



# LEDx: Praxeum *Human in the Loop*

*Empowering the Future Force:  
Harnessing AI/ML across  
AETC for Lifelong Learning ?*

*Dr. Wendy Walsh, USAF/AETC CLO*

# Agenda

- Why am I so excited about AI
- Close friends & inspiration
- More from the ecosystem
- What's on the horizon
- Ideas & curiosity







# General Approach

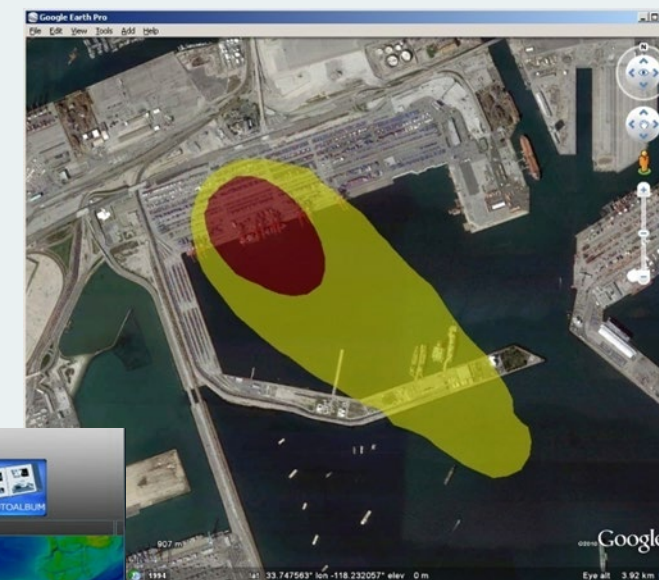
## ROGUEVIDEO

*Real-time Online Gaming Use-case Engine for Validation of Interagency Doctrine for Emergency Operations*

- Capture doctrine, plans, policy, SOPs, TTP, equipment & subject matter expertise relevant to all National Planning Scenarios.
- Create a repository for the captured data, organized into a knowledge base for automated manipulation.
- Extract information from the knowledge base to specify scenarios of interest for implementation in open source synthetic environments to facilitate doctrine & equipment interoperability validation.

*ROGUEVIDEO creates a bridge between operational environments and synthetic environments to enable developers and users to examine and evaluate doctrines, plans, and systems.*

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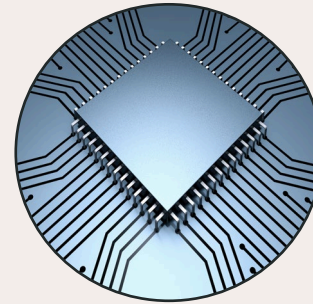
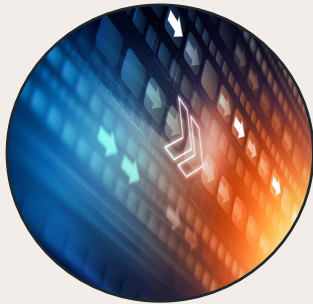


Lexical Link Counts/Themes by Sources and Timelines														
Seq	Event	Thm	All	but	Max	30m	Instru	job	NIMS	Play	Play	Play	SOP	Transcript
1	113	89	92	Trans	7	3	11	28	3	13	6	9	2	7
2	113	57	20	Trans	0	0	0	2	0	6	0	4	0	8
3	113	78	38	Trans	4	0	4	21	5	12	1	5	1	5
4	113	108	127	Trans	7	0	14	16	19	15	17	13	18	5
5	113	92	104	Trans	12	1	15	5	12	17	13	7	13	0
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12	113	100	41	42	Trans	5	0	3	3	8	10	0	3	6
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14	113	87	42	31	Trans	0	0	4	15	3	4	1	2	1
15	113	15	36	20	Trans	0	1	1	9	0	1	1	0	1
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27	113	40	40	107	Play	4	0	0	0	0	0	0	0	0
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41	113	50	2	0	Trans	0	0	0	0	0	0	0	0	0
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Sort by Lexical Links according to the source Transcript. The top 20 themes are highlighted yellow.





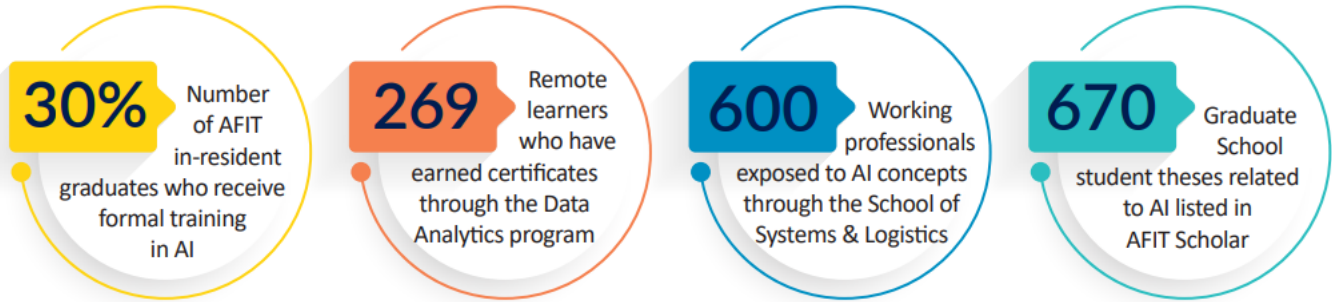








# USAF- INSTITUTE OF TECHNOLOGY ARTIFICIAL INTELLIGENCE EFFORTS

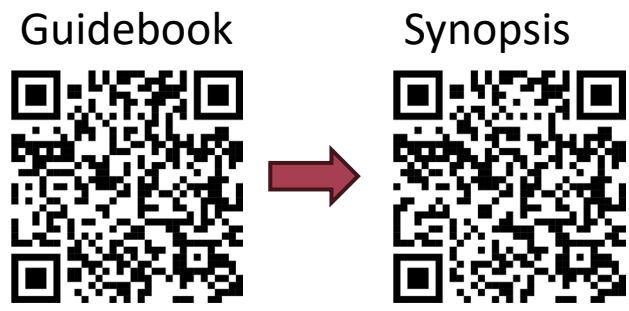


← AFIT Artificial Intelligence Technology Research & Education Consortium (AI TREC)



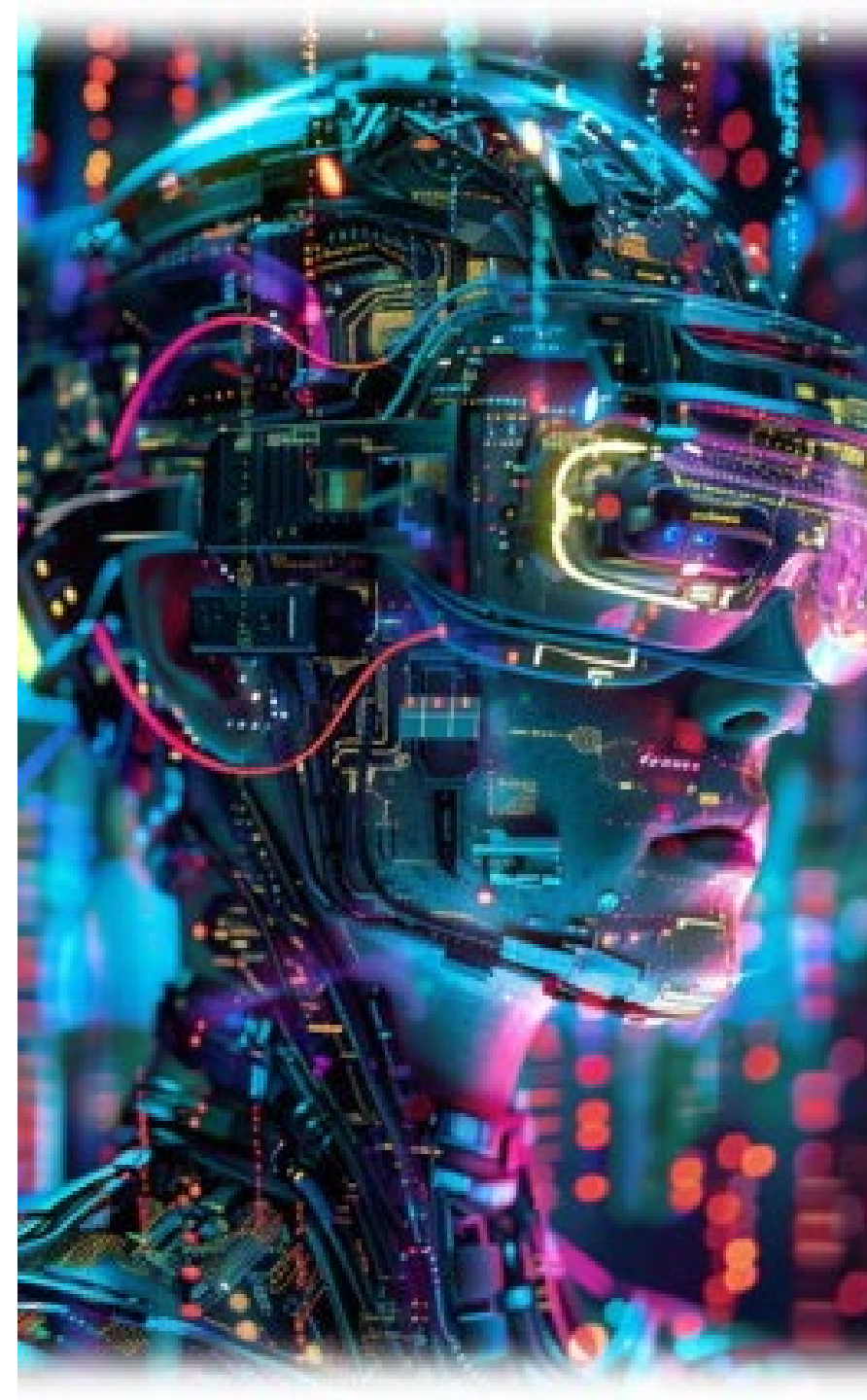
↑ **AFIT Engineer**  
December 2024 issue includes courses, certificate, faculty development and much more

AFIT Generative AI Teaching Guidebook Synopsis



# AIR UNIVERSITY ARTIFICIAL INTELLIGENCE EFFORTS

- AI [community of practice](#) & hosted unconferences to expand connection on the topic, has an active immersive learning & simulation research task force that is supporting a two-term immersive VR course on AI/ML
- AI integrated into [building & reviewing courseware & workshops](#) focused on PME, leadership & writing- using as a critical-thinking partner for assignments.
- [Integrating into Technology](#) AI-powered notebooks (using Google's NotebookLM) and leveraging AI for avatar training scenario building
- [Building algorithms](#) -AUiX has created a custom GPT for crunching through course feedback to generate custom reports (DRADIS = Data Review and Decision-Making Instructional Support) and another for strategic modeling (CHUCK).
- [Sharing efforts](#) through the distribution of newsletters and updates from faculty on advances in AI to address leadership, ethics and security.





# AFRL & THE HUMAN EFFECTIVENESS DIRECTORATE & 711<sup>TH</sup> HUMAN LEARNING & COGNITION TEAM



■ **NIPRGPT & AcqBot**

- **Prompt Engineering & Promptapoolza** (role-based prompts)

- **Human Effectiveness Directorate** is working on understanding: Co-learning research, Adaptive Human Machine Teaming, Effective models of learning technology, cognitive warfare, and decision making that integrate human performance



AFRL AI Page Link







# CLO ENGAGEMENT WITH AI

## Staying Curious:



- CDAO Leadership courses
- Made connections with the MIT AI Accelerator and highlighting the Phantoms
- Using NIPRGPT, ASK SAGE and other LLMs to support
- Engaging with other curious people



## Sharing what I Learn:

- Included AI in my briefings and dialogues
- Encouraging others to engage & share resources
- Presenting & Sharing Presentations
- Advocating for trials and thoughtful application



# QUICK PROMPT ENGINEERING TUTORIAL



# PROMPT ENGINEERING

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Define Clear Objectives: Precise inputs for desired outcomes

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Use Detailed Prompts: Specific prompts for accurate and relevant outputs

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Iterative Process: Refine prompts based on previous outputs

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Cross-Verify Information: Check AI-generated information with reliable sources

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Understand the Limits: Recognize AI limitations, do not expect beyond capabilities

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Specificity: Specific information requested yields more accurate AI responses

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Use Structured Data: Improve processing accuracy with structured data

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Bias Awareness: Mitigate biases in AI responses

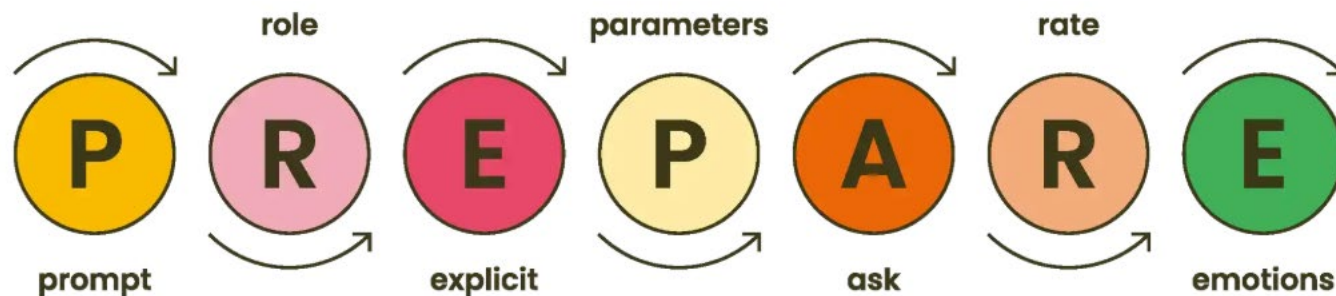
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Consistent Review: Regularly review AI-generated content for relevance and accuracy

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Use Multiple Tools: Utilize various AI tools to leverage their strengths, pay attention to security levels

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*PREPARE framework: [Dan Fitzpatrick](#)*

## ALIGN

- 💡 [Aligned 4-3-2 objectives](#)
- 💡 [Project based learning objectives](#)
- 💡 [From topics to objectives](#)

## DEFINE

- 💡 [Evaluation plan](#)

## DESIGN

- 💡 [Scenario based multiple choice questions](#)
- 💡 [Self-Evaluation or 360 Feedback](#)

## ANALYZE

- 💡 [Thematic Analysis](#)
- 💡 [Analyze and Vizualize Excels](#)
- 💡 [Open Answers Surveys](#)
- 💡 [ROI](#)

## ACTION

- 💡 [Prioritize actions](#)



QUESTIONS  
COMMENTS  
SHARING

