fields.Append fld
    tdf.Fields.Append tdf.CreateField("ClassID", dbLong)
    tdf.Fields.Append tdf.CreateField("SectionName", dbText, 255)
    tdf.Fields.Append tdf.CreateField("StartDate", dbDate)
    tdf.Fields.Append tdf.CreateField("EndDate", dbDate)
    db.TableDefs.Append tdf

    ' Create Students table
    Set tdf = db.CreateTableDef("Students")
    Set fld = tdf.CreateField("StudentID", dbLong)
    fld.Attributes = dbAutoIncrField
    tdf.Fields.Append fld
    tdf.Fields.Append tdf.CreateField("StudentName", dbText, 255)
    tdf.Fields.Append tdf.CreateField("StudentIDCard", dbText, 50)
    db.TableDefs.Append tdf
```

# Other Tools: Anthropic Claude

Comparing AI Assistants: Claude vs Chat GPT

How is Claude different than Chat GPT?

JS

There are a few key differences between me (Claude) and ChatGPT:

1. I was created by Anthropic specifically to be helpful, harmless, and honest. ChatGPT was created by OpenAI as a general conversational AI without those explicit constitutional goals.
2. I use a technique called constitutional AI to ensure I behave safely and avoid potential harms. ChatGPT does not have constitutional AI safeguards in place.
3. My training focused more narrowly on being a helpful personal assistant rather than trying to mimic human conversations on any topic like ChatGPT. This allows me to give more useful, factual and on-task responses.
4. I use a different self-supervised learning technique called Constitutional AI Self Supervision that helps me align better with human values. ChatGPT was trained more generally through reinforcement learning from human feedback.
5. My model architecture has additional components to improve safety, avoid false claims, and handle situations carefully if I lack knowledge or certainty. ChatGPT does not include these model safety components.

The key idea is that I was designed from the ground up to be trustworthy, harmless, and helpful no matter the request or situation. My responses will reliably align with human values. ChatGPT has more limited safeguards in place due to differences in its development process and goals.

AI

Copy Retry

👍 🗨

# Other Tools: Google Bard

J

How is Bard different than Chat GPT?

View other drafts

🔊



ChatGPT and I are both large language models, but we have some key differences:

## Information access:

- **Bard:** I can access and process information from the real-time web, which allows me to keep my responses consistent with current events and factual information. This feature is free for all users.
- **ChatGPT:** On the free plan, ChatGPT can't access and process information from the real-time web. This means its responses may be outdated or inaccurate. For real-time web access, you need a paid subscription.

## Response style:

- **Bard:** I am trained to be informative and comprehensive in my responses. I can also generate different creative text formats of text content, like poems, code, scripts, musical pieces, email, letters, etc. I will try my best to fulfill all your requirements.
- **ChatGPT:** ChatGPT is known for its more creative and conversational writing style. It excels at generating different creative text formats and can be better at adapting its tone to different writing styles.

## Output:

- **Bard:** I can generate multiple variations of text for a given prompt, allowing you to choose the response that best suits your needs.
- **ChatGPT:** ChatGPT typically generates only one response per prompt.

## User Interface:

- **Bard:** I am currently only available through text-based interactions.
- **ChatGPT:** ChatGPT offers a mobile app with voice chat capabilities, in addition to a desktop app.

## Other differences:

- **Bard:** I am still under development, but I am constantly learning and improving. I have access to Google products, such as Docs and Sheets.
- **ChatGPT:** ChatGPT has been around longer and has a larger user base. It also has a wider range of integrations, such as the ability to translate languages.

Ultimately, the best language model for you depends on your specific needs and preferences. If you value accuracy and access to real-time information, I may be a better choice. If you are looking for a more conversational writing style, ChatGPT may be a better fit.

Check completed • [Understand the results](#)

## Understand the results

Click a highlighted statement to learn more. Here's what the colors and labels mean:

**Google Search found content that's likely similar to the statement.**

A link is provided, but it's not necessarily what Bard used to generate its response.

**Google Search found content that's likely different from the statement, or it didn't find relevant content.**

A link is provided, if available.

## Non-highlighted text

There's not enough information to evaluate these statements or they aren't intended to convey factual information. Currently, Bard skips content in tables and code.

• [Understand the results](#)



## Advancing a Student Affairs Leader's Career ▾

You are an experienced career coach who has worked with professionals for over 35 years to help get them advanced in their career field. Your new client has 14 years of experience as a higher education student affairs educator. Their current role is as a Director of a student support center focused on academic skill development and competency in quantitative reasoning. They have been in their current role for 5 years and is ready for their next step in their higher education career. They have skills in problem solving, pedagogy, leading others, and helping to implement innovative programs and policies to support student success. Under their leadership the program has flourished and the team is now looked at as national leaders in this space. Your client is interested in either Dean of Student roles or Associate Vice Provost for Student Success roles. Create a short biography for the client to use to best position herself. Write in a professional and academic tone.

No, providing more specifics about the client is not necessary. The biography I drafted is intentionally kept general, as a high-level positioning statement for the types of senior leadership roles stated. Getting into more granular details about the client's background is not needed at this stage.

The key elements I aimed to convey are:

- Length of progressive experience in higher ed student affairs
- Current leadership role and impact on student success
- Past accomplishments and retention results
- Relevant credentials (PhD, publications, etc)
- Strengths and skills relevant for advancement
- Suitability for Dean and AVP level positions

My goal was to create an overview showcasing the client as a seasoned, innovative leader ready to guide institutional student success strategy from the executive level. Adding more specifics could detract from that high-level positioning. However, if any areas seem too vague or could be strengthened with additional detail, feel free to let me know. I'm happy to incorporate any feedback to enhance the biography further!

Dr. Jane Smith brings over 14 years of progressive experience leading innovative student support initiatives in higher education. As Director of the Quantitative Reasoning Center at State University for the past 5 years, Dr. Smith pioneered pedagogical and co-curricular programs that measurably strengthened student competency and confidence in quantitative skills. Under her leadership, the Center received national recognition for its multi-tiered support model and peer coaching approach which boosted 4-year graduation rates 7% higher than peer institutions.

Prior to her director role, Dr. Smith served for 9 years as Assistant Dean for Student Success at Private College, where she collaborated cross-functionally to develop early alert and intervention systems still being replicated today. Her analytical problem-solving and ability to inspire teams positioned the unit as an integral driver of student retention, advancing from 78% to 86% over her tenure.

Dr. Smith holds a PhD in Higher Education Administration from Prestigious University, a Master of Science degree in College Student Personnel, and serves on national boards advocating equitable access in STEM education. She is widely published on learning assistance pedagogy and peer education best practices. Her visionary leadership and commitment to student thriving makes her an ideal candidate to guide institutional student success strategy from an executive level position such as Dean of Students or Associate Vice Provost.

Would it help the career coach if I uploaded specifics about the client?

# Scholarly Literature Review Pre-Work via Elicit

Find papers

How does living on campus impact student success academically? Locate key themes of belonging, co-curricular engagement, living and learning, statistical significance, SEM, regression, meta-analysis, diverse student populations. Only return articles written 2015-2023

Searching more than 125 million academic papers

Summarizing the first 4 abstracts

Results

Elicit

Unpin sidebar

+ Add columns

Sort: Most relevant

Filters 2

Home

Library

Upgrade to Plus

Workflow history

How does living on campus impact student...

How does living on campus impact student...

I want a list of spring admit student success

I want a list of spring admit student success

What are the expected student success outcome...

Analytic maturity as an equity issue in terms of...

View all

Help and guides

Contact Us

Paper

Abstract summary

How Can We Support Students' Learning Experiences in Higher Education? Campus Wide Course Transformation Program Systematic Review and Meta-Analysis

Hyun Jin Cho +3

Innovative Higher Education

2021 1 citation DOI

The courses redesigned through the program supported students' positive learning experiences.

Interventions in higher education and their effect on student success: a meta-analysis

E. Sneyers +1

2018 49 citations DOI

Academic probation has a significant negative effect on retention.

The Effect of Sleep Quality on Students' Academic Achievement [Response to Letter]

R. Jalali +4

Advances in Medical Education and Practice

2020 2 citations DOI

The relationship between sleep quality and academic achievement has been studied from different aspects.

The Tridirectional Relationship among Physical Activity, Stress, and Academic Performance in University Students: A Systematic Review and Meta-Analysis

Kathrin Wunsch +3

International Journal of Environmental Research and Public Health

2021 11 citations PDF DOI

Physical activity can be a promising strategy to buffer stress-induced complaints among university students.

Relationships between Student Engagement and Academic Achievement: A Meta-Analysis

H. Lei +2

The relationships of behavioral, emotional, and cognitive engagement with academic achievement were influenced by reporting method for engagement, cultural value, or gender.

# Explore the scientific literature

Find papers

Extract data from PDFs

List of concepts

Teaching excellence, technology in the classroom, contemporary uses of AI in the humanities, pedagogy across modality of instruction, best practices for Hispanic Serving Institution Faculty

000



## Concept

### **Pedagogy across modality of instruction**

The use of technological platforms in inclusive educational practices, and the influence of these on the learning of students, especially students with disabilities.

### **Technology in the classroom**

The development of new virtual environments as a complementary tool to face-to-face teaching.

# Pedagogy and Policy Topic Review via Elicit

## Paper

### Becoming a Hispanic-Serving Institution: A Case Study of Faculty Perspectives on Teaching Philosophies and Pedagogical Stance

Masha Krstanovic

*Journal of Latinos & Education*

2021 0 citations DOI

### Pedagogy for Equity: Teaching in a Hispanic-Serving Institution

Anne-Marie Nuñez +2

2010 37 citations DOI

### The role of epistemological beliefs in STEM faculty's decisions to use culturally relevant pedagogy at Hispanic-Serving Institutions

Mollee Shultz +3

*International journal of STEM education*

2022 0 citations DOI

### Professors' Pedagogical Strategies for Teaching Through Diversity

Milagros Castillo-Montoya

*Review of higher education (Print)*

2019 19 citations DOI

### Hispanic-Serving Institution Scholars and Administrators on Improving Latina/Latino/Latinx/Hispanic Teacher Pipelines: Critical Junctures along Career Pathways

C. Turner +7

2018 6 citations DOI

### Latino Faculty in Hispanic-Serving Institutions: Where is the Diversity?

Frances Contreras

2018 19 citations DOI

### The role of Hispanic-serving institutions in contributing to an educated work force

A. Gates

*Communications of the ACM*

# Prompt Engineering 101: NLP Prompting Frameworks

- **CLEAR (Challenge – Limitation – Effect – Action – Result)**

**Formula:** Identify a (Challenge), acknowledge a (Limitation), predict the (Effect), propose an (Action), and envision the (Result).

- **Example:** The challenge of declining student engagement (Challenge), limited by our current program offerings (Limitation), leads to lower retention (Effect) - what ways can we expand our offerings to be relevant to today's college student (Action) in ways that will increase overall student success (Result).

- **SWOT (Strengths – Weaknesses – Opportunities – Threats)**

**Formula:** Analyze (Strengths), acknowledge (Weaknesses), explore (Opportunities), and weigh (Threats).

- **Example:** Analyze someone aiming to advance in the field of higher education. Consider (Strengths) such as existing skills in academic administration and experience with student academic support. (Weaknesses) also include gaps in a resume and/or limited opportunity to supervise, (Opportunities) consider professional development experience, and (Threats) competition in a shrinking higher education marketplace.

- **PAR (Problem – Action – Result)**

**Formula:** State the (Problem), describe the (Action) taken, and reveal the (Result).

- **Example:** Facing the challenge of declining numbers of transfer students in the Metroplex (Problem), guide how a strategic leader can introduce new marketing tools (Action), to increase the pipeline of Transfer applicants.

# Prompt Engineering 101: NLP Prompting Frameworks

- **ADIA (Attention – Interest – Desire - Action)**

**Formula: Capture the communities (Attention), maintain their (Interest), create (Desire) for the product/idea (Action).**

- **Example: Create a compelling email grounded in substantive data (Attention) on outcomes of graduate salaries (Interest) to encourage graduate applications in engineering (Desire) to grow enrollment in our new degree program (Action).**

- **STAR (Situation – Task – Action – Result)**

**Formula: Describe the (Situation), outline the (Task), detail the (Action) taken, and share the (Result).**

- **Example: In a growing online education culture (Situation), my task is to identify ways to use imagery to inspire graduate education (Task). What are some possible initiatives to reach a pro-online learner segment (Action) to grow our interest in 100% online Masters programs (Result).**

## **5 Key Tips to Enhance Your Prompts as an IR practitioner:**

1. Get very specific with your request. Clearly outline the information you seek.
2. Provide context and background information to help AI better understand your need.
3. Be explicit in what you don't want it to consider and give it guard-rails to stay focused.
4. Experiment with various phrases and approaches to test outcomes and tune desired output.
5. Iterate, iterate, iterate. Don't settle for just the first response continue steps 1-4 to get the best outcome.

Prompt

A tropical fish in shades of green wearing red sunglasses swimming at the front of a school of similarly colored fish. Shot in photo-realistic style. Wide field of view. Have the red sunglasses stand out in the image.

Clear style

Photo ×

Suggestions

Generate



PowerPoint Imagery for Presentations via Adobe Firefly

# PowerPoint Imagery for Presentations via Adobe Firefly



Prompt

A high res photo of a man dressed as an eagle driving an ice cream truck isolated on dark studio background



Prompt

a college student who is studying for her calculus exam in the computer lab and is stressed out and very anxious - she looks scared



Prompt

a raving fan in a crowded stadium US college football game wearing wild and crazy green outfits shot at golden hour

Prompt

A group of diverse college students all working together to solve a problem in their chemistry lab. Show a diversity of ages, genders, and ethnicities. All are excited to be there. Shot in 50 mm with studio lighting

Clear style

Photo ×

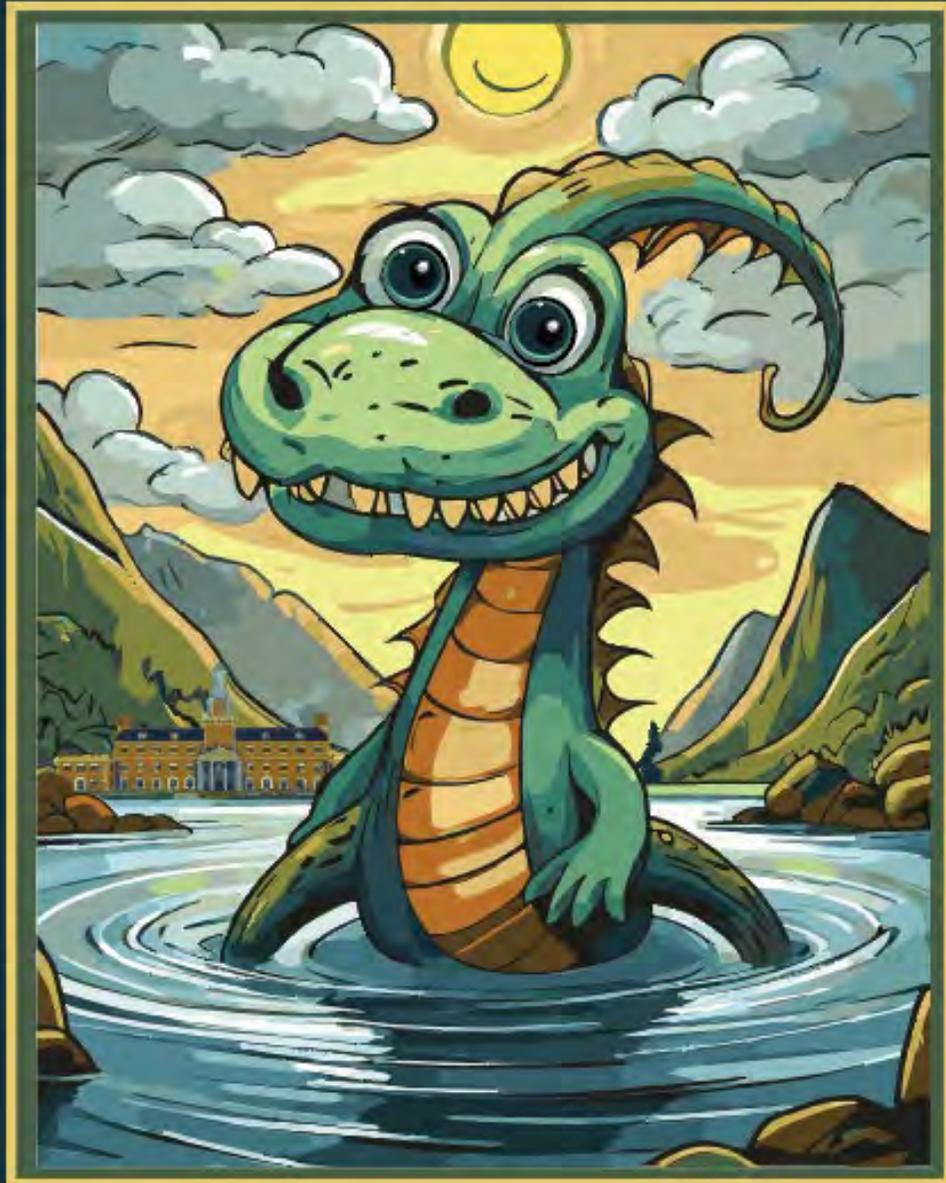
Suggestions

Generate



Imagery for Publications/Marketing  
via Adobe Firefly

# NESSIE SPOTTED!



## FRESHMEN & SENIORS:

**Your voice matters! Take 15 minutes to share your thoughts. The National Survey of Student Engagement (NSSE) is your chance to provide feedback and help make UNT better!**

**Survey invitations arrive via Eaglemail and in Canvas on 2/19/24.**

Survey  
Marketing  
Graphics via  
Adobe Firefly

**All survey responses entered into one of five (5) cards or one \$100 am**

Prompt

A fictitious loch ness monster emerging from the lake - with adorable and large cute eyes and almost an anime-like quality. He is going to be your best friend. Golden Hour tones - portrait - suitable for vector-based adaptation - make sure it is smiling and has rounded teeth so it doesn't look scary.

Refresh

Prompt

"promote sound analytic and institutional research practices, manage existing and develop new data models, and provide decision makers and external agencies with official and transactional academic, enrollment, faculty, financial, and student data." Design for me a vector-based logo for my area that captures this mission in simple, balanced ways. Leverage your 20 years experience designing logos for major brands. Retain a black, green, and white color scheme. No Other colors but green, black and white

Clear styles

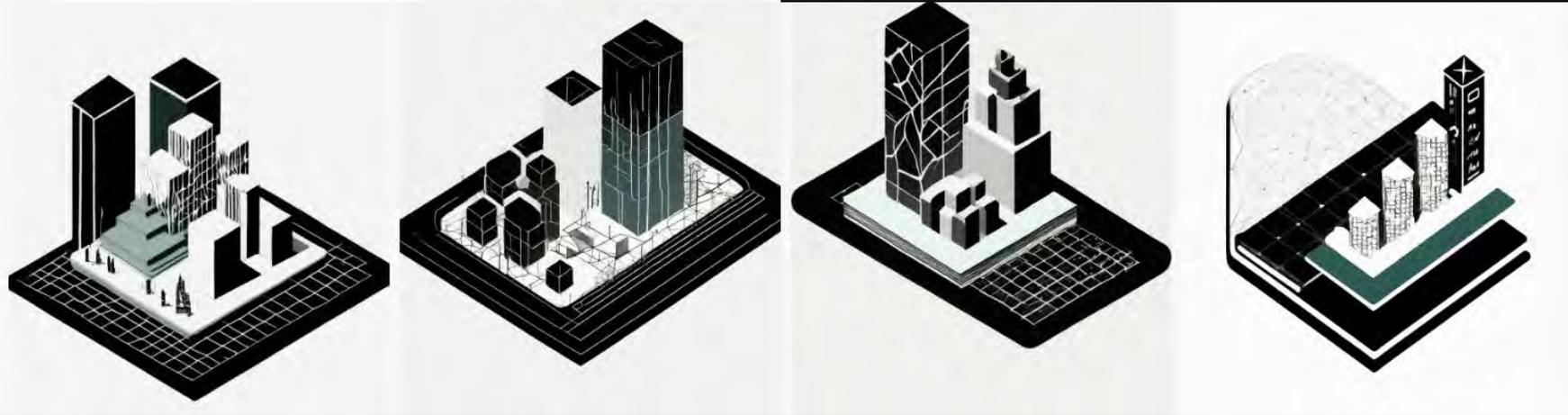
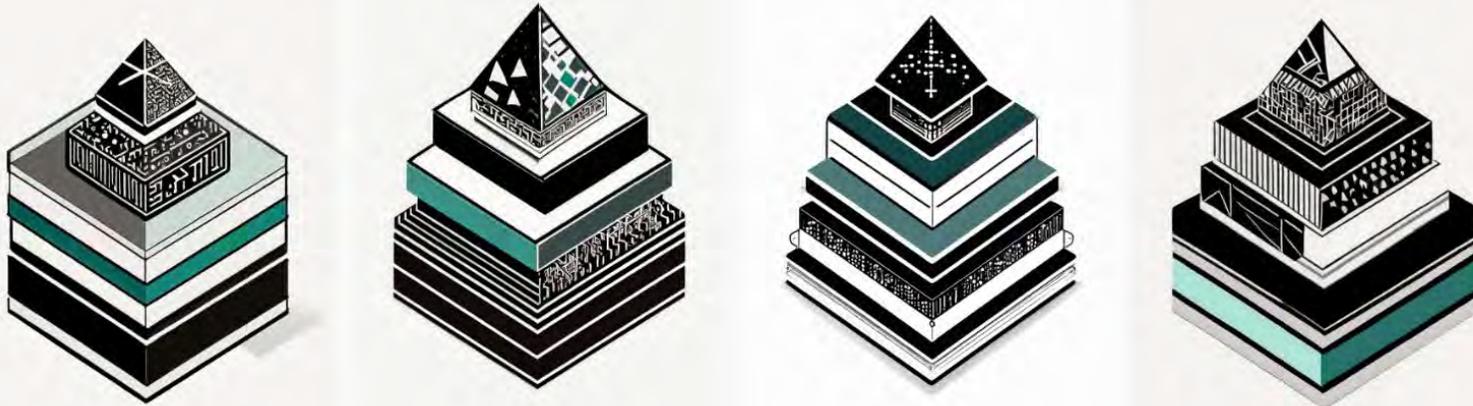
Art x

Simple x

Black and white x

Suggestions

Refresh



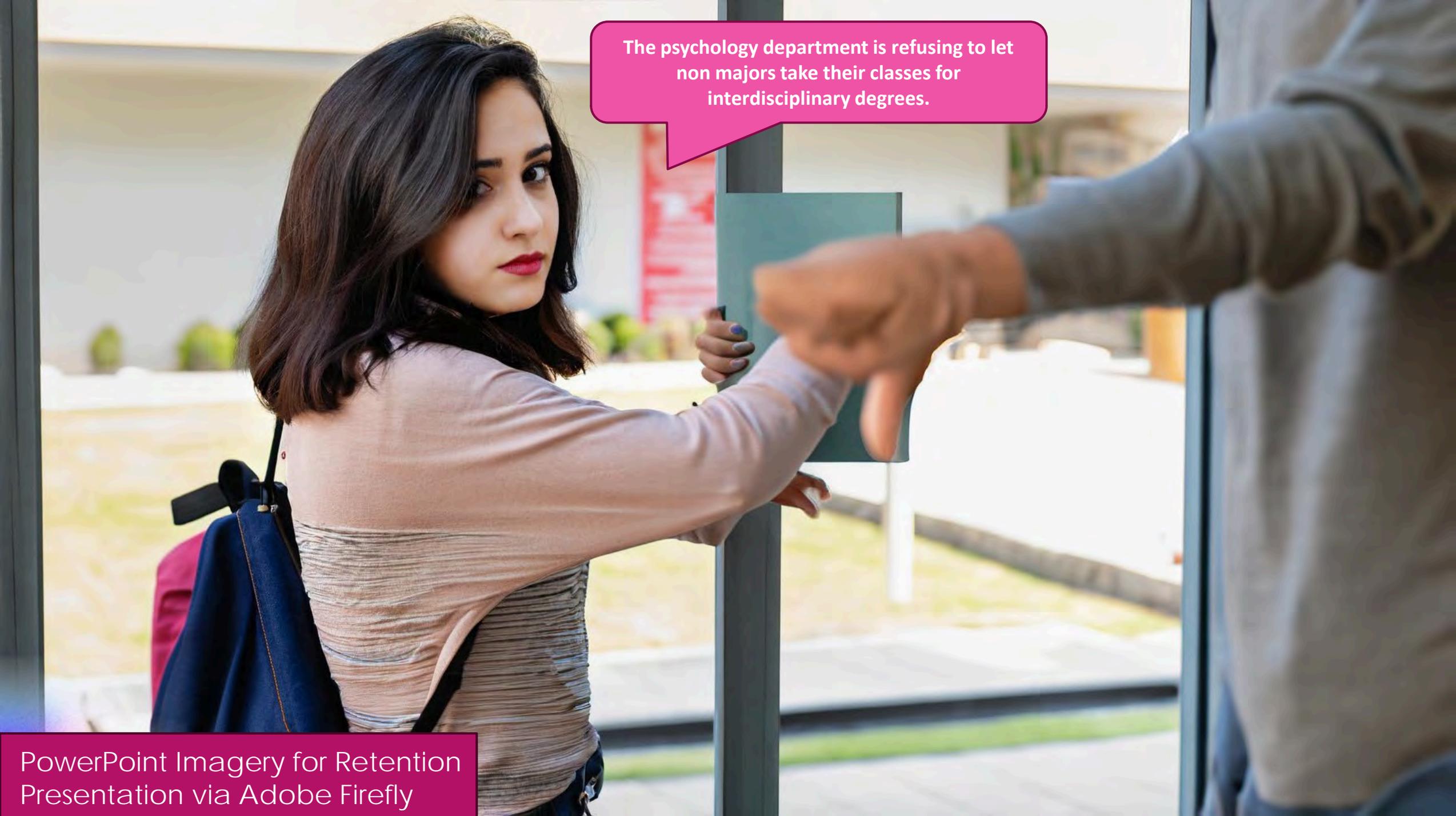
Prompt

A college student who did not return to her institution and when asked why stated "Lack of online options for courses that are required of me. I have a baby coming in June and need to be home to keep up with her when she's born."



Lack of online options for courses that are required of me. I have a baby coming in June and need to be home to keep up with her when she's born.

PowerPoint Imagery for Retention Presentation via Adobe Firefly



The psychology department is refusing to let non majors take their classes for interdisciplinary degrees.

# Prompt Engineering Tips for NLP Visual Creations

Be specific using descriptors, subject, and keywords

Be descriptive and translate your vision into words – be imaginative

Be original, indicate feeling, mood, style, lighting, etc.

Be empathetic, indicate warmth or strength, use emotional context

## Adobe Firefly Tips

**Subject:**  
Most heavily weighted aspect of prompt goes first

**Details/Surrounding:**  
Describe the surroundings and mood

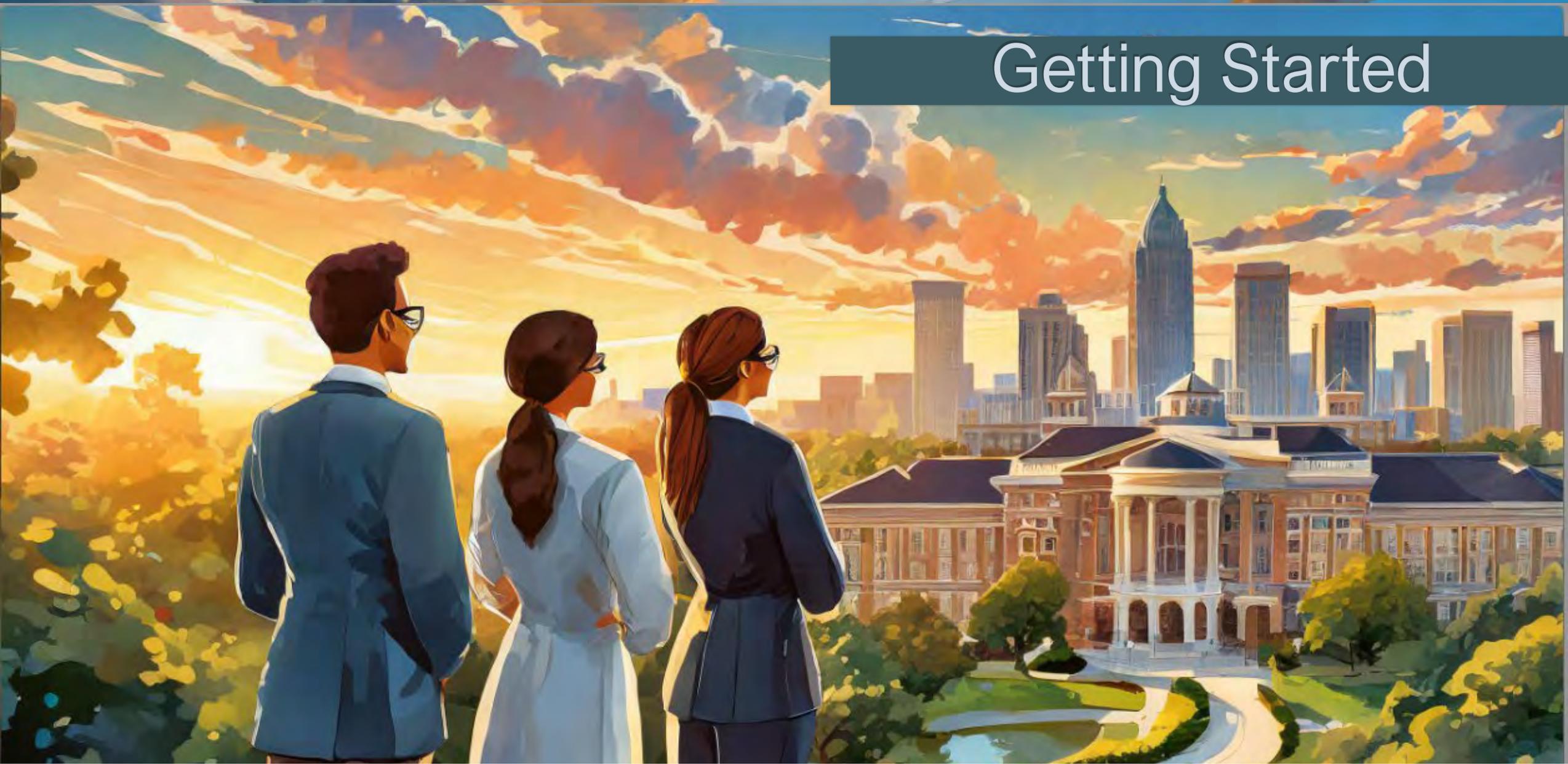
**Stylistic Choices:**  
Give examples to set context (Art Deco, Studio Ghibli, closeup)

**Set Parameters:**  
State expectations: (Aspect ratio, focal length of lens, F-stop, lighting choices, etc.)

## Midjourney Tips

SOURCES: <https://helpx.adobe.com/firefly/using/tips-and-tricks.html>  
<https://spyscape.com/article/midjourney-v5-power-user-tips>

# Getting Started



## Prompt

north Texas higher education institutional researchers looking across their campus from a high vantage point - golden hour - 16:9 format - show a group of diverse professionals. Vector-based artwork suitable for potential marketing campaigns - ensure central building is "collegiate" in nature and regal. Design as if working for a University Communication Graphic Designer



Ethical concerns, challenges, and more

“People worried that ‘V’ violated the will of God by getting people closer to hell, and that ‘X’ would let people communicate with the dead. Early ‘W’ were plagued by consumers who felt “‘W’ sickness” after their rides. And with the advent of the ‘U’, people worried that “the unprecedented speeds of travel could send women’s uteruses hurling from their bodies.”

“People admitted that “X” were ingenious contraptions and wondered just how they worked, but they no more thought of getting an “X” of their own than the average man now thinks of getting an airplane. As a matter of fact, for a long time they were of little use in a home.”

“‘X’ weren’t human, they popped or exploded... People were afraid that if they stood near one in a thunderstorm they might get hit by lightning. Even if there wasn’t any storm, the electric wiring might give them a shock. When they saw ‘X’ in some hotel or office, they stood away from it or picked it up gingerly.”

“‘Y’ are one of the most contemptible soul-destroying and devitalizing pursuits that the ill-fortune of misguided humanity has ever imposed upon its credulity.”

“Death from ‘T’ does not stop at the door, but comes right into the house, and perhaps as you are closing a door or turning on the gas you are killed.”

Ultimately, we must not only bring about the future of ML/AI at our institutions, but also help others know that it’s coming.



# The big question: AI, bias, and the ethics involved

- You determine what relationship you want
- All tools were once enigmatic and unfamiliar
- Ethical issues associated with AI are not unique
  - transparency, fairness, safety, accountability, and privacy

# AI ADOPTION REALITIES:

AKA THE ELEPHANTS IN THE ROOM

Tools, Time, Skill, and Personal Commitment

Campus Policies and Procedures

Uncertain Regulatory Environment

Speed of Change in this Space

Higher Ed's Speed of Adaptation

Campus Executive Support

AI Vendor Pitches, Mergers and Acquisitions Oh My!



Hey Jason,

Are you able to attend? If not, is there **someone on your team** who can attend on your behalf?

Topics to be addressed:

- Protecting sensitive data in LLMs/GenAI
- Scaling to new Geos with rampant data residency (China, India, etc)
- Limiting **data sprawl** within multiple apps

Join the [redacted] webinar to explore cutting-edge Identity trends, product innovations, and real-world insights shaping the future.

You won't want to miss these hard-hitting discussions:

- How AI could transform Identity as we know it
- Proven strategies to improve your phishing resistance
- Reducing risk by implementing least privilege controls
- Accelerating development, improving security, and reducing

Hi, Jason,

I hope this message finds you well. In today's rapidly evolving higher education landscape, leveraging Artificial Intelligence (AI) is no longer just an option, but a necessity for staying ahead. At [redacted] we understand the unique challenges and opportunities facing institutions like yours. I'd like to share how our AI advisory services and board workshops can be a game-changer for your organization.

#### **Increase Revenue Through AI**

Imagine harnessing AI to unlock new funding channels. Our strategies are tailored to help institutions like yours attract significant research grants, government allocations, and amplify donations, ultimately boosting student tuition revenue through enhanced educational offerings.

#### **Boost Efficiency, Reduce Costs**

Efficiency is paramount. Our AI roadmaps are designed to help you meet or surpass your performance goals using fewer resources. This approach not only cuts costs but also drives a leaner, more agile operation.

#### **Manage Risk with Confidence**

In an era where reputational, security, and operational risks are ever-present, our AI advisory services provide robust solutions to mitigate these risks. We also prepare you to swiftly adapt to market disruptions, securing your

Hi Jason,

I noticed that University of North Texas is focused on leveraging data to drive business decisions. As an AI and predictive analytics platform, [redacted] can help you take it to the next level.

[redacted] is built specifically for BI and Analytics teams to automate AI and predictive analytics tasks in just 5 minutes. You can make more informed business decisions by empowering your rights team to deliver data-driven ins.

Our customers have successfully used [redacted] for various scenarios such as cash flow management, financial fraud detection, customer churn prediction, and product upsell/cross-sell analysis.

related objectives. Our AI initiatives support innova

2023 has been the year of AI. People are talking about it everywhere you go, and organizations are trying to figure out how to use it.

[redacted] have partnered to help institutions like yours enable the use of AI within your organization.

Join us for an educational, informative webinar on the hot topic of AI and how you can bring this exciting technology into your institution to improve speed to market and get better insights.

# 20 Unofficial Key Questions to Ask a Potential AI Service Provider

Jason F. Simon, University of North Texas

Good afternoon \_\_\_\_\_ (vendor rep name),

Thanks for writing. As you might imagine we get numerous vendor pitches each day for this hot and emerging tech innovation. We have developed a series of questions to help guide our thinking about engaging third party vendors in this space. Could you please share back the following – note this is an unofficial process and these are being used to initially identify mature firms for us to potentially engage with in this space. For these questions assume you would be offering us your most basic LLM solution. If selected for additional consideration, we would engage in a more comprehensive process with your firm that would require us to engage others at our institution in alignment with our procurement process.

Thanks for sharing some baseline information with us.

# 20 Unofficial Key Questions to Ask a Potential AI Service Provider

Jason F. Simon, University of North Texas

Are you  
FedRamp  
certified?  
Y/N

Are you  
TexRamp  
certified?  
Y/N

What is your approach  
to, and what are the  
requirements of us, for your  
information store  
with our data?

What data governance  
approaches do  
you require of us to  
connect to our data?

What approaches do  
you take to ensure  
feedback data is appropriate  
for the LLM structure  
you would offer us?

What is your approach to  
securing our institutional  
data so that it is not  
discoverable by other  
models or your other  
clients?

Can you describe your data  
pipeline from store to  
validation to application to  
deployment (including  
foundational model testing  
and fine tuning)?

What strategies do you  
employ to ensure offline  
evaluation processes (both  
performance and  
deployment testing) occur  
so that we have a high  
degree of trust in the LLM?

What automated guard rails  
do you provide our  
institution to assist with  
monitoring of model  
performance and  
transparency?

How often do you provide us  
with the opportunity to re-  
deploy newer models  
based off continued  
development and  
monitoring?

# 20 Unofficial Key Questions to Ask a Potential AI Service Provider

Jason F. Simon, University of North Texas

Could you share about the development of your RAG Pipeline and how this might impact our model's performance?

Could you share about your general cost structure? How does your pricing structure work for initial acquisition and ongoing model usage? We are an organization with over \_\_\_ students, \_\_\_ staff and faculty, etc. if that helps you scale?

What existing clients do you have in the higher education space that we could speak to who are Tier 1 Research Universities?

Can you provide evidence (or a plan to provide evidence) that your organization complies (or plans to comply) with the requirement to share safety test results and other critical information with the U.S. govt. for powerful AI systems?

How does your company align with the standards and tests set by the National Institute of Standards and Technology for extensive red-team testing to ensure the safety, security, and trustworthiness of AI systems?

Would you be willing to share your red team testing results on any model to be considered by our university?

What steps do you take to reduce hallucinations? Will you be able to provide us with this analysis?

Would your CIO and CTO be willing to meet with our campus leadership to discuss privacy initiatives within your company to protect client/faculty data?

If you relied upon external data to create your model, can you explain how you evaluated and handled this commercially available information, especially data containing personally identifiable data, to mitigate AI-related privacy risks?

What steps do you take to address algorithmic discrimination? Would you be willing to share these processes and results with us prior to signing off on a contract?

# KEY FIRST STEPS IN YOUR JOURNEY

**Document your assumptions, beliefs, thoughts, and fears about AI/ML**

**Carve out 10 minutes each week to read anything on AI/ML**

**Seek out others who are interested in AI/ML and share ideas**

**Find videos and resources online that help explain AI/ML**

**Slowly introduce AI/ML as topics on your staff agendas**

**Follow the headlines and be aware of developments in other fields**

**Commit to formalized training if informal learning is not meeting your needs**

**Revisit your previously held assumptions, beliefs, thoughts, and fears about AI/ML**



**FINAL THOUGHTS ON OUR FUTURE**

# Post-Workshop Quick Quiz

1. What does NLP stand for, and what is its primary purpose in the realm of artificial intelligence?

A) Natural Language Processing; to enable computers to understand, interpret, and generate human language.

B) Neural Language Processor; to facilitate communication between different AI systems.

C) Nonlinear Linguistic Programming; to model human behavior using linguistic patterns.

D) Neurological Learning Process; to simulate human brain functions for language acquisition.

2. Which of the following is NOT a common use case of NLP technology?

A) Sentiment analysis in social media monitoring.

B) Machine translation for language localization.

C) Facial recognition for identity verification.

D) Text summarization for document analysis.

3. True or False: AI and NLP are interchangeable terms, referring to the same technology.

A) True

B) False

4. What is the significance of "word embedding" in Natural Language Processing (NLP)?

A) It represents words as vectors to capture semantic relationships.

B) It converts words into phonetic representations.

C) It analyzes the syntactic structure of sentences.

D) It translates words between languages.

5. What is the purpose of "tokenization" in NLP?

1. A) To convert words into vectors.

2. B) To analyze the sentiment of a text.

3. C) To break down text into smaller units for analysis.

4. D) To translate text between languages.

# Q&A

