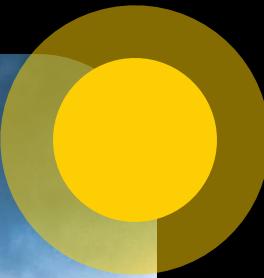




The background of the image is a dramatic, cloudy sky. A bright, jagged lightning bolt strikes down from the upper right towards the center of the frame, illuminating the surrounding clouds. The clouds are a mix of dark, billowing cumulus and denser, greyish stratus, set against a deep blue sky.

Prompt Engineer

And the
AI Agents
in Javascript



Ron Dagdag

R&D Engineering Manager at



7th year Microsoft AI MVP



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Agenda

AI Agents

What is LangChain?
What is an AI Agent?



Prompt Engineering

Why?



Demo

Will look at some code

Use AI Responsibly

Generative AI



Prompt Engineering

What is Prompt Engineering?

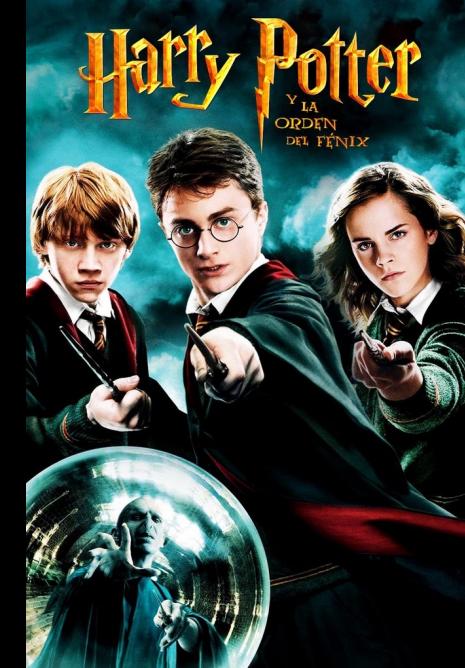
- Technique to improve AI response quality in Generative AI models
- Involves refining the question you ask AI.

Types of Prompt

- Zero-Shot – no examples
- Prompting with examples (One-Shot, Few-Shots, Multi-Shots)
- Chain-of-Thought - "Let's think step by step."

Real-World Example

- Crafting the right Google search query to find what you need



AI Agents

What is OpenAI GPT API?

- (Generative Pre-trained Transformer)
- trained to understand natural language and code

What is LangChain?

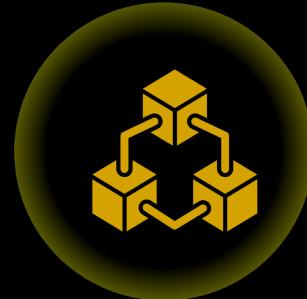
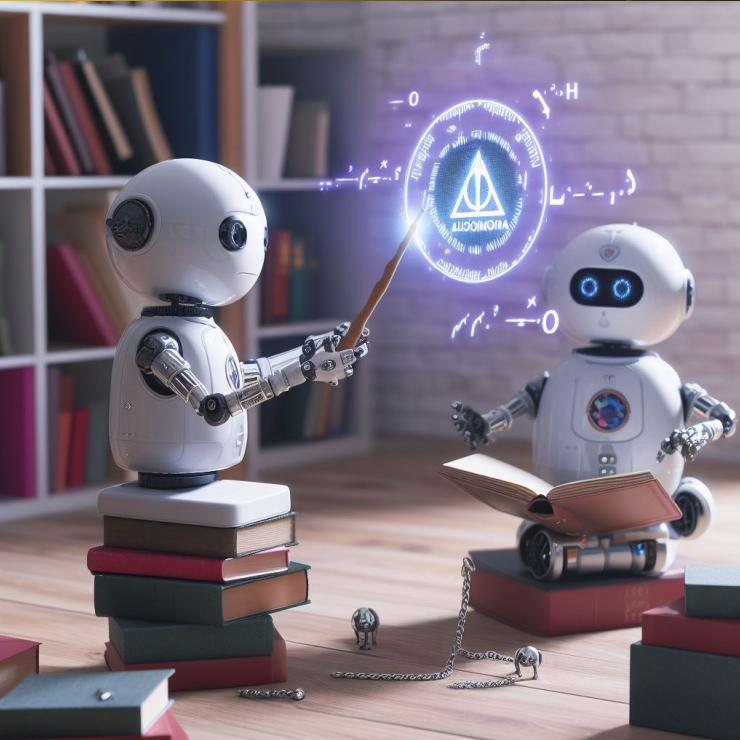
- open-source framework
- simplify creation and development of applications powered by large language models (LLMs)

What are AI Agents?

- leverage large language models (LLMs) for decision-making within a chain of actions



Demo



<https://github.com/rondagdag/ai-agents-js>

Use AI Responsibly

Do not humanize AI!
How to mitigate hallucinations



| Do not humanize AI!

Generative AI

is not:

- **Intelligent**
- **Deterministic**
- **Grounded**

Generative AI

can not:

- **Understand language or maths**
- **Understand manners or emotions**
- **Know facts that are not in its training dataset**

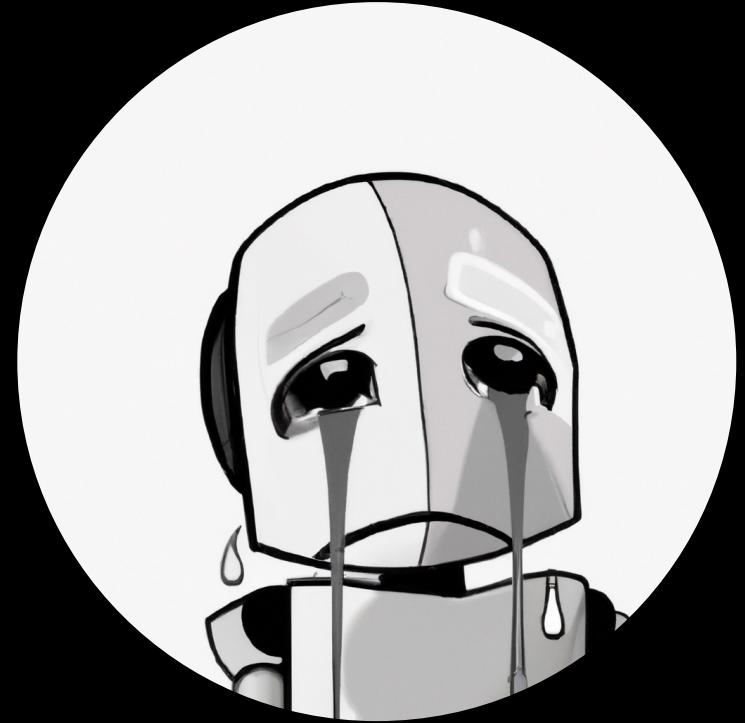
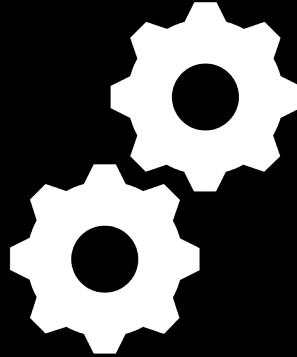
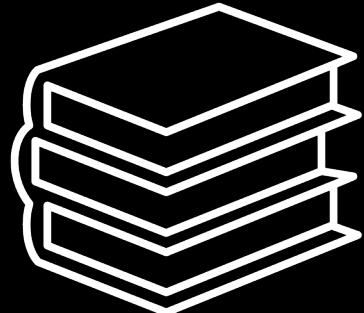


Image created by DALL E2

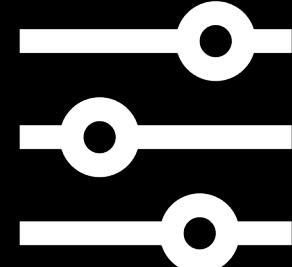
| How to mitigate hallucinations



- Effective prompt engineering



- Provide validated data sources
- Ask for citations



- Tweak parameters (temperature/max length)
- Content filtering



Summary

What is Prompt Engineering?
Asking certain way

What is GPT, LangChain and AI Agents?

Prompts, Chains, Parsers, Retrieval,
Vector DB, Memory, ChatBot

Agents: ReAct (ZeroShot,
Conversational) , OpenAI Functions,
Plan and Execute

Resources



<https://learnprompting.org/>

<https://js.langchain.com/>

<https://flowiseai.com/>

<https://www.deeplearning.ai/short-courses/build-llm-apps-with-langchain-js/>

About Me

Ron Dagdag

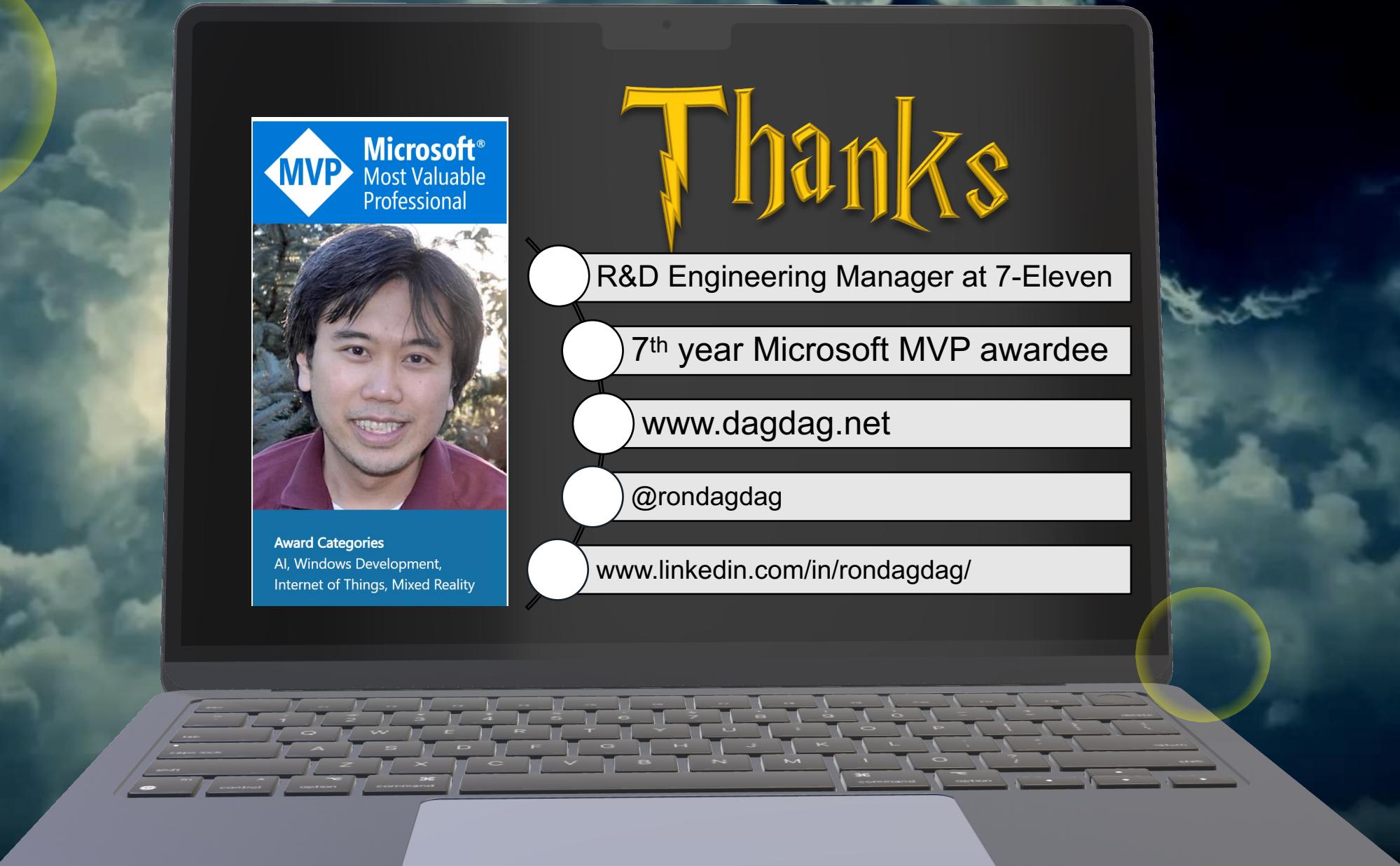


Award Categories

AI, Windows Development,
Internet of Things, Mixed Reality

<https://linktr.ee/rondagdag>





Thanks

