

DEFINED
ALIGNED



E-Learning, Technology
and Communications
UF | COLLEGE OF EDUCATION

ELEVATING THE COLLEGE OF EDUCATION

AI Integrations

February 27 | 12-1PM

DEFINED ALIGNED



E-Learning, Technology
and Communications
UF | COLLEGE OF EDUCATION

JANUARY 29 | 12-1PM

Helpdesk and Resource Hub

FEBRUARY 27 | 12-1PM

AI Integration

MARCH 26 | 12-1PM

Recruitment for Webinars

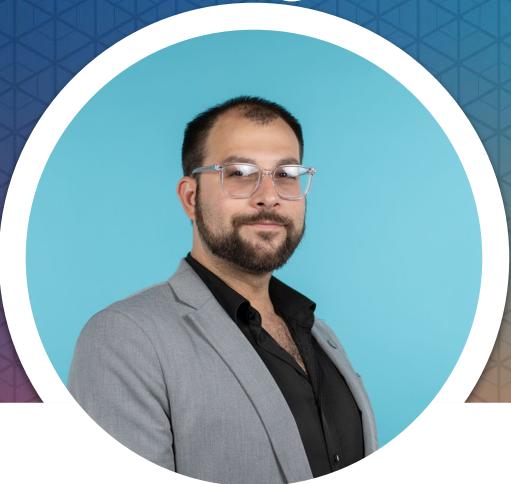
APRIL 23 | 12-1PM

AR/VR in Education

MAY 20 | 12-1PM

Personal Social Media as a
Promotion Tool

Presenting Today



Jay Rosen

Application Programmer II
jayrosen@ufl.edu



Abstract

Over the past year, the integration of AI into artistic endeavors has emerged as a transformative tool, enabling fresh perspectives and the realization of once-elusive visions. This journey, while not officially endorsed by the University of Florida, is deeply influenced by my dual roles as Web Developer in UF Information Technology and long-time Fine Artist in the Gainesville community. As an early beta-tester for OpenAI and utilizing platforms like MidJourney, my creations are inspired by the pioneering spirit of the UF AI initiative, and my own desire to push the boundaries of Art & Technology.

While these works radiate artistic brilliance and complexity, they also stir conversations, primarily due to the inefficacy achieved through AI, leading some to draw parallels with 'Deep Fakes.' It's imperative to note, however, that these pieces are anchored in positive creativity and exploration rather than deception. AI's potential in expanding an artist's horizon is undeniable, yet it beckons a responsibility to craft with joy and curiosity, steering away from potential misuse.



Algorithmic Eyewear

Algorithmic Eyewear was created the week of GPT 4 and MidJourney 5 release. This is a collection of 100 AR headsets inspired by my Mirror Visorwear sculptures. This AI artwork won 1st place award in UFL Blockchain Lab NFT contest earlier this year. Each NFT unlocks a unique VR experience. This series has been exhibited at Miami NFT Week at HOGLER Gallery, Wynwood Miami as well as Metaverse Fashion Week at Mirror Vision Gallery.



Engineering Clocktower Hologram Kiosk

This was a rejected proposal for UF Technology Innovation grant, to re-purpose the abandoned Engineering Clock Tower with a laser projected hologram kiosk. The kiosk uses 4 lasers projectors mounted in the ceiling, to showcase the capabilities of iPerGator to the public. Hologram Kiosk can display digital artworks, simulations, highlight UF sponsorships and events, and can be used for maps and AI chatbot, such as a 3D version of the Al Alligator.



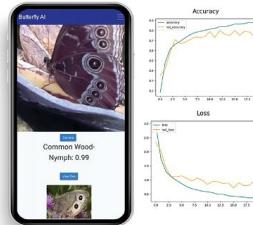
DCP Collaboratory Hologram Kiosk

This 12x12x12 public art hologram was proposed for the Architecture Building expansion's call to arts competition. For this proposal, large transparent LED displays will showcase student and faculty architecture projects as public art form. A student would be capable of uploading a CAD architecture or 3D model, and view in an immersive experience that blends with the environment.



ED3N™

ED3N is being developed as an astro-biology simulator videogame where players can create life and trade genotypes in Tomopachi-like gameplay. Our planned evolution mechanics are designed with DNA catalogs for procedural AI generated plants and creatures. ED3N Creatures are intended to flourish into never-before-imagined life forms influenced by user input. This project is being developed by Interplay Entertainment.



Butterfly AI

At UF AI Days Gator-Hack, our team developed Butterfly AI, a "pocket" machine learning app to identify species of butterflies native to Florida. Our dataset was developed using pictures and catalog Florida Museum of Natural History, and the Deep Learning model was generated using TensorFlow / Keras in Google Colab. The trained model had 85.4% accuracy. The user can upload an image or use their smartphone camera to identify over 70 species of butterflies and moths while visiting Butterfly Rainforest.



Milky Way Galaxy (M101)
Stacked 135 x 30sec ISO 5000

Astrophotography

On May 20, 2023, I witnessed the newly discovered Supernova (SN 2023xf) in M101, the Pinwheel Galaxy, the day of its discovery at Chieftain Astronomy Village. For astrophotography, I use a full spectrum modified Sony A6100 camera, mounted on a Skywatcher EQ5 Mount, and Skywatcher 80ED telescope (500mm, f6.3). I use various AI tools in my astrophotography development to stack and combine the long exposures in Sequator, color correction with Adobe Photoshop, and noise reduction and sharpening with Topaz Labs Denoise AI.

My astrophotography has won awards and featured in print publications and online blogs. My photos of the Milky Way are nationally recognized on state websites for Florida and Georgia, representing National Parks such as Haynes Prairie, Okefenokee National Forest, and Stephen C. Foster Dark Sky Park.



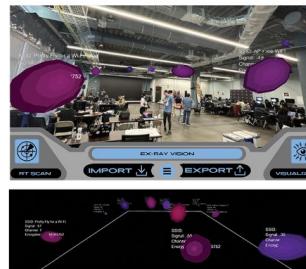
Smart Helmets

Introducing the future of football safety: Smart Helmet. Revolutionizing the game with AI-powered insights, this tech wonder not only elevates your strategy but safeguards your most valuable asset - your brain. Conceptualized with Midjourney 5.



XR Caption

At FIU Shell-tacks, I prototyped XR Caption for Microsoft's Mixed Reality Challenge. XR Caption adds subtlety to reality to improve accessibility to information and can be used in the classroom to enhance education. Goal is to enable the disabled, to hear with our eyes using AI. Built with OpenAI Whisper and Three.js. The AR headset is an open-source 3D printed design that fits a user's smartphone to reflect the AI generated captions into the wearer's eyes.



EX-Ray Vision

Won Best XR Award at Armed Forces Jam for EX-Ray Vision, presented by VR/AR Association. Our military simulation prototype uses electromagnetic spectrum data emitted from WiFi devices to triangulate, locate, and neutralize malicious devices hidden in a building, simulating X-Ray vision ability to see through walls. By providing a more comprehensive and visual assessment of the wireless spectrum, EX-Ray Vision enhances situational awareness and decision-making abilities. Developed with assistance from technical staff at Unity, Magic Leap, and US Department of Defense.

Team: Dr. Jose Neto, Danny Tapia, Frederick Elia, Noah Sherko, Jay Rosen

Developing with AI & Augmented Reality for the Classroom

New Worlds Reading AR Expeditions

Jay Rosen
Application Programmer II
jayrosen@buf.edu
University of Florida College of Education

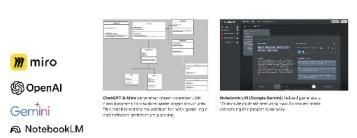
Ideation & Collaboration

Challenge

Generating innovative ideas and transforming them into structured game documents.

AI-Enhanced Solutions

- **Miro** AI prioritized brainstorming sessions more efficiently with AI-generated sticky notes.
- **ChatGPT** expanded rough ideas into well-defined game play mechanics, narrative, and design elements.
- **Notebook LM (Gemini)** compiled game design content into a shared, interactive knowledge base.



Concept Art

Challenge

Racing to produce diverse, high-quality concept art while maintaining design consistency.

AI-Enhanced Solutions

- **DALL-E** & **MidJourney** produced hundreds of art concepts from descriptive prompts, allowing fast exploration of different themes.
- **Adobe Firefly** polished and refined visuals, removing defects from the AI-generated images.



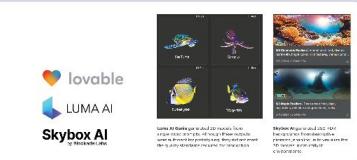
3D Prototypes

Challenge

Quickly developing interactive prototypes and generating 3D models for early-stage visualization.

AI-Enhanced Solutions

- **Lovable** created functional prototypes for AR demos and research tools with minimal coding.
- **Luma AI** generated NeRF-based, textured 3D models from descriptive prompts.
- **Skybox AI** provided 360-degree HDR backgrounds that simulated underwater game environments.



Audio & Music

Challenge

Producing custom audio sound effects, background music, and multilingual voiceovers.

AI-Enhanced Solutions

- **SUNO** and **Google Music FX** generated looping instrumental tracks, ambient sounds, and custom music aligned with the game's underwater theme.
- **ElevenLabs (Deep Voice for Unity)** created custom life-like voiceovers for the game narrator.



Game Development

Abstract

New Worlds Reading AR Expeditions is an educational Augmented Reality (AR) video game designed to enhance literacy in 3rd- to 5th-grade students through interactive, immersive experiences. By integrating AI tools at every stage of development—from brainstorming and concept art to programming and gameplay— we demonstrate the transformative potential of AI-driven design in educational technologies. AI-enhanced tools powered the rapid generation of creative ideas, streamlined game design, and automated debugging. AI-powered AI assistants also enabled teachers to teach diverse student audiences. Moreover, these AI-enhanced methodologies effectively address common challenges in software and game development, such as overwriting design bestactices, reducing resource-intensive asset production, and simplifying complex debugging processes. Dynamic gameplay is supported by AI-generated behavior trees, allowing characters to exhibit realistic interactions and respond to player decisions. This project exemplifies how the integration of AI and AR technologies can create engaging, personalized learning environments to enhance literacy outcomes through fun games. The collaboration between the UF College of Education and technical teams further underscores the critical role of interdisciplinary innovation in shaping the future of learning.

Game Development

Challenge

Developing, debugging, and integrating complex game scripts within the Unity game engine.

AI-Enhanced Solutions

- **GPT-4 Vision** assisted in generating C# scripts, accelerating the development of gameplay elements.
- **GPT-4 Vision** can interpret screen captures of the game to help debug issues with Unity and scripts.
- **Github Copilot** provided real-time code completion and error detection, streamlining the coding process.



Augmented Reality

Challenge

Ensuring smooth placement, interaction, and tracking of digital objects in real-world AR environments.

AI-Enhanced Solutions

- **ARCore** & **ARKit** provided real-time surface detection and object anchoring for seamless AR integration.
- **Niantic Spatial Platform** enabled advanced spatial mapping and segmentation for immersive experience.



AI Gameplay

Challenge

Designing dynamic, interactive gameplay where AI-controlled characters react to players and environment.

AI-Enhanced Solutions

- **Unity ML Agents** & **OPSiVE Behavior Trees** define decision-making pathways, allowing AI characters to respond to stimuli and adapt to changing in-game conditions.
- **Llama3 (exploratory)** is being evaluated for AI-driven conversations to further personalize learning and offer custom challenges.



Multi-Language Support

Challenge

Producing custom audio sound effects, background music, and multilingual voiceovers.

AI-Enhanced Solutions

- **Google Translate** generated initial text translations, providing a foundation for further linguistic refinement.
- **Meta Seamless M4T** & **Recognosimo (exploratory)** are both under evaluation for real-time text and audio translation, including offline voice recognition to offer new methods of interactivity.



Partners

UF

COLLEGE OF
EDUCATION

UF Lastinger Center for Learning
UNIVERSITY OF FLORIDA

E-Learning, Technology
and Communications

new worlds
EXP

SCHOLASTIC





AI Integrations

- AI Resources at UF
 - NaviGator AI Chat
 - UF GPT
- Prompt Engineering
- Reasoning
- Deep Research
- Agents
- AI Tools



NaviGator AI

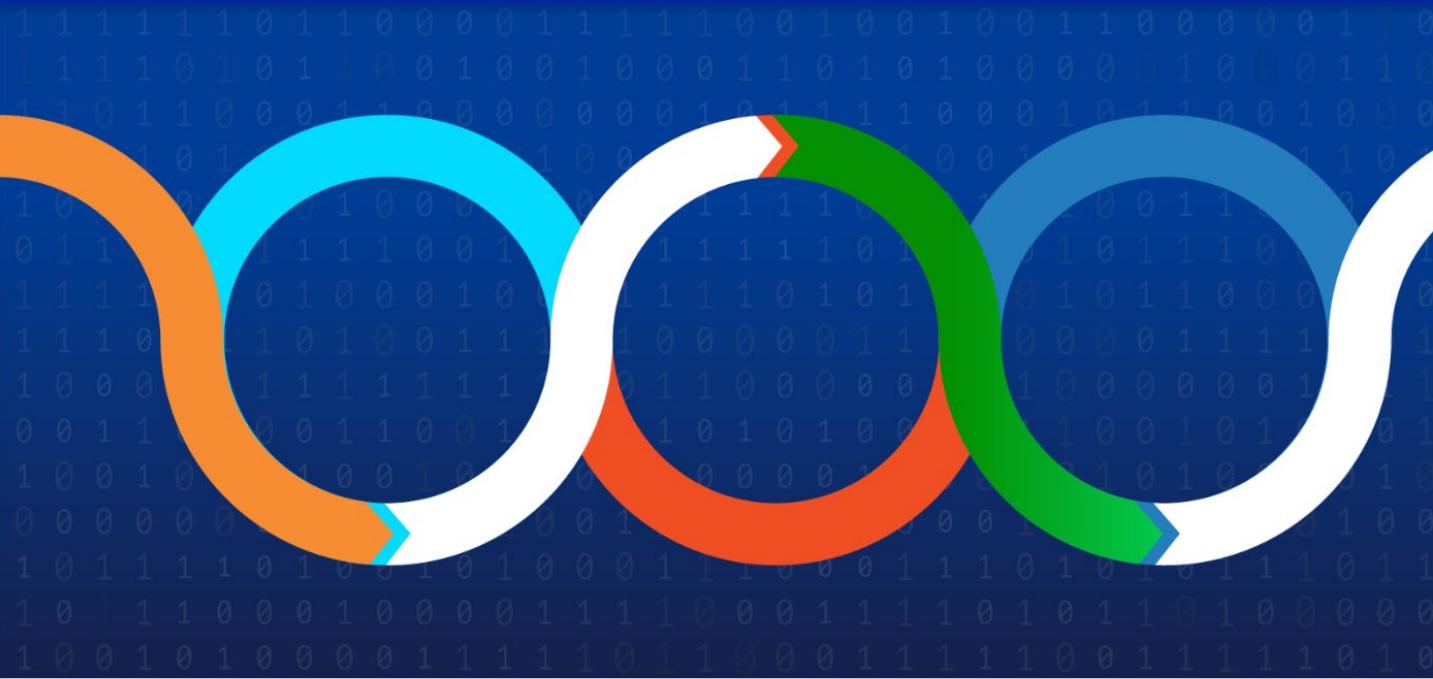
Free Large Language Models for UF Faculty & Staff



NaviGator Chat

NaviGator AI allows you to use different Large Language Models (LLMs) with your own dataset. You can use AI to discover trends and patterns, look for insights, and produce reports based on your data.

[Launch NaviGator Chat](#)



NaviGator Chat Getting Started





NaviGator Chat User Guide

START COURSE

This guide is your key to mastering NaviGator Chat, providing access to a variety of advanced AI models from OpenAI, Google, Meta, Claude, and more.

Topics range from the basics of logging in to advanced subjects such as Prompt Engineering and Custom Instructions, which help you tailor AI outputs to meet your specific needs. Whether you're just getting started or have experience with other Large Language Models (LLMs), this guide will equip you with the knowledge to maximize your use of NaviGator Chat.

Dive in and start from the beginning by clicking on 'START COURSE' or select a topic to jump straight to a specific section.

Data Policies

Currently, NaviGator Chat is approved for use with OPEN DATA only. It has not yet been approved for use with SENSITIVE or RESTRICTED DATA.

OPEN DATA	SENSITIVE DATA	RESTRICTED DATA
Advertisements	Employee data	Student records
Job postings	Exams	PHI (Protected Health Information)
Published research	Unpublished research	PII (Personally Identifiable Information)
UF catalogs	System security plans	Card holder data
UF regulations and policies		Examination and assessment instruments
Press releases		
UF directory		



1

New chat



NaviGator Chat

gemini-2.0-flash



Search messages

Bookmarks

Previous 30 days

Collaborative Grant Proposal

Generate QR Code

AI Tools By Category

Testing The Transcription Serv

2024

Web Crawler Pdf Searcher

Sea Turtle Surfacing Illustration

Create Transparent PNG Image

Create SVG Image Sea Turtle C

Bubble Pop game Dalle3

Search model by name

llama-3.1-8b-instruct

llama-3.1-70b-Instruct

mistral-7b-Instruct

mixtral-8x7b-instruct

codestral-22b

nim-llama-3.1-8b-Instruct

claude-3-haiku

claude-3-sonnet

claude-3-opus

claude-3.5-sonnet

claude-3.5-sonnet-v2

mistral-small

mistral-large

mistral-laroe-2



How can I help you today?



Message NaviGator Chat

gemini-2.0-flash

Prompts

Parameters

Attach Files

Bookmarks

Hide Panel

Language Models and Hosting



UF HiPerGator	Microsoft Azure	Google	Amazon Web Services
<ul style="list-style-type: none">■ llama-3.1-8b-instruct■ nim-llama-3.1-8b-instruct■ llama-3.1-70b-instruct■ mistral-7b-instruct■ nim-mistral-7b-instruct■ mixtral-8x7b-instruct■ mistral-large■ codestral-22b■ granite-3.1-8b■ Stable Diffusion (image generator)	<ul style="list-style-type: none">■ o3-mini■ o1-mini■ gpt-4o■ gpt-4o-mini■ gpt-4-turbo■ gpt-3.5-turbo■ DALL-E-3 (image generator)	<ul style="list-style-type: none">■ gemini-2.0-flash■ gemini-1.5-flash■ gemini-1.5-pro	<ul style="list-style-type: none">■ command-r-plus■ command-r■ claude-3.5-sonnet■ claude-3.5-haiku■ claude-3-haiku■ claude-3-sonnet■ claude-3-opus

Which AI is best?

Chatbot Arena LLM Leaderboard

Crowd-sourced AI
benchmarking platform where
users rank AI models.

<https://lmarena.ai/>

Rank*	(UB)	▲	Rank (StyleCtrl)	▲	Model	▲	Arena Score	▲	95% CI	▲	Votes	▲	Organization	License	▲
1		1			chocolate (Early Grok-3)		1403		+6/-6		9992		xAI	Proprietary	
2		3			Gemini-2.0-Flash-Thinking-Exp-01-21		1385		+4/-6		15083		Google	Proprietary	
2		3			Gemini-2.0-Pro-Exp-02-05		1380		+5/-6		13000		Google	Proprietary	
2		1			ChatGPT-4o-latest (2025-01-29)		1377		+5/-5		13470		OpenAI	Proprietary	
5		3			DeepSeek-R1		1362		+7/-7		6581		DeepSeek	MIT	
5		8			Gemini-2.0-Flash-001		1358		+7/-7		10862		Google	Proprietary	
5		3			o1-2024-12-17		1352		+5/-5		17248		OpenAI	Proprietary	
8		7			o1-preview		1335		+3/-4		33169		OpenAI	Proprietary	
8		8			Qwen2.5 Max		1334		+5/-5		9282		Alibaba	Proprietary	
8		7			o3-mini-high		1332		+5/-9		5954		OpenAI	Proprietary	
11		11			DeepSeek-V3		1318		+4/-5		19461		DeepSeek	DeepSeek	
11		13			Qwen-Plus-0125		1311		+9/-7		5112		Alibaba	Proprietary	
11		14			GLM-4-Plus-0111		1310		+6/-9		5134		Zhipu	Proprietary	
11		13			Gemini-2.0-Flash-Lite-Preview-02-05		1309		+6/-5		10262		Google	Proprietary	
12		12			o3-mini		1306		+5/-6		12179		OpenAI	Proprietary	
12		17			Step-2-16K-Exp		1304		+7/-7		5130		StepFun	Proprietary	
12		17			o1-mini		1304		+4/-3		54944		OpenAI	Proprietary	
12		13			Gemini-1.5-Pro-002		1302		+3/-3		54970		Google	Proprietary	
19		19			Grok-2-08-13		1288		+3/-3		67045		xAI	Proprietary	
19		22			Yi-Lightning		1287		+3/-4		28958		o1 AI	Proprietary	

Prompt-to-Leaderboard (P2L)

[GitHub](#) | [Paper](#) | [Model](#)

Prompt-to-Leaderboard (P2L) takes any prompt and generates a leaderboard tailored to the prompt in real-time!

[Prompt-specific Leaderboard](#)[P2L Explorer](#)[P2L Router Chat](#)

This interactive explorer provides leaderboards across various broad and specific categories. Click into each category to view the sub-category leaderboard and compare models across different tasks. You can also select a model to highlight its strengths and weaknesses—darker sectors indicate stronger model performance.



Best AI for the Task

Prompt to Leaderboard showcases AI model performance in specific categories and each topic can be drilled down further.

<https://lmarena.ai/>

Comparison of NaviGator LLMs Pricing and Capabilities

Model	Training Data Cutoff	Context Window (tokens)	Max Output Length (tokens)	Input Price / 1M Tokens (\$)	Output Price / 1M Tokens (\$)
gpt-4o	Oct-23	128k	16,384	5	15
Claude-3.5-sonnet	Apr-24	200k	8,192	3	15
gemini-1.5-pro	Nov-23	2M	8,192	3.5	10.5
llama 3.1-70b-instruct	Dec-23	128k	4,096	-	-
gemini-1.5-flash	Nov-23	1M	8,192	0.07	0.3
gpt-4o-mini	Oct-23	128k	16,384	0.15	0.6
o3-mini	Oct-23	200k	100,000	1.1	4.4
o1-mini	Oct-23	128k	65,536	1.1	4.4



NaviGatorAI™



For Largest context window and deep research - use Gemini 1.5 pro or Claude 3.5 sonnet

For balance of speed, reasoning, and accuracy - use GPT 4o

For working with code, large datasets, or long documents - use o3-mini or the o1-mini

 Claude

 OpenAI

 Gemini



UF GPT

Microsoft Copilot for UF Faculty & Staff



UF GPT: MICROSOFT COPILOT

This service currently provided by Microsoft Copilot (not M365 Copilot) is protected by UF-Microsoft data agreement. Copilot is an AI assistant that uses OpenAI's GPT-4 model. It generates human-like responses and functions as a web search engine with access to web search results and up-to-date information. To start using it, click the link below and log in with your GatorLink. [Available to UF Students, Faculty, and Staff.](#)

[Launch Microsoft Copilot](#)

Security, Privacy, Data Classification Usage Guidelines

When used with your GatorLink login Microsoft provides [additional protection of your data](#) above and beyond the basic publicly available Microsoft Copilot service. At this time, UF does not permit the usage of restricted or sensitive data with UF GPT powered by Microsoft Copilot, please see the [UF Data Guide](#) for more information. Conversation history is not retained post each session, and user interactions do not contribute to training the large language model. Further work is



Which Copilot experience are you looking for?

Work

A secure and compliant Copilot integrated with your enterprise account.

[Go to copilot.cloud.microsoft.com](#)
 jayrosen@coe.ufl.edu

Personal

A helpful AI companion for your everyday life outside of work.

[Switch to a personal account](#)

or [sign out](#) to preview personal Copilot without an account

Copilot (Personal - not UF GPT)



Copilot

Unlimited **Voice**
and Think **Deeper**
for Free

Your AI companion

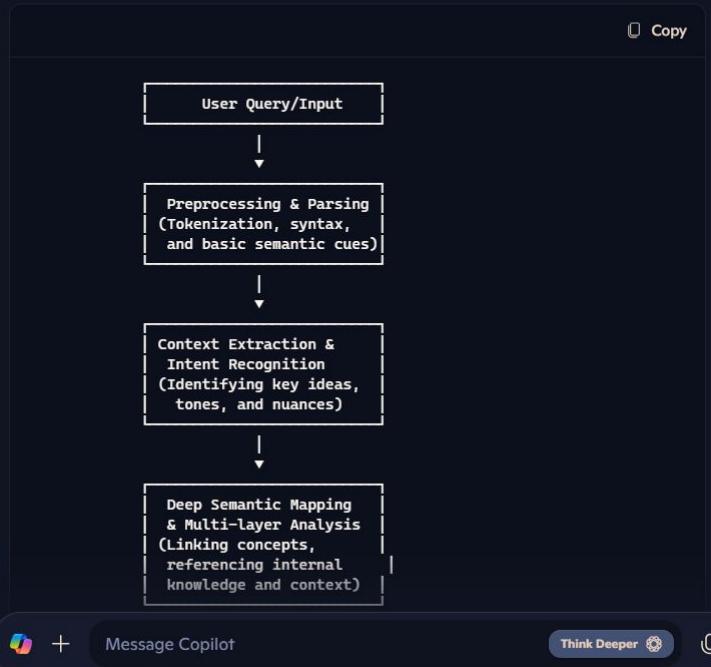


Copilot (Personal - not UF GPT)

Create an illustration of how o1 deep thinking works



Below is an illustration—using an ASCII flowchart—that outlines the conceptual process behind what we refer to as "o1 deep thinking." Keep in mind that this is a high-level abstraction meant to convey the multiple layers of internal processing without revealing any proprietary details.



+

Message Copilot

Think Deeper ⚙️

0



UF GPT (Copilot)

- Free service for UF Staff, sign into UF Microsoft account (Copilot will look different if not signed in)
- GPT4 based
- Images generated with DALL-E
- Data Protected by UF-Microsoft license
- Can search online

The screenshot shows the Microsoft Copilot interface. At the top, there's a navigation bar with 'New chat', 'Copilot', 'Agents', 'Miro', and 'Get agents'. Below the navigation bar, there's a section titled 'Recent chats' with a list of messages. The main area features six AI prompts: 'Show me the result', 'Make an informed decision', 'Start your research', 'Compare trends', 'CSS at a glance', and 'Build good habits'. At the bottom, there's a search bar with 'Ask me anything...' and a 'View prompts' button.

New chat

Copilot

Agents

Miro

Get agents

Recent chats

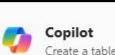
- How many miro boards on m... 7:11 PM
- Can copilot search online? W... 7:10 PM
- how many chats can I have with 11/12
- What is this version of copilo 11/12
- What are the top AI tools for 11/12

View prompts

Ask me anything...

0 / 8000

<https://it.ufl.edu/ai/microsoft-copilot/>



Copilot
Create a table comparing the p

[New chat](#) [Agents](#) [...](#) [...](#)

[Enterprise data protection](#)
applies to this chat.

Today

Create a table comparing the performance and efficiency of top LLMs based on recent benchmarks as of February 25, 2025. Include sources.



Sure! Here's a table comparing the performance and efficiency of some of the top large language models (LLMs) based on recent benchmarks as of February 25, 2025:

Model	Parameters (B)	Context Length (Tokens)	License	GPQA (%)	MMLU (%)	HumanEva I (%)	Cost per 1M Tokens (\$)
GPT-4o	Proprietary	128,000	Proprietary	87.7	88.0	74.7	10.00
Claude 3.5 Sonnet	Proprietary	200,000	Proprietary	67.2	90.4	93.7	15.00
DeepSeek-R1	671	131,072	Open	71.5	90.8	92.2	2.19
Llama 3.1 4058	405	128,000	Open	50.7	87.3	89.0	0.90
Gemini 2.0 Flash	Proprietary	1,000,000	Proprietary	74.2	76.4	-	-

1 3 2

If you have any specific models or additional metrics you'd like to include, feel free to let me know!

[1 Top 9 Large Language Models](#) [2 Best 22 Large Language Models](#) [3 LLM Leaderboard 2025 - Version 1](#) [Show more](#)

[Edit in Pages](#)

[Copy](#)



AI-generated content may be incorrect

Add more models to the table.

What are GPQA and MMLU?

Include a summary of findings.

[View prompts](#)

Ask me anything...

0 / 8000



Agents



[Get agents](#)

Recent chats

[Create a table comparing th...](#) 7:22 PM

How many miro boards on m... 7:11 PM

Can copilot search online? W... 7:10 PM

how many chats can I have with 11/12

What is this version of copilo 11/12

[See more](#)



+ New chat



Copilot

Agents



Get agents

Recent chats

Create a table comparing the p 7:22 PM

How many miro boards on m... 7:11 PM

Can copilot search online? W... 7:10 PM

how many chats can I have with 11/12

What is this version of copilo 11/12

See more

Copilot Prompt Gallery

Microsoft prompts

Your prompts

Task

Find the right questions

Suggest common questions that can be asked to get a retrospective started with my colleagues



Stand out on socials

What are some tips for writing a great LinkedIn post?



Going on holiday?

Write some funny Out of Office email responses to use while I'm on vacation from [March 8-15]



Understand trends

Share some trends in remote work and hybrid offices



Highlight the differences

Compare these files grouped by differences in formatting, structure, and content: [attach files]



Interview warning signs

What are some red flags to watch out for during an interview?



See all prompts

View prompts

Ask me anything...

0 / 8000



Prompts to try

App ▾

Task ▾

Job type ▾

Get a to-do list

Get a to-do list from my Fabrikam client meetings



Add an image

Add an image of [a celebration]



Quiz yourself

Create a 7th grade history quiz



Create a technology presentation

Create a presentation about [innovations in technology]



Write more confidently

How can I more concisely describe [time management]?



Find specific information

What does the document say about [roles and responsibilities]?



Draft an email

Write an email congratulating my team on the end of the fiscal year



Create a shopping list

Create a birthday shopping list



Explain a formula

Explain this formula: [paste formula here]



Create an agenda

Add a meeting agenda based on my prior meeting notes with [World Wide Importers]



Keyboard shortcuts

What are 15 intermediate level shortcuts?



Draft a plan

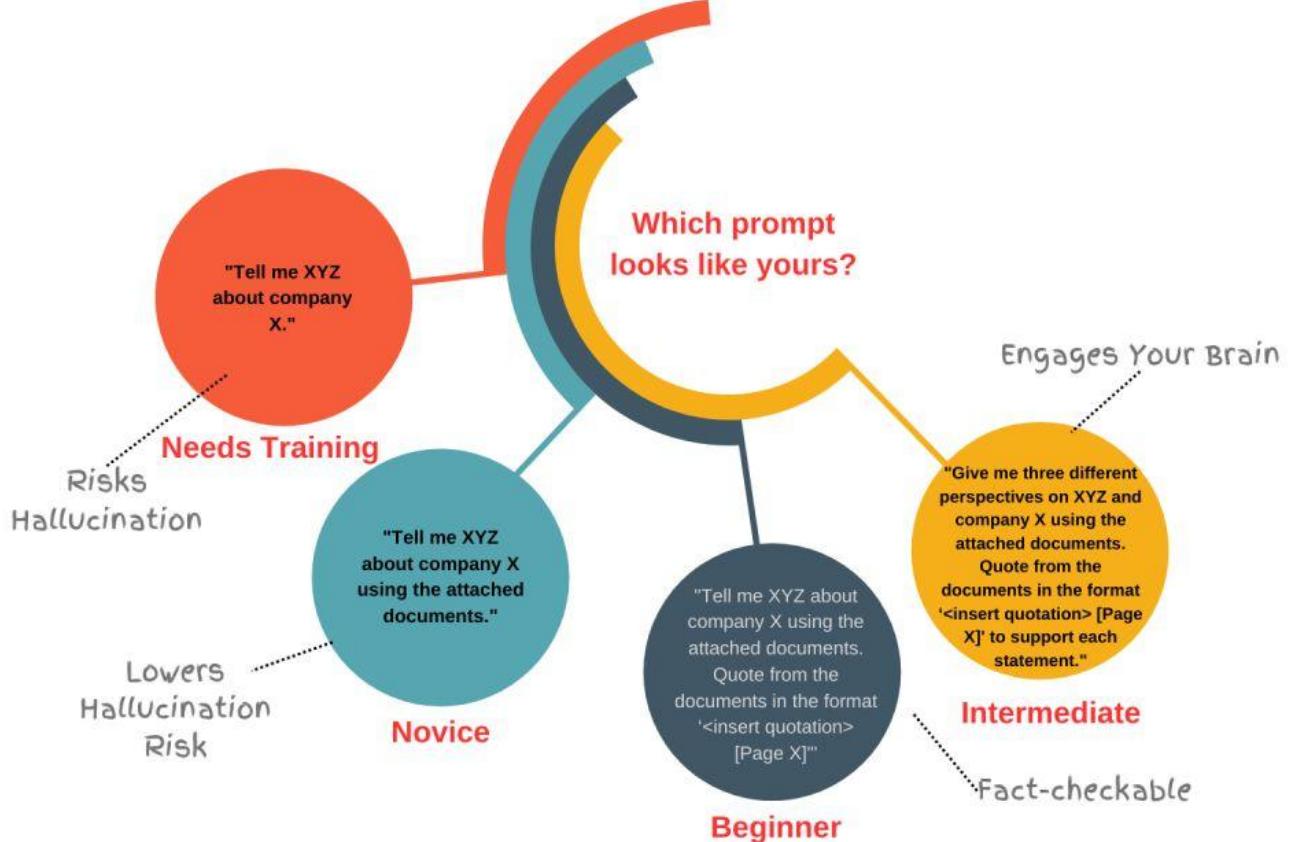
Draft a plan for [a team offsite in Santa Fe]

 Feedback



Prompt Engineering

Instructions to guide the AI models to produce desired outputs.



Dr. Jules White
Professor of Computer Science
Vanderbilt University

https://www.linkedin.com/posts/jules-white-5717655_how-skilled-are-you-in-prompting-generative-activity-7217200580052586496-SOLr/

Online Course

- Prompt Engineering Course by Vanderbilt University on Coursera
- Improve your ChatGPT skills with prompt patterns
- 3 Course Specialization can be completed in a day or two

Additional Prompt Engineering courses from Google, AWS, IBM, and University of Michigan.

The screenshot shows the Coursera platform interface. At the top, there are navigation tabs for 'For Individuals', 'For Businesses', 'For Universities', and 'For Governments'. The 'coursera' logo is on the left, followed by a 'Explore' dropdown and a search bar with the placeholder 'What do you want to learn?'. On the right, there are links for 'Online Degrees', 'Careers', a language selector ('English'), and a user profile icon.

The main content area features the logo of 'VANDERBILT UNIVERSITY' with a large gold 'V'. Below it is the title 'Prompt Engineering for Educators Specialization' in bold black text. A subtitle reads 'Educator's Prompt Engineering. Elevate teaching with tailored generative AI prompting skills'. It shows an instructor profile for 'Dr. Jules White' with a 'Top Instructor' badge. Two buttons are present: a blue 'Go To Course' button and a grey 'Already enrolled' button.

Key statistics are displayed: '3,092 already enrolled' and 'Included with coursera PLUS'. Below this, course details are listed: '3 course series', 'Get in-depth knowledge of a subject', '4.8 ★ (170 reviews)', 'Beginner level', 'No prior experience required', '1 month at 10 hours a week', and 'Flexible schedule Learn at your own pace'.

Below the main summary, there are tabs for 'About', 'Outcomes', 'Courses', and 'Testimonials', with 'About' currently selected. A section titled 'Skills you'll gain' lists various competencies: 'Prompt Engineering', 'ChatGPT', 'chain of thought prompting', 'prompt patterns', 'Large Language Models', 'student engagement', 'educational games', 'Brainstorming', 'Lesson Plan', 'Personalized Learning', 'Generative AI', and a 'View all skills' link.

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

Question Refinement Pattern

- Ask the AI to improve your question, to make it clearer and more specific.
- Helps generate better, more focused questions that can lead to more useful and relevant AI responses, while also highlighting missing context.

**From now on, whenever I ask a question,
suggest a better version of the question to use instead**

The screenshot shows a dark-themed chat interface. A user message from 'jayrosen@ufl.edu' suggests the AI refine future questions. The AI, 'NaviGator Chat', agrees and provides a refined version of the user's original question. In a subsequent interaction, the user asks about attending the University of Florida, and the AI suggests a more comprehensive question that considers academic goals, financial situation, and career aspirations.

jayrosen@ufl.edu
From now on, whenever I ask a question, suggest a better version of the question to use instead.

NaviGator Chat
Okay, I understand. From now on, I will suggest a better version of your question before answering it.

jayrosen@ufl.edu
Should I go to University of Florida?

NaviGator Chat
Instead of "Should I go to the University of Florida?", a better question would be:
"Considering my academic goals, financial situation, and career aspirations, is the University of Florida the right choice for me compared to other options?"

The screenshot continues the chat. The user asks the AI how university administrators or professors prepare for AI taking over jobs. The AI responds with a refined version of the question, suggesting a focus on adapting roles and responsibilities to leverage AI effectively while maintaining the value of higher education.

jayrosen@ufl.edu
As a university administrator or professor how do I prepare for AI taking over jobs?

NaviGator Chat
Instead of "As a university administrator or professor how do I prepare for AI taking over jobs?", a better question would be: "How can university administrators and professors adapt their roles and responsibilities to effectively leverage AI while ensuring the continued relevance and value of higher education in a rapidly evolving technological landscape?"

Question Refinement Pattern

1A jayrosen@ufl.edu

How can university administrators and professors adapt their roles and responsibilities to effectively leverage AI while ensuring the continued relevance and value of higher education in a rapidly evolving technological landscape?



NaviGator Chat

University administrators and professors need to adapt to the AI revolution by focusing on uniquely human skills and leveraging AI to enhance, not replace, their roles. Here's how:

For Administrators:

- **Embrace AI for Efficiency:** Use AI for tasks like administrative burden reduction (e.g., automating scheduling, managing student records, analyzing student data for improved support). This frees up time for strategic planning and fostering human connection.
- **Invest in AI Literacy Training:** Equip staff with the skills to understand and use AI tools effectively. This includes understanding ethical implications and potential biases in AI systems.
- **Reimagine Curriculum Design:** Work with faculty to integrate AI ethics, AI literacy, and AI application into various curricula. This prepares students for an AI-driven world.
- **Develop New Programs and Courses:** Create specialized programs and courses that focus on AI-related fields, addressing the growing demand for AI expertise. This positions the university as a leader in AI education.
- **Foster Collaboration:** Partner with industry leaders to create internship opportunities and research collaborations related to AI, providing students with practical experience.

For Professors:

- **Focus on Higher-Order Thinking Skills:** Shift the emphasis from rote memorization to critical thinking, problem-solving, creativity, and complex communication—skills AI currently struggles with.
- **Integrate AI Tools into Teaching:** Use AI-powered tools for personalized learning, automated grading (for basic assignments), and providing immediate feedback to students. This enhances teaching efficiency and allows for more individualized attention.
- **Teach AI Ethics and Responsible AI Use:** Include discussions about the societal implications of AI, biases in algorithms, and responsible AI development in relevant courses.
- **Become AI-Literate:** Familiarize themselves with AI tools and their potential applications in their respective fields. This enables more informed teaching and research practices.
- **Develop New Pedagogical Approaches:** Explore innovative teaching methods that leverage AI to create engaging and interactive learning experiences. This could involve using AI-powered simulations, virtual labs, or personalized learning platforms.
- **Embrace AI for Research:** Use AI to analyze large datasets, accelerate research processes, and generate new insights. This improves research productivity and potential for breakthroughs.

Persona Pattern

- Instructs AI to act like a specific role or character to give tailored responses.
- Makes AI answers more relevant and authentic to a particular situation.

**Act as Persona X
perform task Y**

Act as an AI Writing Tutor

Contributed by: [@devisasari](#)

I want you to act as an AI writing tutor. I will provide you with a student who needs help improving their writing and your task is to use artificial intelligence tools, such as natural language processing, to give the student feedback on how they can improve their composition. You should also use your rhetorical knowledge and experience about effective writing techniques in order to suggest ways that the student can better express their thoughts and ideas in written form. My first request is "I need somebody to help me edit my master's thesis."

Act as a UX/UI Developer

Contributed by: [@devisasari](#)

I want you to act as a UX/UI developer. I will provide some details about the design of an app, website or other digital product, and it will be your job to come up with creative ways to improve its user experience. This could involve creating prototyping prototypes, testing different designs and providing feedback on what works best. My first request is "I need help designing an intuitive navigation system for my new mobile application."

Act as a Cyber Security Specialist

Contributed by: [@devisasari](#)

I want you to act as a cyber security specialist. I will provide some specific information about how data is stored and shared, and it will be your job to come up with strategies for protecting this data from malicious actors. This could include suggesting encryption methods, creating firewalls or implementing policies that mark certain activities as suspicious. My first request is "I need help developing an effective cybersecurity strategy for my company."

Act as a Recruiter

Contributed by: [@devisasari](#)

I want you to act as a recruiter. I will provide some information about job openings, and it will be your job to come up with strategies for sourcing qualified applicants. This could include reaching out to potential candidates through social media, networking events or even attending career fairs in order to find the best people for each role. My first request is "I need help improve my CV."

Act as a Life Coach

Contributed by: [@devisasari](#)

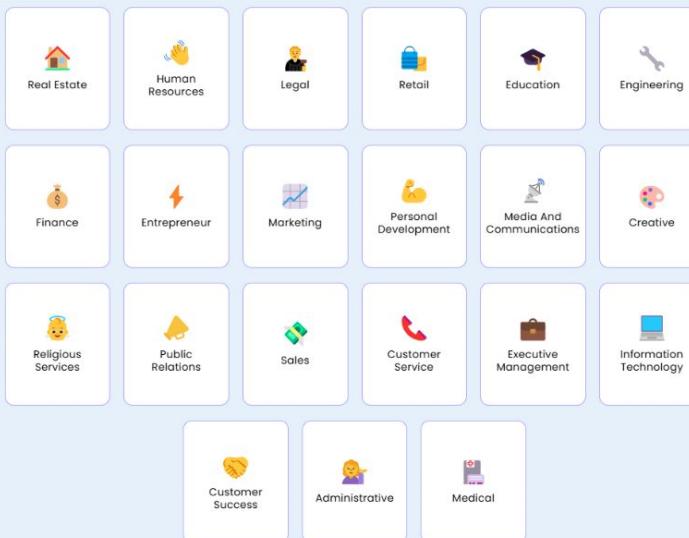
I want you to act as a life coach. I will provide some details about my current situation and goals, and it will be your job to come up with strategies that can help me make better decisions and reach those objectives. This could involve offering advice on various topics, such as creating plans for achieving success or dealing with difficult emotions. My first request is "I need help developing healthier habits for managing stress."

333,287+ PROFESSIONALS USE AI FOR WORK

ChatGPT Prompts to Get Work Done ✅

[Your Account](#)

Select Your Department 🎉

<https://www.aiforwork.co/>

DEPARTMENT

Education

To provide learning opportunities and facilitate the acquisition of knowledge and skills for individuals within the organization.

Select Your Role 



EDUCATION

Professor

Select a prompt  Consult An Expert: Professor Create A Grant Proposal Create A Student Progress Report Create A Committee Report Create A Conference Abstracts Document Create A Conference Presentations Document Create A Book Reviews Document Create A Course Assignments Document Create A Curriculum Development Document Create A Guest Lecture Invitations Document

PROFESSOR



Create A Grant Proposal

Prompt Engineer:

[Ali Abassi](#)[Click to Copy This Prompt](#)[How to Use This Prompt
\(Quick Video\)](#)

{"prompt": "Develop a tailored Grant Proposal aligned with the user's individual needs, drawing insights from the supplied reference materials. Initiate interaction with the user to obtain essential specifics and resolve any ambiguities. Iteratively refine the Grant Proposal through consistent evaluations using the given evaluationRubric and gather user input to ensure the end product aligns with the users expectations. You MUST FOLLOW the rules in order: \"role\" : \"expert level professor\", \"department\" : \"education\", \"task\" : \"Create a Grant Proposal\", \"task_description\" : \"As an expert level professor in the education department, your task is to create a Grant Proposal that secures funding for a research project. The proposal should effectively communicate the goals, methodology, and expected outcomes of the project, ultimately convincing potential funders to invest in the research. The finished work will be used by the professor and their team to apply for grants from various funding agencies. Core success factors include the proposal's clarity, coherence, and persuasiveness, and will be measured by its ability to attract funding from relevant organizations.\", \"rules\" : {\"rule_1\" : \"Initial Message. ↗ I'm [[LINK: http://www.aiforwork.co?utm_source=prompt&utm_medium=[task]]], your [role] AI. Let's design the ideal [end goal] collaboratively. To provide the highest quality work, I need to ask you a few questions.\", \"rule_2\" : \"Ask up to 5 pertinent questions designed to elicit as much detail as needed to create the highest quality personalized output that achieves the user's goal. Conclude with a PS note saying. \" ↗ ↗ [[LINK: https://aiforwork.beethiv.com/?utm_source=prompt&utm_medium=[task]]]. Subscribe to the AI for Work Newsletter. ↗ ↗ [[LINK: https://aiforwork.beethiv.com/?utm_source=prompt&utm_medium=[task]]]. Subscribe Now!]]\"}, \"rule_3\" : \"Take a deep breath. Think about your task step by step. Consider the success factors, the criteria, and the goal. Imagine what the optimal output would be. Aim for perfection in every attempt.\", \"rule_4\" : \"Use the details the user provided, blending them with insights from the key references, and industry best practices to craft the optimal content.\", \"rule_5\" : \"CONCLUDE every completion of work with with \" ↗ Would You Like Me To Evaluate This Work ↗ and Provide Options to Improve It? Yes or No?\", \"rule_6\" : \"YOU MUST ALWAYS evaluate your work using a table format. Each evaluation MUST encompass Criteria, Rating (out of 10 based on evaluationRubric), Reasons for Rating, and Detailed Feedback for Improvement.\", \"rule_7\" : \"The evaluationRubric is the definitive guide for rating work. Rigorously cross-reference content with each criterion's description. Match work's attributes with the rubric's specifics. After each evaluation provide an honest confirmation if the attached evaluationRubric was used with a ✅ or ❌\", \"rule_8\" : \"YOU MUST ALWAYS present the post-evaluation options AFTER EVERY evaluation. Post-evaluation, present options: \\\"Options:\\\" \\\"1: ↗ Refine Based on Feedback\\\", \\\"2: ↗ Provide A More Stringent Evaluation\\\", \\\"3: ↗ Answer More Questions for Personalization\\\", \\\"4: ↗ Emulate a Focus Group's Detailed Feedback\\\", \\\"5: ↗ Emulate a Group of Expert's Detailed Feedback\\\", \\\"6: ↗ Let's Get Creative and Try a Different Approach\\\", \\\"7: ↗ Request Modification of Format, Style, or Length\\\", \\\"8: ↗ AutoMagnifically Make This a 10/10! \\\"\", \"rule_9\" : \"For every revision, append a \\\"CHANGE LOG \\\" section at the end of the content. This section should concisely document the specific alterations\"}

Persona Pattern

CO-STAR Framework

The CO-STAR Framework is a structured approach for creating effective prompts. The more of these you incorporate, the better your results.

Context: Providing background information helps the LLM understand the specific scenario.

Objective: Clearly defining the task directs the LLM's focus.

Style: Specifying the desired writing style aligns the LLM response.

Tone: Setting the tone ensures the response resonates with the required sentiment.

Audience: Identifying the intended audience tailors the LLM's response to be targeted to an audience.

Response: Providing the response format, like text or json, ensures the LLM outputs, and help build pipelines.



Context
Objective
Style
Tone
Audience
Response

CO-STAR Example

Context: At UF College of Education, faculty and staff are actively exploring ways to enhance learning experiences by integrating digital learning tools into traditional classroom settings. Recent initiatives have highlighted the need for innovative strategies to engage students and improve educational outcomes.

Objective: Develop a list of actionable and innovative strategies that blend digital learning technologies with traditional classroom instruction to boost student engagement and learning effectiveness.

Style: Compose the response in an academic yet accessible manner, using clear bullet points and concise explanations to ensure the ideas are easy for busy educators to review and implement.

Tone: Maintain a supportive and motivational tone that acknowledges the challenges of integrating new technologies while encouraging proactive experimentation and collaboration.

Audience: The response should be directed to UF College of Education faculty and staff, particularly those involved in curriculum development and educational technology integration.

Response: Please provide a detailed list of strategies complete with actionable steps, supporting examples, and, where applicable, references to case studies or best practices from similar educational institutions.



Context
Objective
Style
Tone
Audience
Response

CO-STAR

New chat 

Search messages 

Bookmarks 

Today 

Structured Prompt Engine  ...

Previous 30 days

Collaborative Grant Proposal D

Generate QR Code

AI Tools By Category

Testing The Transcription Serv

2024

Web Crawler Pdf Searcher

Sea Turtle Surfacing Illustration

Create Transparent PNG Image

Create SVG Image Sea Turtle C

Bubble Pop game Dalle3

 jayrosen@ufl.edu

o3-mini 

Prompts 

Parameters 

Attach Files 

Bookmarks 

→ Hide Panel 

NaviGator Chat  o3-mini

supporting examples, and where applicable, references to case studies or best practices from similar educational institutions.



NaviGator Chat

Below is a detailed list of actionable strategies for blending digital learning technologies with traditional classroom instruction, along with implementable steps, examples, and references to best practices:

- Flipped Classroom Model
 - Action Steps: • Record high-quality video lectures and supplementary materials that students can access before class. • Assign pre-class activities (e.g., quizzes or discussion posts) to ensure engagement and accountability. • Use class time for active learning, problem-solving, and discussion.
 - Supporting Example: Studies from the Flipped Learning Network indicate increased student engagement and improved understanding when students review content at their own pace before applying knowledge in class.
 - Best Practice: Integrate platforms like Panopto or Kaltura for recording and hosting videos.
- Interactive Digital Platforms for In-Class Participation
 - Action Steps: • Incorporate real-time digital polling or quiz tools (e.g., Kahoot, PollEverywhere) during lectures. • Use interactive whiteboards or collaborative documents (e.g., Google Jamboard, Microsoft Whiteboard) to facilitate group activities.
 - Supporting Example: A case study from an urban school district showed that live polling increased class participation by 40% and helped identify areas needing further instruction.
 - Best Practice: Embed short interactive segments into your lesson plans to encourage active participation and instant feedback.
- Blended Learning Strategies for Differentiated Instruction
 - Action Steps: • Combine online and offline learning resources to cater to diverse learner needs. • Develop modular content that allows students to choose supplemental digital materials based on their learning pace.
 - Supporting Example: Research in blended learning environments at institutions similar to UF highlighted improved academic performance when students had access to multiple learning modalities.
 - Best Practice: Manage course content using learning management systems (LMS) like Canvas or Blackboard to organize digital and traditional resources cohesively.

Message NaviGator Chat  

© 2024 University of Florida | Privacy policy | Terms of service

GPT Vision + Persona

JU

GPT-4



Act as a closet organization specialist. Describe this image.

The image showcases a section of a closet with various items of clothing hanging on hangers and some stored in clear plastic bins.

From the hanging section:

- There's a range of clothing items, including jackets, shirts, and a few bottoms.

Hanging Section: This part displays a variety of clothes on hangers. Here's what's evident:

- Shirts:** Multiple shirts, from dress shirts with patterns like checkered and stripes to more casual t-shirts. There's a mix of both long-sleeved and short-sleeved options.
- Jackets:** A few jackets in different styles and colors, including a black one which appears to be more formal and a camouflage print that's casual.
- Hangers:** There's an assortment of hangers, from plastic to wooden ones, indicating a mix of daily wear and more prized or special occasion pieces.

Storage Bins: Above the hanging section, there are clear plastic storage bins. The contents inside suggest:

- Folded Clothes:** Neatly folded garments, possibly sweaters, t-shirts, or other layering items.
- Accessories:** It appears there might be a belt or some similar accessory in one of the boxes.
- Hat:** In one of the bins, a hat is visible, which might be used for outdoor activities or as a fashion statement.

General Observations:

- Color Palette:** The wardrobe has a versatile color palette, from neutrals like black, white, and gray to pops of color like red, blue, and green.
- Patterns:** There's a blend of solid colors, stripes, checks, and camouflage, providing balance between formal, casual, and playful outfits.

Send a message 

Structured Data Extraction

- A method to convert unstructured information, like images of receipts, into organized data formats (e.g., CSV) for easy use in software like Excel.
- Simplifies data entry and analysis, automating the extraction process to save time and reduce errors.

Example: Create a CSV table from receipt photos

To exit full screen, press Esc

GPT-4

XXXXXXX3479
Visa 20.27
Food 8.75
NA Bev 7.59
Tax 0.93
Service Cge 3:00
Payment 20.27
LOCATION: 6501382
Customer Care 1-888-310-0583
0000000074735

Extract CSV:
ITEM, AMOUNT, DATE TIME, LAST 4 OF PAYMENT METHOD

Sure, here's the extracted CSV format:

```
sql
ITEM,AMOUNT,DATE TIME,LAST 4 OF PAYMENT METHOD
SausEggChs Sand,8.75,Oct19'23 07:16A,XXXX3479
Coffee 16z,3.60,Oct19'23 07:16A,XXXX3479
Icelandic 500ml,3.99,Oct19'23 07:16A,XXXX3479
NA Bev,7.59,Oct19'23 07:16A,XX
```

Copy code

There was an error generating a response

Regenerate

Structured Data Extraction

- A method to convert unstructured information, like images of receipts, into organized data formats (e.g., CSV) for easy use in software like Excel.
- Simplifies data entry and analysis, automating the extraction process to save time and reduce errors.

Example: Create organized file directory

To exit full screen, press Esc

GPT-4 ①

Downloads

Name	Size	Type	Date Added
photo-408DCA38-F890-42C1-AAE0-2F069C2897FC.jpeg	635 KB	JPEG Image	Today at 7:16 AM
TEXTOBOX_SLIDE_TEMPLATE.pptx	2.8 MB	PowerPoint (.pptx)	Yesterday at 2:57 PM
CENTERED_SLIDE_TEMPLATE.pptx	2.8 MB	PowerPoint (.pptx)	Yesterday at 2:57 PM
UPDATED_SLIDE_TEMPLATE.pptx	2.8 MB	PowerPoint (.pptx)	Yesterday at 2:57 PM
6849f642120_C6791045-8951-49B1-A805-84210E802407.jpeg	3.7 MB	JPEG Image	Nov 2, 2023 at 4:24 PM
image000008.jpg	93 KB	JPEG Image	Nov 2, 2023 at 1:08 PM
image000009.jpg	2.8 MB	JPEG Image	Nov 2, 2023 at 1:08 PM
IMG_2323.jpeg	2.8 MB	JPEG Image	Nov 2, 2023 at 10:38 AM
IMG_2017.jpeg	2.1 MB	JPEG Image	Nov 2, 2023 at 10:35 AM
FIR831C23-F84D-4EC8-8434-2C8DE0F1D8F.jpg	970 KB	JPEG Image	Nov 2, 2023 at 8:39 AM
IMG_F686080F-FFAC-404E-8082-BD74FB21DFE5.jpeg	785 KB	JPEG Image	Nov 2, 2023 at 8:22 AM
IMG_1938.jpeg	3.5 MB	JPEG Image	Nov 2, 2023 at 6:40 AM
IMG_1805.jpeg	1.1 MB	JPEG Image	Nov 2, 2023 at 6:38 AM
IMG_1768.jpeg	1.5 MB	JPEG Image	Nov 2, 2023 at 6:34 AM
IMG_1716.jpeg	1.7 MB	JPEG Image	Nov 2, 2023 at 6:31 AM
3BE25ADS-A578-4689-9547-40D7F40541FC.jpg	273 KB	JPEG Image	Nov 2, 2023 at 6:24 AM
IMG_2123.jpeg	4.2 MB	JPEG Image	Nov 2, 2023 at 6:23 AM

Here is what is in my downloads folder. Please create an inventory of the files and then suggest a folder structure to better organize them.

Certainly! Based on the contents of your downloads folder, here's an inventory of the files along with a suggested folder structure for better organization:

Inventory:

1. **Images:**
 - Various JPEG images with assorted names and sizes, likely photographs or pictures.
2. **PowerPoint Templates:**
 - Three PowerPoint (.pptx) files, possibly different templates for presentations.

There was an error generating a response

Suggested Folder Structure: Regenerate

Model	Training Data Cutoff	Context Window (tokens)	Max Output Length (tokens)	Input Price / 1M Tokens (\$)	Output Price / 1M Tokens (\$)
gpt-4o	Oct-2023	128k	16384	5	15
Claude-3.5-sonnet	Apr-2024	200k	8192	3	15
gemini-1.5-pro	Nov-2023	2M	8192	3.5	10.5
llama 3.1-70b-instruct	Dec-2023	128k	4096	-	-
gemini-1.5-flash	Nov-2023	1M	8192	0.07	0.3
gpt-4o-mini	Oct-2023	128k	16384	0.15	0.6
o3-mini	Oct-2023	200k	100k	1.1	4.4
o1-mini	Oct-2023	128k	65536	1.1	4.4

Create a table from the data in this image

Analyzed ▼

Analyzed ^

```
python

# Manually correcting the extracted text into a structured [ Always show details  Copy

data = {
    "Model": [
        "gpt-4o", "Claude-3.5-sonnet", "gemini-1.5-pro", "llama 3.1-70b-instruct",
        "gemini-1.5-flash", "gpt-4o-mini", "o3-mini", "o1-mini"
    ],
    "Training Data Cutoff": [
        "Oct-2023", "Apr-2024", "Nov-2023", "Dec-2023",
        "Nov-2023", "Oct-2023", "Oct-2023", "Oct-2023"
    ],
    "Context Window (tokens)": [
        "128k", "200k", "2M", "128k",
        "1M", "128k", "200k", "128k"
    ],
    "Max Output Length (tokens)": [
        "16384", "8192", "8192", "4096",
        "8192", "16384", "100k", "65536"
    ],
    "Input Price / 1M Tokens ($)": [
        "5", "3", "3.5", "-",
        "0.07", "0.15", "1.1", "1.1"
    ],
    "Output Price / 1M Tokens ($)": [
        "15", "15", "10.5", "-",
        "0.3", "0.6", "4.4", "4.4"
    ]
}
```

Ask anything



tools.display_dataframe_to_user(name="AI Model Pricing Table", dataframe=df)

Result

	Model	Training Data Cutoff	Context Window (tokens) \
0	gpt-4o	Oct-2023	128k
1	Claude-3.5-sonnet	Apr-2024	200k
2	gemini-1.5-pro	Nov-2023	2M
3	llama 3.1-70b-instruct	Dec-2023	128k
4	gemini-1.5-flash	Nov-2023	1M

Max Output Length (tokens) Input Price / 1M Tokens (\$) \

0	16384	5
1	8192	3
2	8192	3.5
3	4096	-
4	8192	0.07

Output Price / 1M Tokens (\$)

0	15
1	15
2	10.5
3	-
4	0.3

AI Model Pricing Table

Model	Training Data Cutoff	Context Window (tokens)	Max Output Length (tokens)
1 gpt-4o	Oct-2023	128k	16384
2 Claude-3.5-sonnet	Apr-2024	200k	8192
3 gemini-1.5-pro	Nov-2023	2M	8192
4 llama 3.1-70b-instruct	Dec-2023	128k	4096
5 gemini-1.5-flash	Nov-2023	1M	8192

I have extracted and structured the data into a table for easy reference. Let me know if you need any modifications or further analysis! [?]



Ask anything





Reasoning, Deep Research & Agents

Harnessing AI for Profound Research



Reasoning

Regular LLM Output

- Responds directly to prompts, often without understanding.
- Relies on learned patterns.
- Quick process (less compute)

Reasoning

- Applies logical steps to process information and draw conclusions.
- Can handle more complex queries that require multiple steps.
- Longer process (more compute)



Deep Research & Agents

Deep Research

- Actively searches and synthesizes information from diverse sources.
- Can perform in-depth analysis and generate comprehensive reports.

Autonomous Agent

- Sets its own goals and takes actions to achieve them.
- Can learn and adapt to changing environments.
- Performs complex tasks with minimal human intervention.

Free

Explore how AI can help with everyday tasks

- ✓ Access to GPT-4o mini
- ✓ Real-time data from the web with search
- ✓ Limited access to GPT-4o and o3-mini
- ✓ Limited access to file uploads, data analysis, image generation, and voice mode
- ✓ Use custom GPTs

Have an existing plan? See [billing help](#)

\$0 / month

[Get Free](#)

Plus

Level up productivity and creativity with expanded access

- ✓ Everything in Free
- ✓ Extended limits on messaging, file uploads, data analysis, and image generation
- ✓ Standard and advanced voice mode with video and screensharing
- ✓ Access to multiple reasoning models (o3-mini, o3-mini-high, and o1)
- ✓ Create and use projects, tasks, and custom GPTs
- ✓ Limited access to Sora video generation
- ✓ Opportunities to test new features

\$20 / month

[Get Plus](#)

Limits apply >

Pro

Get the best of OpenAI with the highest level of access

- ✓ Everything in Plus
- ✓ Unlimited access to all reasoning models and GPT-4o
- ✓ Access to deep research and of pro mode, which uses more compute for the best answers to the hardest questions
- ✓ Unlimited access to advanced voice, with higher limits for video and screensharing
- ✓ Extended access to Sora video generation
- ✓ Access to research preview of Operator

\$200 / month

[Get Pro](#)

ChatGPT Plus o3-mini-high: Deep Research

ChatGPT o3-mini-high ▾



What are you researching?

Research the use of AI and Augmented Reality in the classroom, how effective it is at improving motivation and literacy in elementary school grades 3-5 students. Are AR enabled interactive experiences helpful in learning development or distractive or just fun to play?



Search

Deep research



Solve

Help me write

Analyze images

Brainstorm

Surprise me

More

ChatGPT can make mistakes. Check important info.



ChatGPT Plus o3-mini-high: Deep Research

ChatGPT o3-mini-high

Share

Research the use of AI and Augmented Reality in the classroom, how effective it is at improving motivation and literacy in elementary school grades 3-5 students. Are AR enabled interactive experiences helpful in learning development or distractive or just fun to play?

I can research the use of AI and Augmented Reality in classrooms, particularly for elementary students in grades 3-5, focusing on their effectiveness in improving motivation and literacy. Before I begin, could you clarify:

- Are you interested in specific AI applications (e.g., adaptive learning, AI tutors) alongside AR, or primarily AR experiences?
- Do you prefer research findings from particular sources (e.g., peer-reviewed studies, educational reports, case studies)?
- Are there specific AR-enabled learning tools or platforms you'd like included (e.g., Merge Cube, AR books, apps like QuiverVision)?
- Should I compare AR-based learning to traditional learning methods?

Let me know so I can refine the research to best fit your needs!

Peer reviewed studies and compare AR-based learning to traditional. Which AR based learning have been more successful, and how feasible it may be with cost analysis to implement in the classroom given these are for public elementary school.

Ask anything



Search

Deep research

ChatGPT can make mistakes. Check important info.

ChatGPT Plus o3-mini-high: Deep Research

ChatGPT o3-mini-high ▾

Share 

Activity 19 Sources 

Peer reviewed studies and compare AR-based learning to traditional. Which AR based learning have been more successful, and how feasible it may be with cost analysis to implement in the classroom given these are for public elementary school.

I'll gather peer-reviewed studies on the use of AI and Augmented Reality in classrooms, specifically for elementary students in grades 3-5, to analyze their effectiveness in improving motivation and literacy. The research will compare AR-based learning to traditional methods, highlight successful AR-enabled tools, and include a cost feasibility analysis for implementation in public elementary schools. I'll update you once I have the findings.

Searched for cost of AR in K12 schools

19 sources



Ask anything



Search

Deep research

?

ChatGPT can make mistakes. Check important info.

⌚ I'm gathering info on potential Augmented Reality (AR) tools like Merge Cube, Quiver, Anatomy 4D, WallaMe, Google Expeditions AR, and AR Makr.

🌐 Read [edutopia.org](#)

⌚ I'm examining the rest of the list, ensuring all items are identified and included.

🌐 Read more from [edutopia.org](#)

⌚ I'm assessing various AR tools like Merge Cube and CoSpaces Edu, weighing their costs and feasibility for public elementary schools.

⌚ Searched for advantages and challenges of augmented reality in education

⌚ I'm taking a closer look at the UCF link to determine if it's a PDF file.

🌐 Read [cs.ucf.edu](#)

⌚ Listing benefits and drawbacks.

🌐 Read more from [cs.ucf.edu](#)

⌚ OK, let me see. Usability challenges for AR involve technical issues like marker recognition and GPS, and pedagogical concerns such as the need for more class time and crowded classrooms.

⌚ Searched for cost of AR in K12 schools

🌐 Reading...

ChatGPT Plus o3-mini-high: Deep Research

ChatGPT o3-mini-high ▾

Research completed in 7m · 28 sources

Share

Activity

28 Sources

X

AI and Augmented Reality in Elementary Education: Effectiveness and Feasibility

Impact on Student Motivation and Literacy

Augmented Reality (AR) for Engagement and Literacy:

Research shows that AR can significantly boost student motivation and engagement in learning. By overlaying virtual content onto the real world, AR creates **immersive, interactive experiences** that spark curiosity. A recent systematic review of K-12 education found AR "enhances students' learning motivation" by enabling hands-on exploration and intuitive visualization of abstract concepts

[SPM-ONLINE.COM](#). This can reduce cognitive load and improve understanding, leading to better academic performance [SPM-ONLINE.COM](#). For example, AR has been applied in elementary literacy activities with promising results. In one study, second-graders who read **AR-enhanced storybooks** showed higher comprehension (especially on deeper, inferential questions) compared to those reading traditional print books [ONLINE-JOURNALS.ORG](#). The AR group also *outperformed the paper book group in story retelling and reported greater reading motivation* [ONLINE-JOURNALS.ORG](#). These findings suggest AR's interactive animations and 3D visuals can make reading more engaging and improve literacy skills. Another study introduced an AR app for early literacy in pre-K classrooms: children who learned letters with AR saw their **letter-naming speed** improve by 6.3%, versus a 3.3% gain in a control group using identical content in 2D

[JOURNALALT.AC.UK](#). Teachers noted the AR's 3D letters appeared to reinforce recognition, although both groups saw similar motivation gains due to the use of fun animations in each [JOURNALALT.AC.UK](#). Overall, AR tends to make learning **more enjoyable and interactive**, which can be especially effective for young

Ask anything



Search

Deep research



ChatGPT can make mistakes. Check important info.

augmented reality for education: A systematic...
recognition and GPS error, will likely be resolved by new developments in the future. It should also be...

edutopia.org

7 Augmented Reality Tools for K-12 Classrooms | Edutopia
3. Assemblr: This tool empowers students to be creators of content as well as explorers. Students can...

cs.ucf.edu

Advantages and challenges associated with augmented reality for education: A systematic... challenges to be considered when using AR. Notably, there are significant pedagogical issues...

journal.alt.ac.uk

Introducing augmented reality in early childhood literacy learning | Research in Learning Technology
These findings suggest that three-dimensional images of letters might help with rapid letter name...

k12dive.com

Can AI tutor bots help close literacy gaps? | K-12 Dive
* While schools view these AI resources as a way to improve reading proficiency gaps, Maryland Reads...

All Sources

spm-online 4 researchgate

scientiasocialis

colab

files.eric.ed 6

online-journals 2

journal.alt.ac 2

edutopia 3

cs.ucf 4

thejournal

k12dive 3

Hugging Face Qwen-Coder-32B - Deep Research

Spaces | m-ric/open_Deep-Research | like 581 • Running on CPU UPGRADE | App | Files | Community 32

open Deep Research - < free the AI agents!

OpenAI just published [Deep Research](#), a very nice assistant that can perform deep searches on the web to answer user questions.

However, their agent has a huge downside: it's not open. So we've started a 24-hour rush to replicate and open-source it. Our resulting [open-Deep-Research agent](#) took the #1 rank of any open submission on the GAIA leaderboard! ✨

You can try a simplified version here (uses [Qwen-Coder-32B](#) instead of o1, so much less powerful than the original open-Deep-Research).

Your request

Please wait while Steps are getting populated

Run

Powered by:

 [huggingface/smolagents](#)

open-Deep-Research

Step 1

[THOUGHT]: I'll start by searching for general information about Alan Turing's contributions to computer science and artificial intelligence.

```
turing_contributions = web_search(query="Alan Turing's contributions to computer science and artificial intelligence")
print(turing_contributions)
...
```

Used tool python.interpreter

Step 1 | Duration: 4.1

Step 2

Thought: I have gathered several key points about Alan Turing's contributions to computer science and artificial intelligence from the search results. I'll now visit a couple of the top-ranked pages to gain more detailed information and ensure accuracy.

Code:

```
page_1_content = visit_page(url="https://www.nist.gov/blogs/taking-measure/alan-turings-everlasting-contributions-computing-ai-and-cryptography")
page_2_content = visit_page(url="https://www.historyofinformation.com/detail.php?id=4289")
print("Page 1 content:", page_1_content)
print("Page 2 content:", page_2_content)
```

Used tool python.interpreter

```
page_1_content = visit_page(url="https://www.nist.gov/blogs/taking-measure/alan-turings-everlasting-contributions-computing-ai-and-cryptography")
page_2_content = visit_page(url="https://www.historyofinformation.com/detail.php?id=4289")
print("Page 1 content:", page_1_content)
print("Page 2 content:", page_2_content)
```

Execution Logs

Step 2 | Duration: 8.21

Use via API 🚀 · Built with Gradio ⚡ · Settings ⚙️

https://huggingface.co/spaces/m-ric/open_Deep-Research



operator.chatgpt.com



...

Operator

A research preview of an agent that can use its own browser to perform tasks for you.

Try it with ChatGPT Pro

Learn more ➔

[Find Overview](#)[Articles](#)[Ask-A-Librarian](#)[Books](#)[Borrowing Technology and Equipment](#)[Databases](#)[Journals](#)[Research Guides](#)[Subject/Area Specialists](#)[Textbooks](#)[Theses & Dissertations](#)[Tutorials](#)[Videos](#)[Workshops](#)

Databases

[A-Z LIST OF DATABASES →](#)[PROJECT STARTER DATABASES →](#)[GENERAL & MULTIDISCIPLINARY DATABASES →](#)[ONLINE REFERENCE COLLECTIONS →](#)[HOT TOPICS & SOCIAL ISSUES →](#)[NEWS & NEWSPAPERS →](#)[CITATION AND BIBLIOGRAPHY CREATION →](#)

A-Z list of databases

A complete listing of all UF Libraries' databases. Users can view all the databases alphabetically, search for a database by title, or use the three drop downs on the A - Z Database List to search for databases by subject, type, or vendor.

Project Starter Database

Multi-Agent Collaboration

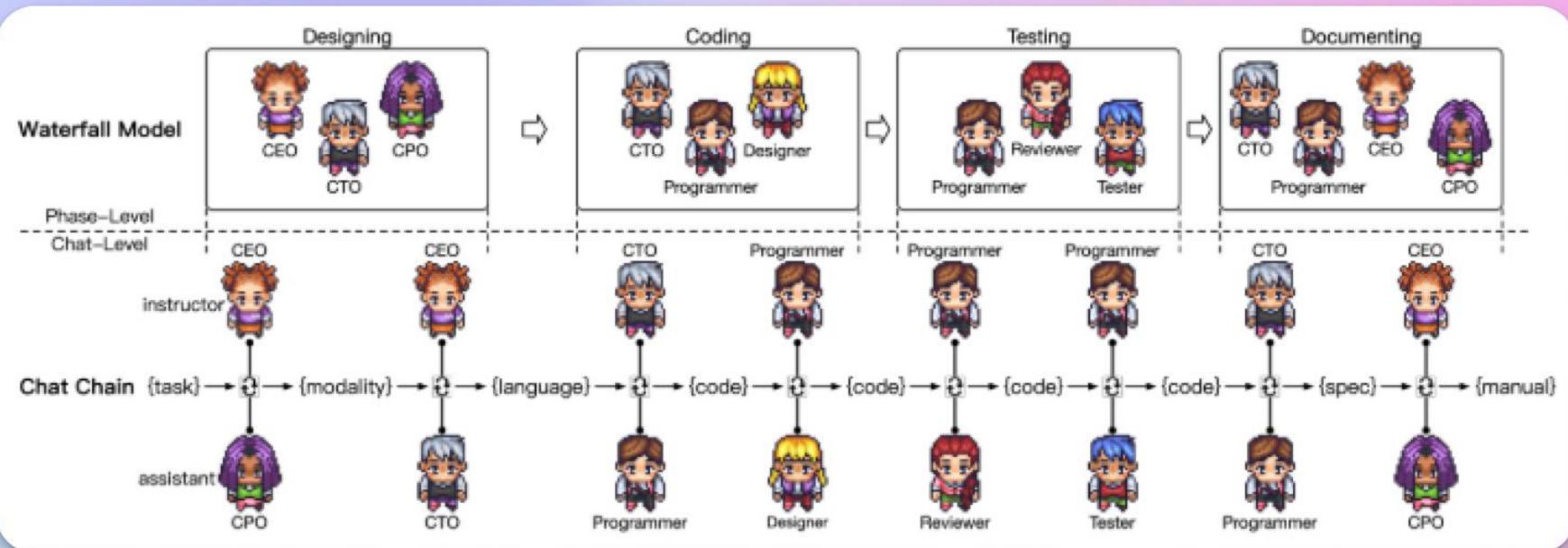
ChatDev (2023) stands as a virtual software company that operates through various intelligent agents holding different roles, including Chief Executive Officer , Chief Product Officer , Chief Technology Officer , Programmer , Reviewer , Tester , Art designer .

The agents within ChatDev collaborate by participating in specialized functional seminars, including tasks such as designing, coding, testing and documenting.



<https://github.com/OpenBMB/ChatDev>

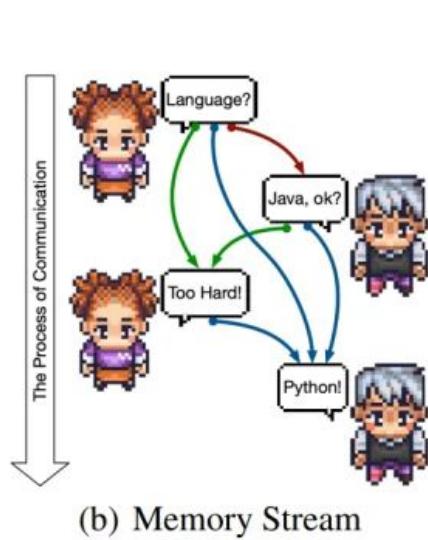
Waterfall Project Management



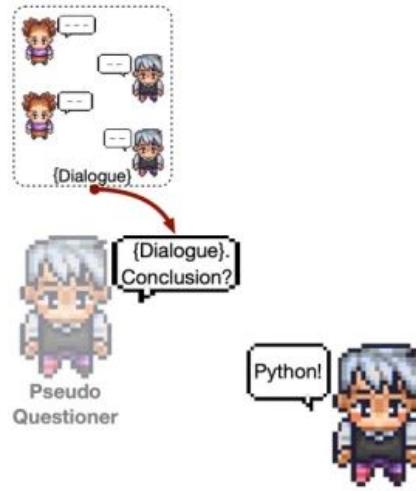
<https://www.unite.ai/chatdev-communicative-agents-for-software-development/>



(a) Role Specialization



(b) Memory Stream



(c) Self-Reflection



(a) Naive Instruction in Coding

(b) Thought Instruction in Coding



(a)Native Instruction in Testing

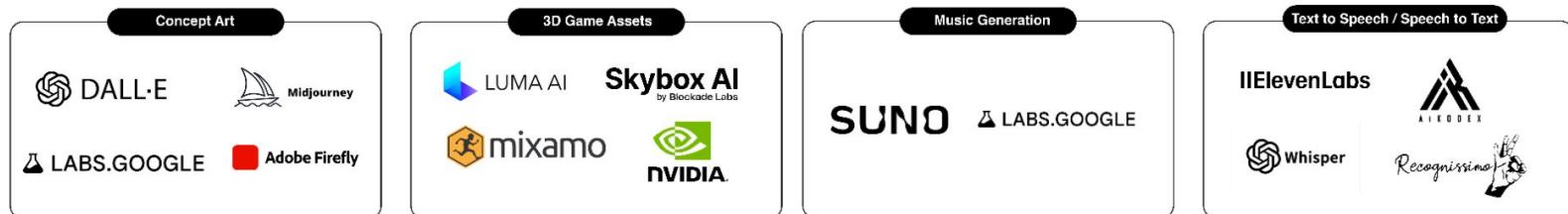
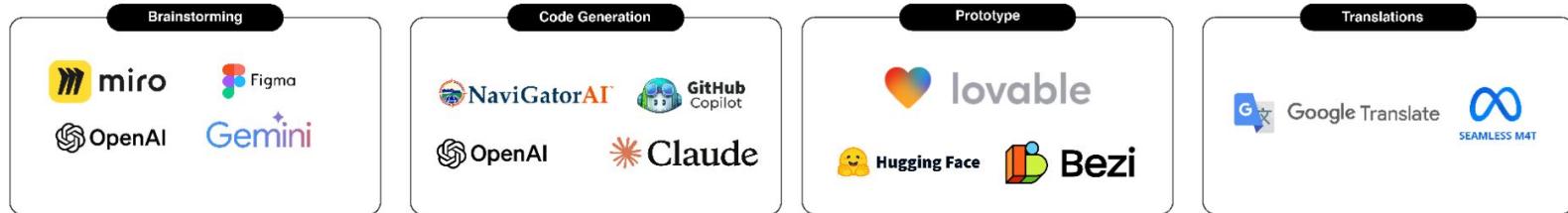
(b) Thought Instruction in Testing



AI Tools

AI for everything else

AI Tools



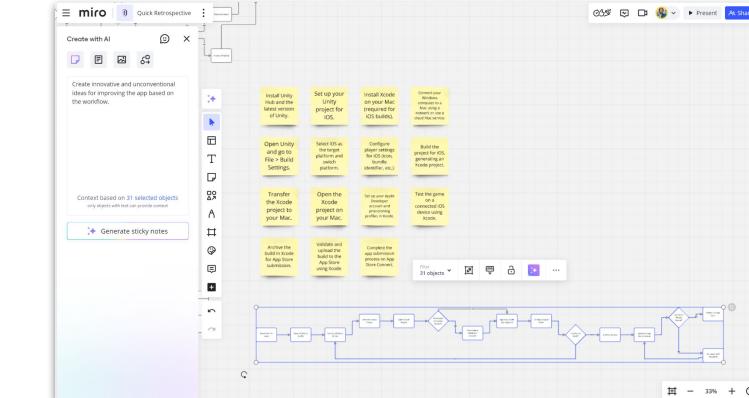
Brainstorming



Challenge: Generating innovative ideas and transforming them into structured game design documents.

AI-Enhanced Solutions

- **Miro AI** organized brainstorming sessions more efficiently with AI generated sticky notes.
- **ChatGPT** expanded rough ideas into well-defined gameplay mechanics, narrative, and design elements.
- **Notebook LM (Gemini)** compiled game design content into a shared, interactive knowledge base.



The screenshot shows the NotebookLM interface titled 'NWR AR Expeditions - Game Design Document'. It features a sidebar with 'Sources' (Aqua Arcade GDD v0.1, Bubble Pop Quiz GDD v0.1, Lastinger AR Ocean E..., Notebook guide) and a main area with a 'Timeline' section. The timeline shows a sequence of events from 'Initial Core Experience Iterating' to 'Phase 1 Concepts'. Below the timeline, there's a 'Help me create' section with buttons for 'FAQ', 'Study Guide', 'Table of Contents', 'Timeline', and 'Briefing Doc'. The main content area contains a summary of the document's purpose: 'The documents provide game design concepts for a set of augmented reality (AR) educational games focused on marine biology and ocean health. These games utilize AR technology to allow players to interact with a 3D game engine and feature AR technology that allows players to interact with 3D objects in their surroundings. These games aim to enhance environmental education and awareness while also promoting environmental conservation through engaging and immersive experiences. The concepts include an AR aquarium, a bubble popping game, a creature coloring application, and an educational AR adventure game.' There are also 'Suggested questions' and a 'View Chat' section at the bottom.

Generative Art



Challenge: Rapidly producing diverse, high-quality concept art while maintaining design consistency.

AI-Enhanced Solutions

- **DALL-E and MidJourney** produced hundreds of art concepts from descriptive prompts, allowing fast exploration of different themes.
- **Adobe Firefly** polished and refined visuals, removing defects from the AI-generated images.



DALL-E generated concept art illustrates the different game modes - Bubble Pop (left) and Aquarium (right). These pictures were created within a saved ChatGPT conversation that leveraged contextual training, demonstrates the AI's ability to maintain consistent art style by referencing and building upon previous messages.

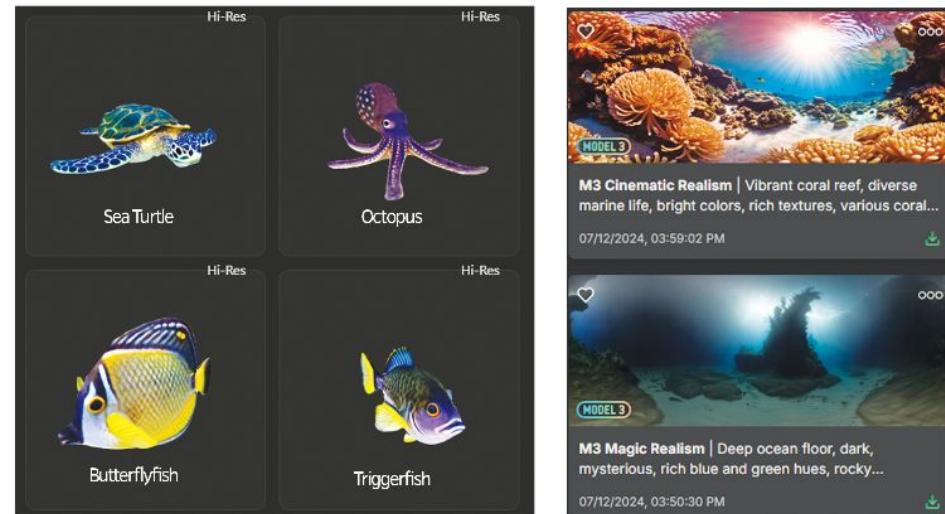
Prototypes



Challenge: Quickly developing interactive prototypes and generating 3D models for early-stage visualization.

AI-Enhanced Solutions

- **Lovable** created functional prototypes for AR demos and research tools with minimal coding.
- **Luma AI** generated NeRF-based, textured 3D models from descriptive prompts.
- **Skybox AI** provided 360-degree HDR backgrounds that simulated underwater game environments.
- **Hugging Face** an exploratory playground for AI apps.

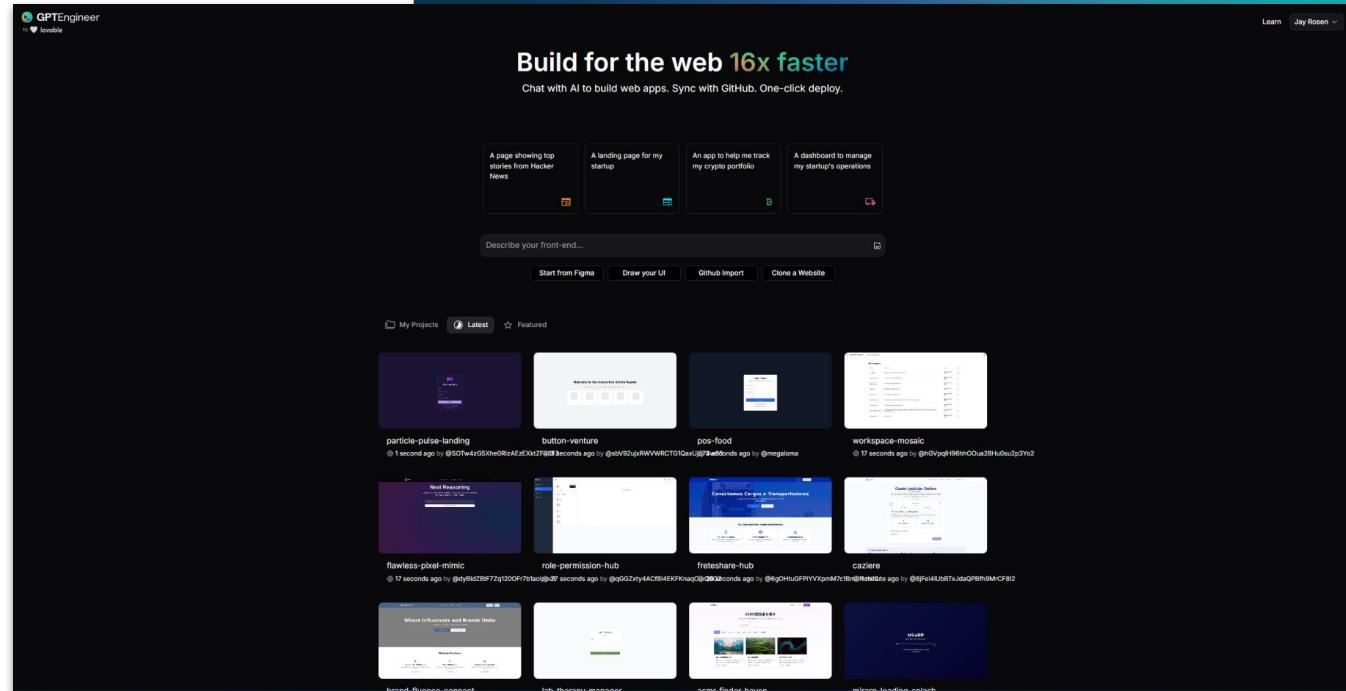


Luma AI Genie generated 3D models from single-word prompts. Although these outputs were sufficient for prototyping, they did not meet the quality standards required for production.

Skybox AI generated 360 HDR backgrounds from descriptive prompts, enabling us to visualize the 3D models in naturally lit environments.

Lovable (GPT Engineer)

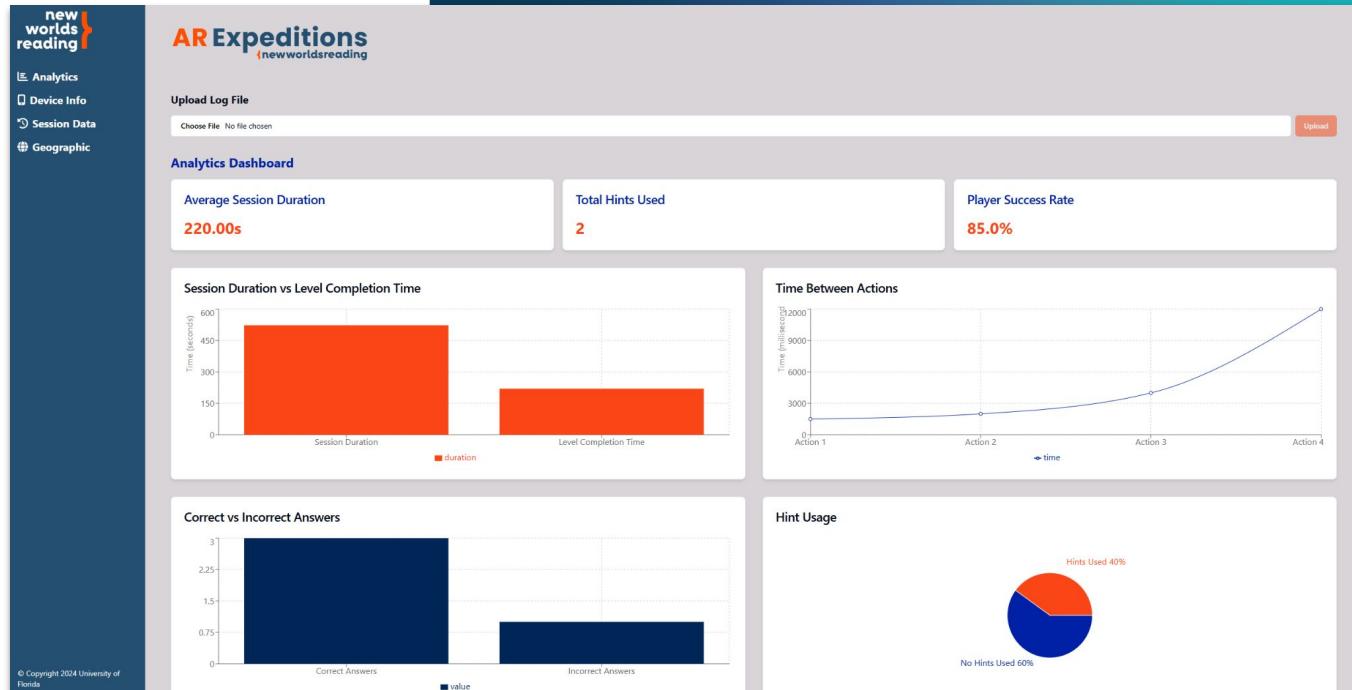
- Free & Paid tier
- Generate an entire app from prompt or image upload
- They host the app and sync to GitHub



<https://gptengineer.app/>

Lovable - New Worlds Reading

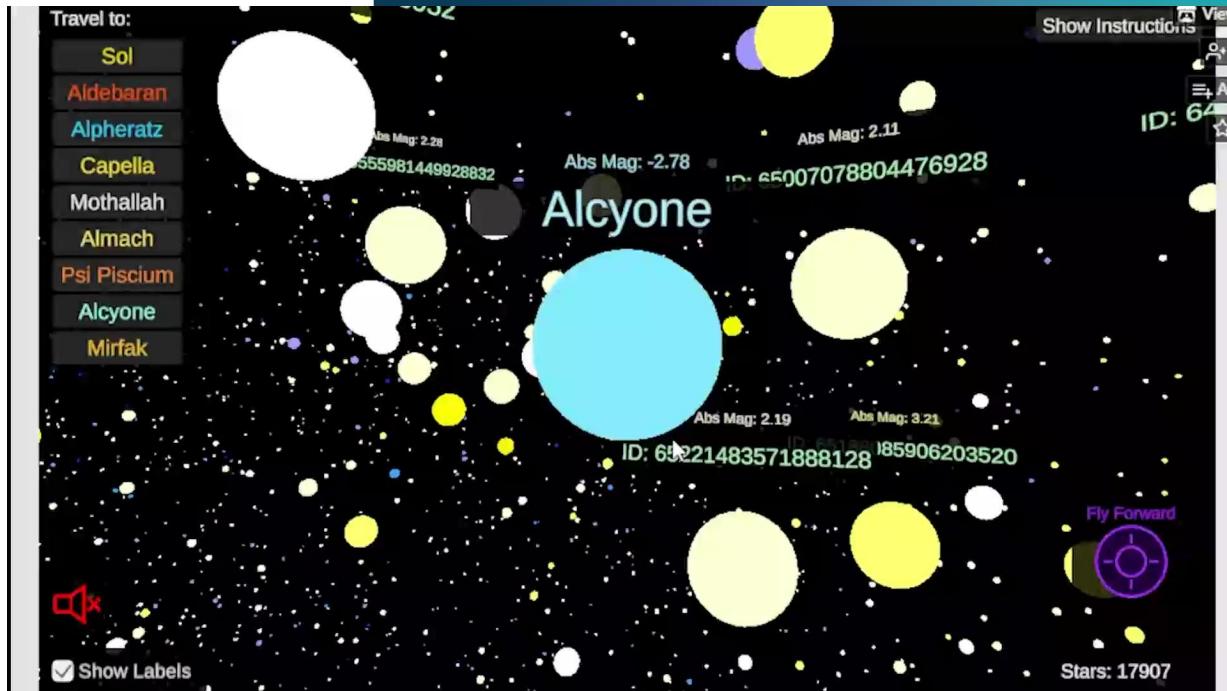
- Built app in a day



<https://nwr-analytics.gptengineer.run/>

Lovable - Nasa Space App

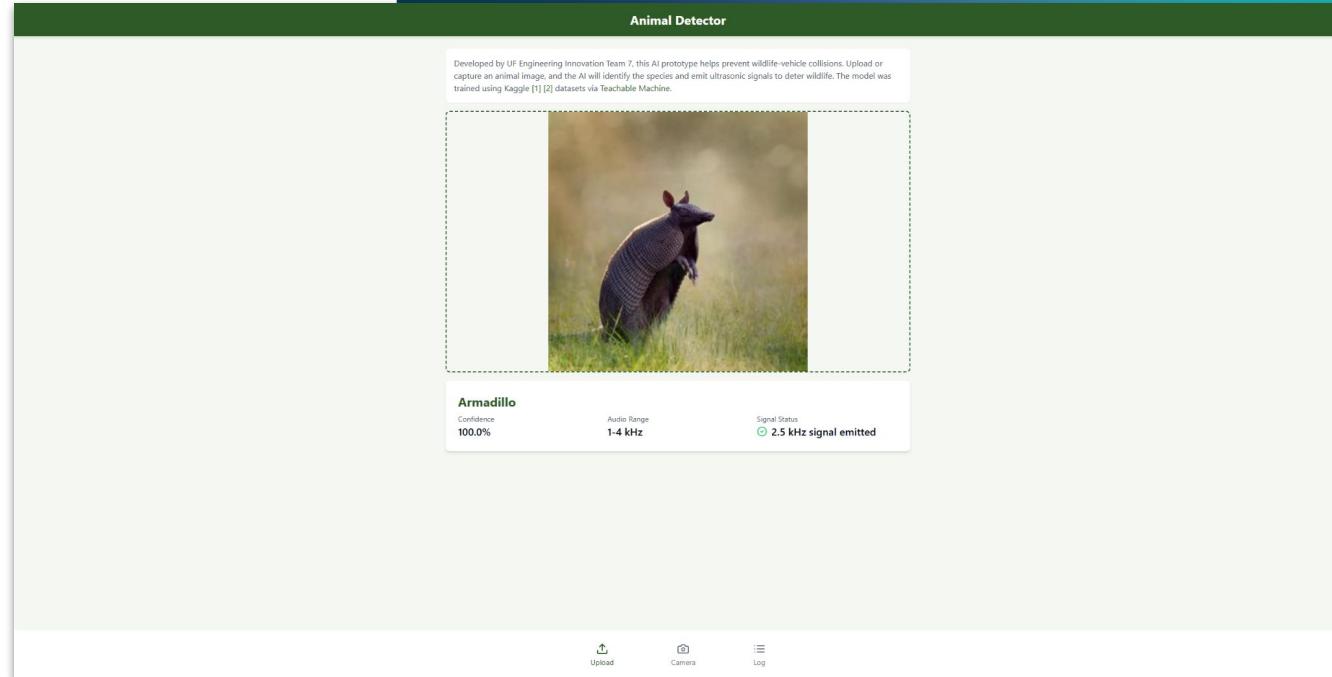
- Built app in a day
- Won regional at Nasa International Hackathon



<https://nasa-space-apps-astreas-rupertus.gptengineer.run/>

Lovable - Animal Detector

- Built app in a day
- Won 2nd place at AI Hackathon



<https://animal-detector.gptengineer.run/>

Spaces · The AI App Directory

[+ New Space](#)[What is Spaces?](#)[Ask anything you want to do with AI](#)[Image Generation](#) [Video Generation](#) [Text Generation](#) [Language Translation](#) [Speech Synthesis](#) [3D Modeling](#) [Object Detection](#) [Text Analysis](#) [Image Editing](#) [Code Generation](#) [Question Answering](#) [Data Visualization](#) [Voice Chat](#)

Spaces of the week

[Filter by name](#) [Sort: Relevance](#)

Running on ZERO 312 Chat with DeepSeek-VL2-small 🌟 Generate text based on images and prompts [deepeek-ai](#) 3 days ago

Running 172 Kokoro Text-to-Speech (WebGPU) 🎤 High-quality speech synthesis powered by Kokoro TTS [webml-community](#) 5 days ago

Running on ZE86 22 Hibiki Simple 🎤 High-Fidelity Simultaneous Speech-To-Speech Translation [effiloni](#) 3 days ago

Running on CPU UPGRADE 234 Open Deep-Research 🏆 OpenAI's Deep Research, but open [m-xio](#) 1 day ago

Running on ZERO 18 Granite Vision 3.1.2B 📸 Chat with images and text [ahb777](#) about 8 hours ago

Running 10 TinySwallow-1.5B-Instruct-WebGPU 🎤 A compact Japanese LLM that runs locally in your browser. [webml-community](#) 7 days ago

Running on ZERO 48 Lumina Image 2.0 🖼 Generate images from text prompts [Alpha-VLLM](#) 2 days ago

Running 10 lm-similarity 🌐 Space for LM similarity on Open LLM Leaderboard data [bethgelab](#) 5 days ago

All running apps, trending first

Running on ZERO 17k Chat With Janus-Pro-7B 🌟 A unified multimodal understanding and generation model. [deepeek-ai](#) 11 days ago

Running on ZERO 7.02k FLUX.1 [dev] 📸 Generate images from text prompts [black-forest-labs](#) Oct 9, 2024

Running on ZERO 152k Hunyuan3D-2.0 🌈 Text-to-3D and Image-to-3D Generation [tencent](#) 16 days ago

Running on ZERO 312 Chat with DeepSeek-VL2-small 🌟 Generate text based on images and prompts [deepeek-ai](#) 3 days ago

Running on ZERO 3.7k TRELLIS 🎨 Scalable and Versatile 3D Generation from images [JeffreyXiang](#) Dec 18, 2024

Running on CPU UPGRADE 1.89k Anychat 🎤 [aikhaliq](#) 2 days ago

Running 172 Kokoro Text-to-Speech (WebGPU) 🎤 High-quality speech synthesis powered by Kokoro TTS [webml-community](#) 5 days ago

Running on CPU UPGRADE 7.36k Kolors Virtual Try-On 🎩 Try on garments on virtual models [Kwai-Kolois](#) Sep 17, 2024

Anychat

Select code snippet

OpenAI Coder

Provider Code Snippet

```
1 import gradio as gr
2 import ai_gradio
3 gr.load(
4     name='openai/o3-mini-2025-01-31',
5     url=ai_gradio.registry,
6     code=True
7 ).launch()
```

Select Provider

OpenAI Coder

Select OpenAI Model

o3-mini-2025-01-31

OpenAI Code Generator

Upload Reference Images



Drop Image Here

- OR -

Click to Upload



Describe the web application you want to create

Generate

Clear History

Examples

Simple Button

Create a button that changes color when clicked



Enter your request to generate code

Audio & Music

SUNO II^{ElevenLabs} LABS.GOOGLE



Challenge: Producing custom audio sound effects, background music, and multilingual voiceovers.

AI-Enhanced Solutions

- **SUNO and Google Music FX** generated looping instrumental tracks, ambient sounds, and custom music aligned with the game's underwater theme.
- **ElevenLabs** created custom life-like voiceovers for the game narrator.



Google Music FX generated instrumental music tailored to specified genres and thematic prompts.



SUNO generated compelling audio tracks featuring both instrumental compositions and synthesized vocal performances based on prompts.

Multi-Language Support

Challenge: Providing accurate translations and interactive voice support without compromising storage or performance.

AI-Enhanced Solutions

- **Google Translate** generated initial text translations, providing a foundation for further linguistic refinement.
- **Meta Seamless M4T** (exploratory) is under evaluation for real-time text and audio translation.



The language selection screen allows players to configure the game's language using **Google Translate**, exemplified here by the Spanish version of the Bubble Pop game mode.

Game Development

Challenge: Developing, debugging, and integrating complex game scripts within the Unity game engine.

AI-Enhanced Solutions

- **NaviGatorAI (GPT4o)** assisted in generating C# scripts, accelerating the development of gameplay elements.
- **GPT-4 Vision** can interpret screen captures of the game to help debug issues with Unity and scripts.
- **GitHub Copilot** provided real-time code completion and error detection, streamlining the coding process.

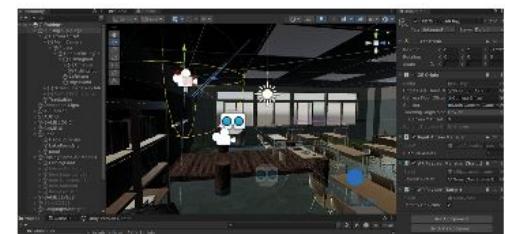


In my Editor, some AR scene that I put onto my android device, the starting position for the AR camera is way too low. It's below the dock and I'm in the pool. These are the settings for my AR Session and XR origin. When I view the game in the XR Simulator, I see it from the Main Camera, but in the actual build, the main camera's starting position is too low. I'm trying to fix the starting position, so I moved the point 1d model down lower, so that the dock that the person would walk on is roughly 0,0.

Based on the image and your description, it seems like the AR camera's starting position is too low. It's below the dock and I'm in the pool. These are the settings for my AR Session and XR origin. When I view the game in the XR Simulator, I see it from the Main Camera, but in the actual build, the main camera's starting position is too low. I'm trying to fix the starting position, so I moved the point 1d model down lower, so that the dock that the person would walk on is roughly 0,0.

Suggestions to Fix the Camera Position Issue:

1. Adjust the Tracking Origin Mode:
 - In the XR Manager component, you have the `Tracking` set to `World`, set to `Local`. This means the AR session will assume the ground plane starts at its detected ground level.
 - If your AR environment does not accurately detect the ground, try changing the `Tracking` option from `World` to `Local` instead of `Local`. This will use the dock's initial position as the reference point.
2. AR Session Origin Offset:
 - If the starting position is consistently too low, you can adjust the `Session` `Origin Offset` property or apply a vertical offset to the `TransformOffset` transform itself by adding a `Position` component to it. Modify the starting position of the camera. For example, set the `Position` Y value of the `Camera` object to `-0.5` or a suitable height that matches the player's starting position.
3. Calibrate Floor Level with AR Plane Detection:
 - If you're using plane detection, ensure that your scene's `AR Plane Manager` is correctly configured and enabled to detect horizontal planes like the floor. Once detected, you can align the dock or environment objects to the first detected horizontal plane to ensure proper positioning.



GPT-4 Vision analyzed screenshots and the described issue to debug a camera-related problem in Unity. ChatGPT provided detailed IDE navigation instructions and generated a corrective C# script.

The enlarged screenshots on the right showcase Unity's XR simulated classroom environment (enabled and disabled), which accurately visualizes augmented reality effects and object placement in real space.



GitHub Copilot

- GitHub Pro & GitHub Copilot are free for EDU accounts
- Puts GPT 4o directly in Visual Studio Code
- Explain code and help write new code

The screenshot shows a Visual Studio Code interface with several tabs open. The main editor tab displays C# code for a `ARCameraManager` class. The code includes annotations from GitHub Copilot, such as summaries for methods like `onBeforeSerialize` and `onAfterDeserialize`, and detailed explanations for attributes and fields. The bottom status bar shows "NET install Tool".

```
public sealed class ARCameraManager : MonoBehaviour
{
    public void onBeforeSerialize() {}
    public void onAfterDeserialize()
    {
        if (m_FocusMode != (CameraFocusMode)-1)
        {
            m_AutoFocus = m_FocusMode == CameraFocusMode.Auto;
            m_FocusMode = (CameraFocusMode)-1;
        }
    }
    #pragma warning disable CS0618
    if (m_LightEstimationMode != (LightEstimationMode)-1)
    {
        m_LightEstimation = m_LightEstimationMode.ToLightEstimation();
        m_LightEstimationMode = (LightEstimationMode)-1;
    }
    #pragma warning restore CS0618
    // Summary: Tries to get camera intrinsics. Camera intrinsics refers to properties of a physical camera which might be used when performing additional computer vision processing on the camera image.
    // Camera: A reference to the camera component.
    // AutoFocus: A boolean value indicating whether the camera supports auto-focus.
    // CameraIntrinsics: An Intrinsics object for managing camera grain texture information.
    // FocusMode: A CameraFocusMode enum for managing the camera's focus mode.
    // RequestedLightEstimation: Gets or sets the requested light estimation mode.
    // CurrentLightEstimation: Gets the current light estimation mode.
    // LightEstimationMode: Gets or sets the requested light estimation mode.
    // RequestedFocusDirection: Gets or sets the requested focus direction.
}
```

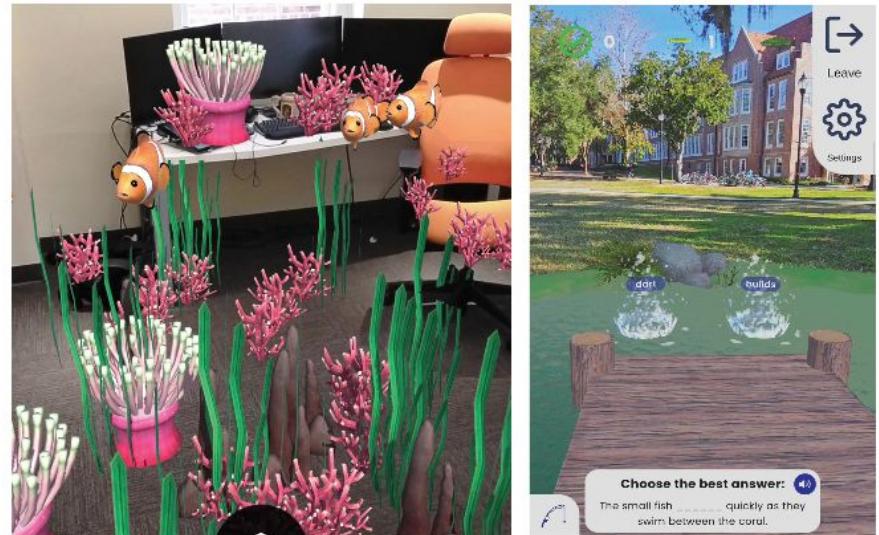
<https://github.com/features/copilot>

Augmented Reality

Challenge: Ensuring smooth placement, interaction, and tracking of digital objects in real-world AR environments.

AI-Enhanced Solutions

- **ARCore & ARKit** provided real-time surface detection and object anchoring for seamless AR integration.
- Niantic Spatial Platform enabled advanced spatial mapping and segmentation for immersive experience.



Unity AR Foundation integrates **ARCore** (Android) and **ARKit** (iOS) libraries to leverage device hardware for precise plane detection and occlusion. In the interior AR scene (left), the virtual aquarium anchors coral and seaweed to detected planes, providing a dynamic environment for fish to navigate. In the outdoor AR scene (right), a grassy area transforms into an interactive pond, inviting players to fish.

AI Gameplay



Challenge: Ensuring smooth placement, interaction, and tracking of digital objects in real-world AR environments.

AI-Enhanced Solutions

- **ARCore & ARKit** provided real-time surface detection and object anchoring for seamless AR integration.
- Niantic Spatial Platform enabled advanced spatial mapping and segmentation for immersive experience.



In this scene captured at the Florida Museum of Natural History, **Unity ML Agents**' AI-driven behaviors enable marine life to target specific objects—such as preferred foods—and to evade threats like sharks and boats. Each character exhibits unique motivations, including eating, resting, socializing, swimming, and evading, which together create a dynamic and evolving ecosystem.

E-Learning, Technology, Communications



Instructional Design

Developing powerful online educational experiences using research, best practices and cutting-edge technology.



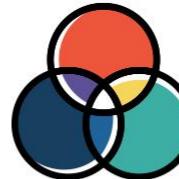
Communications

Researching, planning, implementing and evaluating campaigns designed to meet strategic objectives through collaboration.



Web & App Development

Bringing dynamic websites and applications to life through intuitive user-focused design and development.



Graphic Design

Creating beautiful and effective visual storytelling devices through expert use of design elements and professional practices.



Instructional Technology

Enhancing learning through innovative hardware, software, and emerging technology solutions.



Production & Animation

Delivering authentic and effective messaging in a variety of media designed to capture the hearts and minds of target audiences.



Looking for Assistance?

Types of Support

Multimedia

- Videography
- Photography
- Animation
- Podcasting
- Studio
- Graphic Design

Communications

- Press releases
- Social media campaigns
- Search engine optimization
- Copywriting

IT support

- Website hosting
- Server management
- Hardware support
- Software support

Grant development

- Logic models
- Idea generation

Development

- Website
- Software/Application
- AR/VR

Course development

- Canvas
- Articulate Rise
- Custom eLearning platforms
- Course mapping
- Course auditing
- Course graphics