On being a Good AI Coach

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7-ELEVEN

"Opinions expressed are my own."

What are qualities of a Good Coach?

Qualities of a great sports coach

1. Understands the Sport and Leads by Example
2. Sponge for Knowledge / Profound Thinker / Visionary
3. Shares the Knowledge / Educates Others
4. Highly Energized and a Motivator
5. Knows the Athlete, Values and Respects that Relationship

https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/IOC/What-We-Do/Protecting-Clean-Athletes/Athletes-Space/Athletes-Entourage/Coaches/EN-Qualities-of-a-coach.pdf

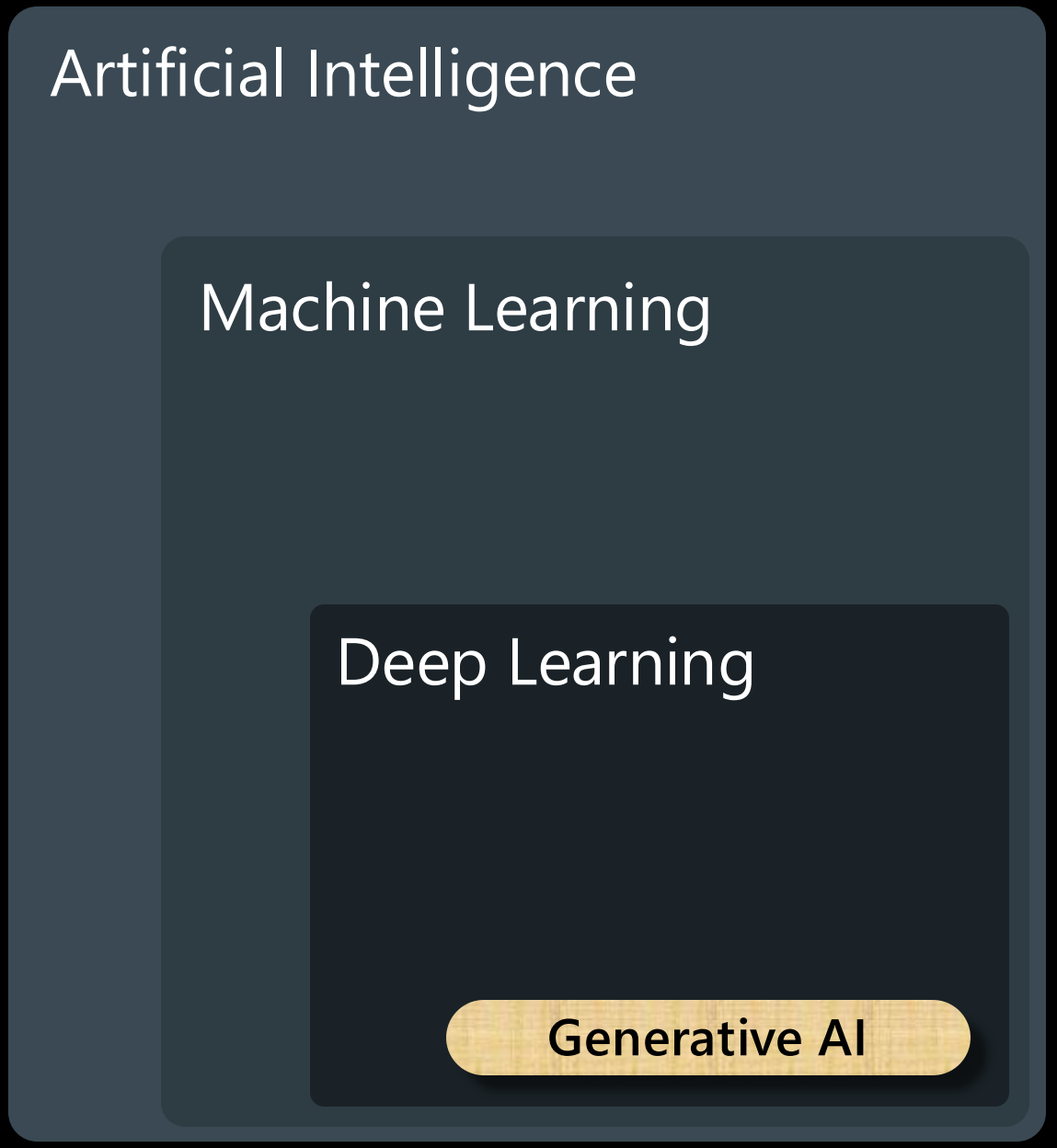
Qualities of a great sports coach

6. Is an Effective Communicator & Teacher
7. Is a Good Listener
8. Is Disciplined, Strong in Character and Integrity
9. Leads by Example with very High Attitude to Hard Work
10. Displays Commitment and Clear Passion for the Sport.

AMONG US

AGENDA:

- What AI AGENTS?
- What are multi Agents?
- Key Elements of Agents
- Agent Coaching Guide



1956

Artificial Intelligence

Seeks to create intelligent machines that can replicate/exceed human intelligence

1997

Machine Learning

subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions

2017

Deep Learning

a machine learning technique in which layers of neural networks are used to process data and make decisions

2021

Generative AI

Create new written, visual, and auditory content given prompts or existing data.

CONCAT: A programming tool for constructing collaborative agents

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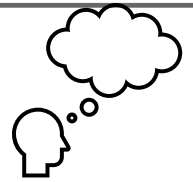

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Abstract/Summary

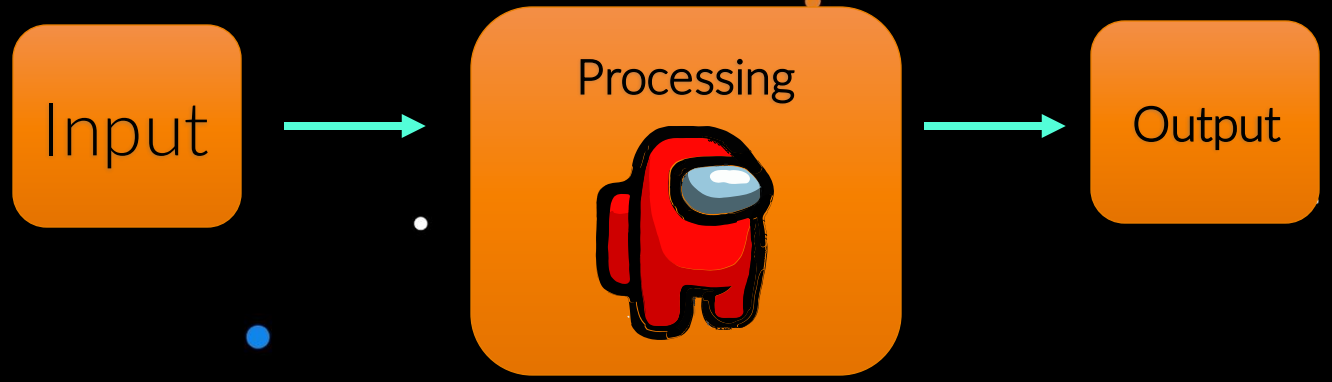
The field of artificial intelligence, particularly on intelligent agents, is one of the busiest these past decades. These agents can greatly simplify the normal, day-to-day tasks of humans by performing these tasks themselves without human intervention. However, the construction of agents requires an understanding of advanced technologies such as knowledge representation, inferencing, and the like.

One of the most common responsibilities of any person is to convene meetings and to set appointments. However, these tasks can be very tedious and time-consuming because most often than not, meetings need to be cancelled or rescheduled for various reasons. In the corporate world where time is of the utmost importance, these seemingly menial jobs could waste a lot of precious resources.

https://animorepository.dlsu.edu.ph/etd_bachelors/14206/

Data Pipeline Flow

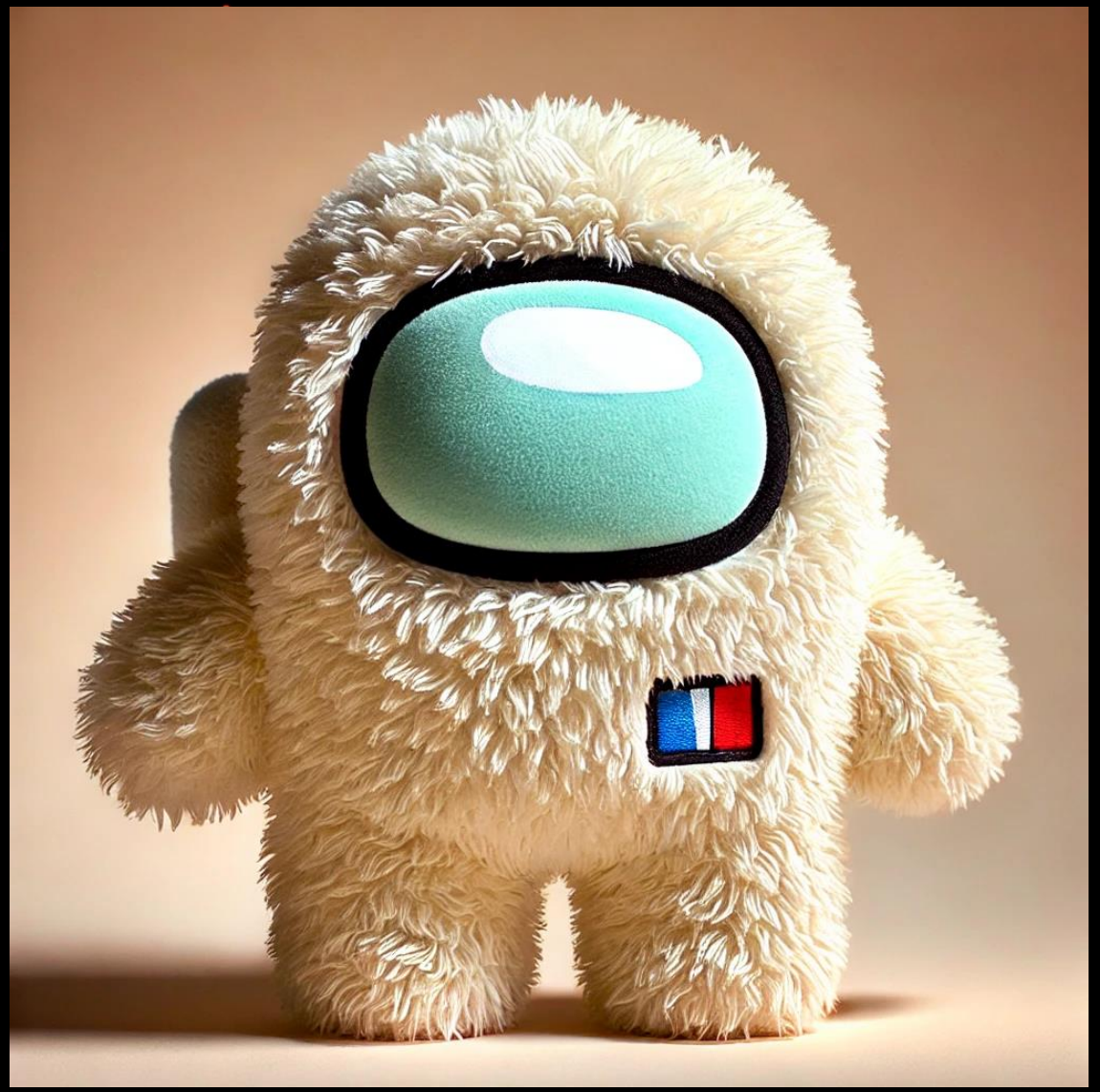
Generative AI App Flow



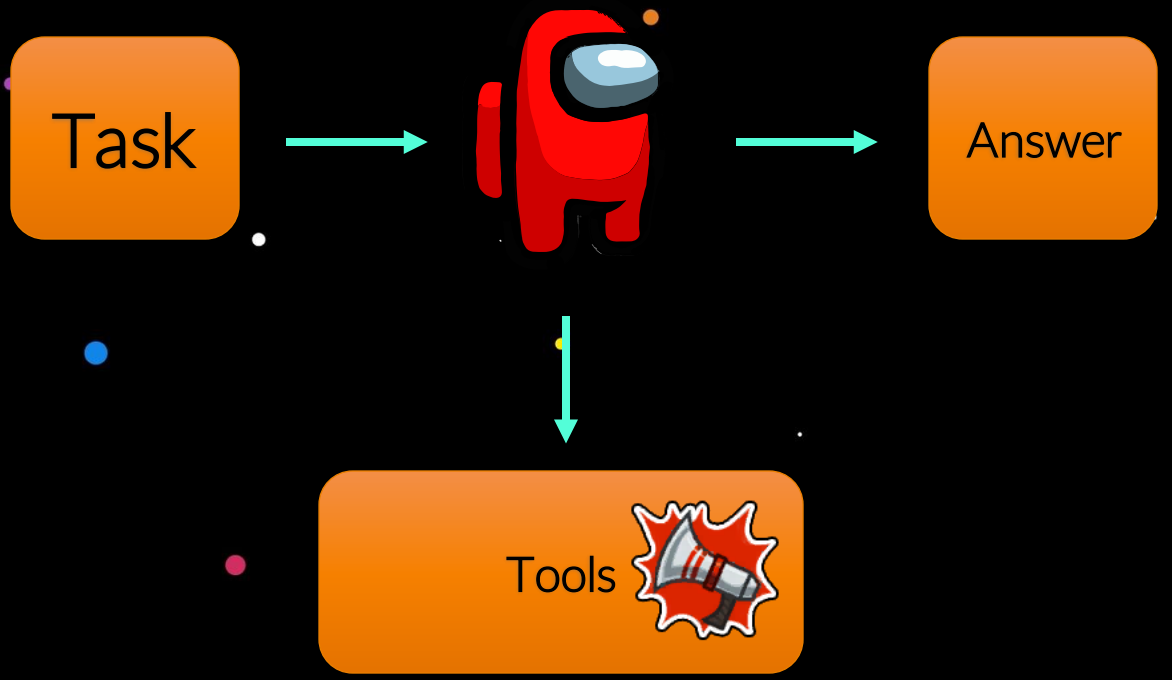
Fuzzy inputs, transformation, outputs

	Traditional Software Development	AI Software Development
INPUTS	- Text with defined set (string) - Numeric (int, float)	Fuzzy inputs: Open ended text - Tabular data, markdown, text, math operation
TRANSFORMATION	- Math Calculations - If, else, else if - For/while loops	Fuzzy transformations: - Extract list of key words - Rewrite as paragraph - Answer a question - Brainstorm new ideas - Perform logic/math reasoning
OUTPUTS	- Text with defined set - Numeric (int, float)	Fuzzy output: text - Paragraph - Number(s) - JSON / Markdown
Notes	- Can be replicated	- Probabilistic: can be different every time

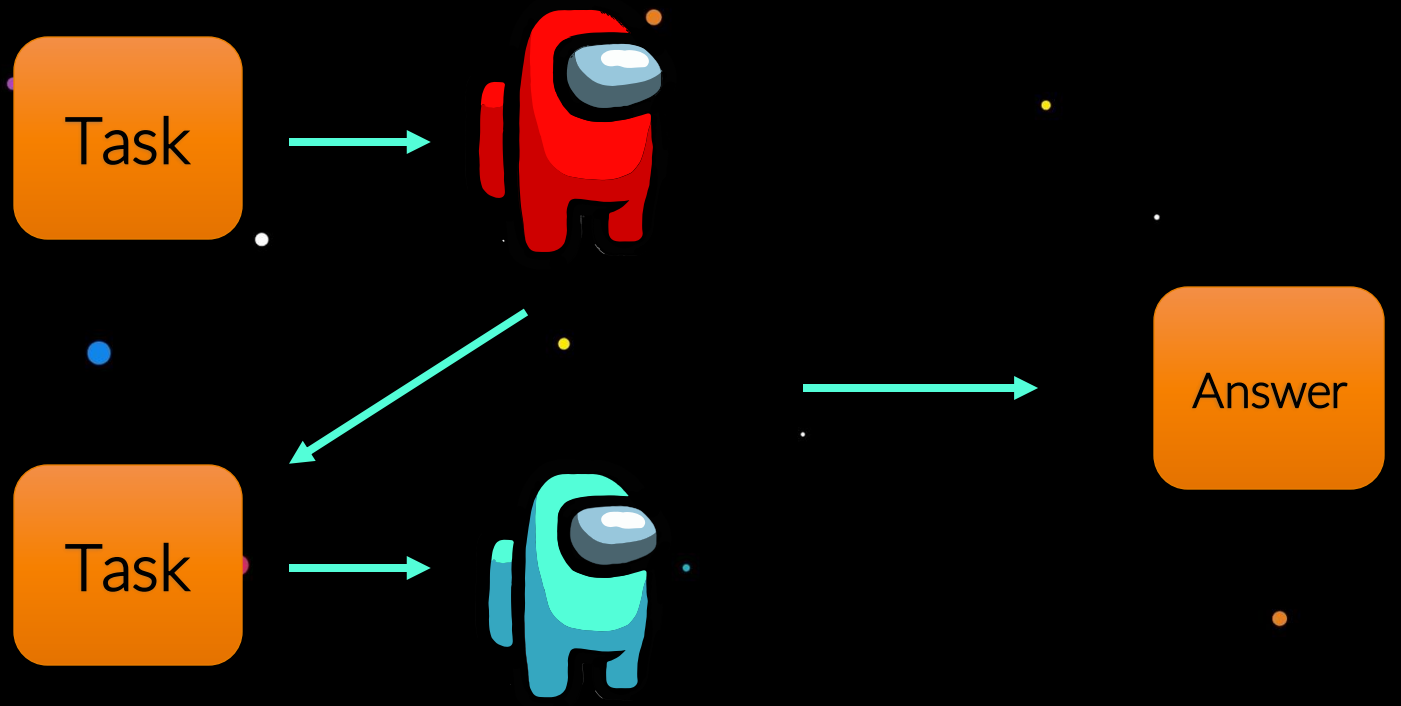
Fuzzy inputs, transformation, outputs



What are AI Agents?



What are Multi AI Agents?



DEMO

Six strategies for getting better results

Write clear instructions	• add details, adopt persona, use delimiters, step by step instructions, provide examples, specify desired output length
Provide reference text	• ask model to use reference text, answer with citations from reference text
Split complex tasks into simpler subtasks	• use intent classification for relevant instructions, summarize long documents

https://platform.openai.com/docs/guides/prompt-engineering

Six strategies for getting better results

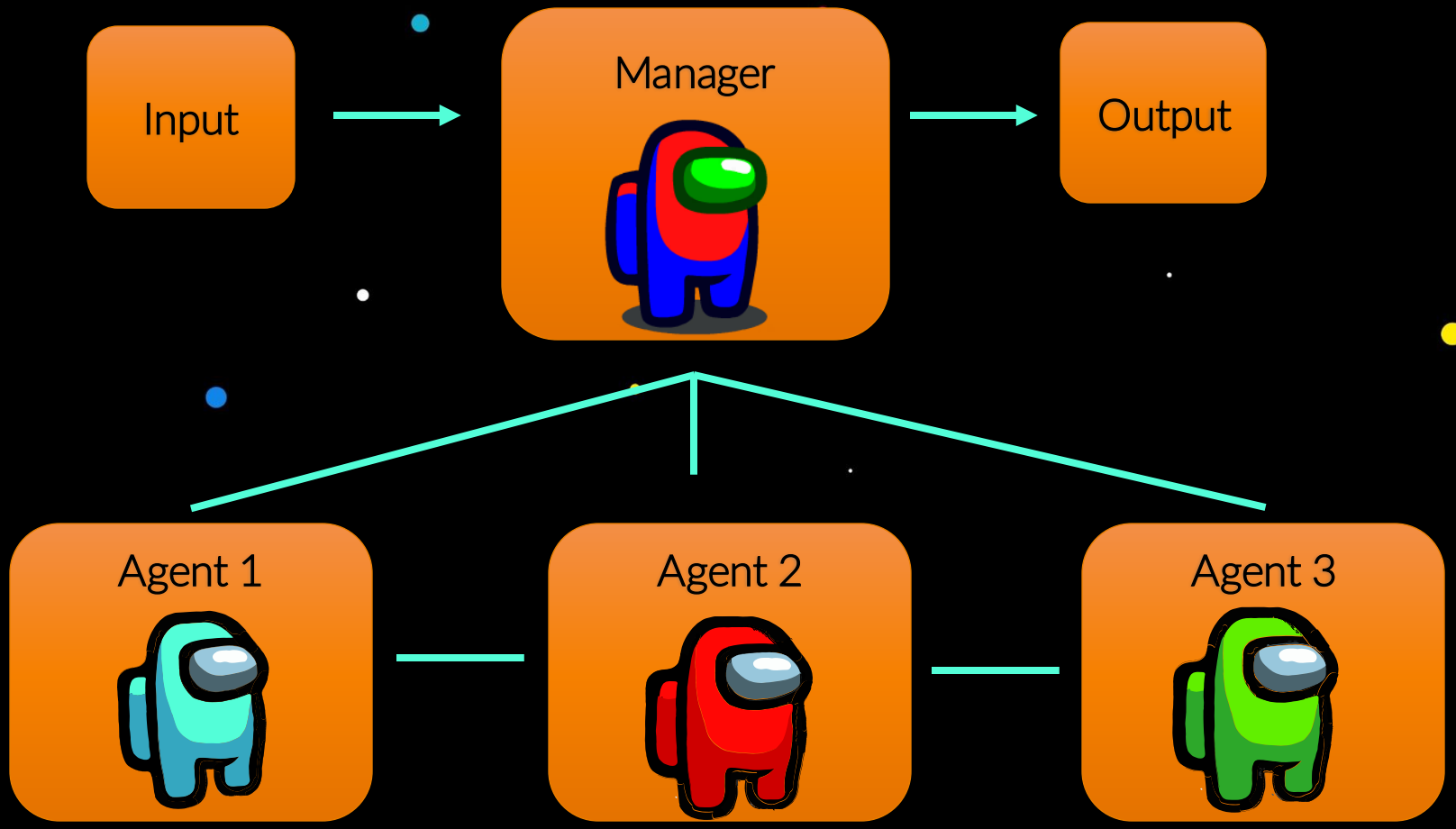
Give the model time to "think"	• work out its own solution before rushing to conclusion, use inner monologue
Use external tools	• use embeddings-based search, use code execution for calculations, access to specific functions
Test changes systematically	• evaluate model output with gold-standard answers,

https://platform.openai.com/docs/guides/prompt-engineering

Key Elements of AI Agent

- Role Playing
- Focus
- Tools
- Cooperation / Collaboration
- Guardrails / Limitations
- Memory

Agentic Framework Flow



Agent Coaching Guide

Manager

Goal?

Process?

What kind of individuals would I need to hire to get this done?

Which processes and tasks do I expect the individuals on my team to do?

Task

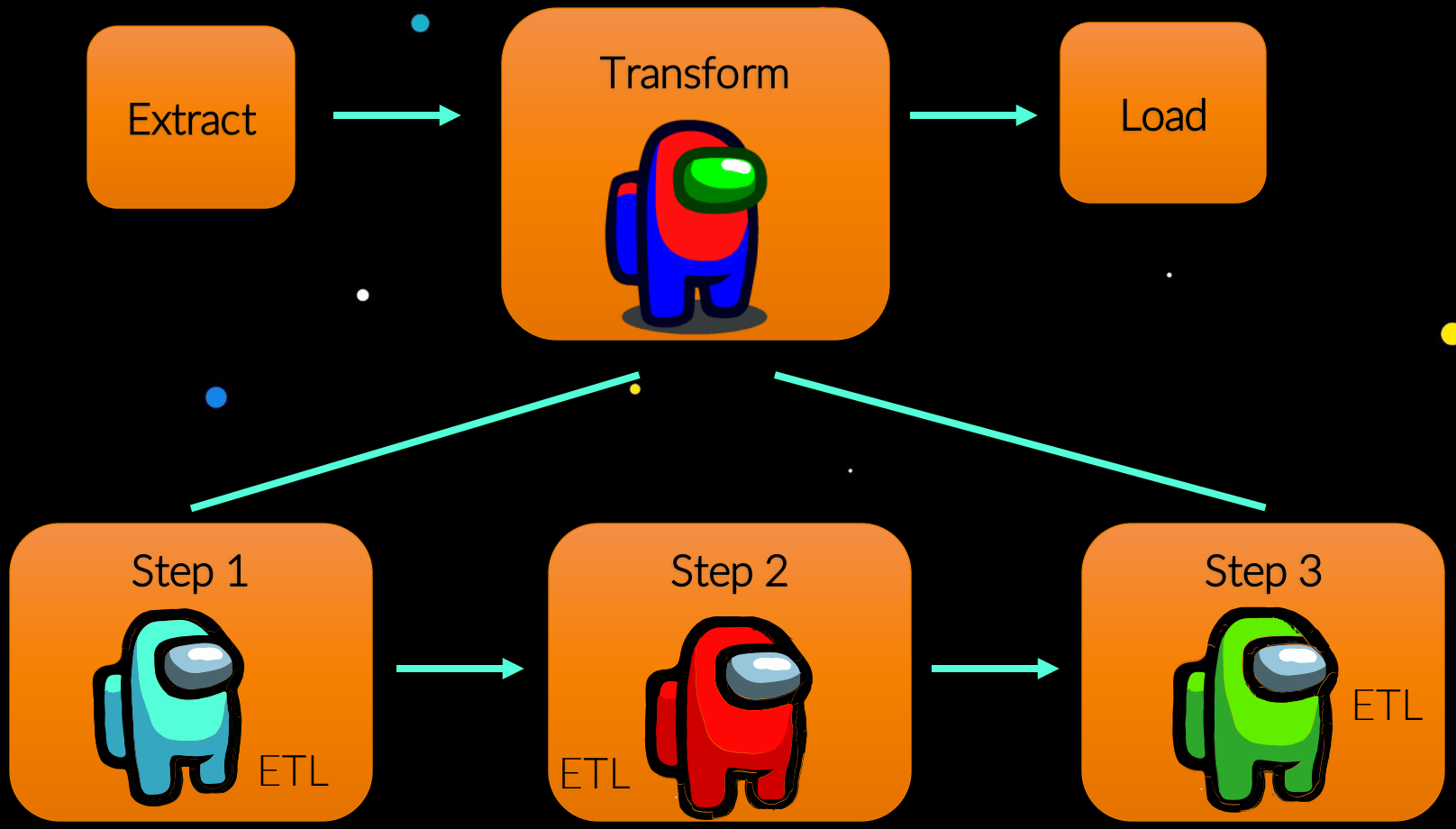
Task

Task

Task

Task

Data Pipeline Flow



DEMO

Do not humanize AI Agents

Generative AI

is not:

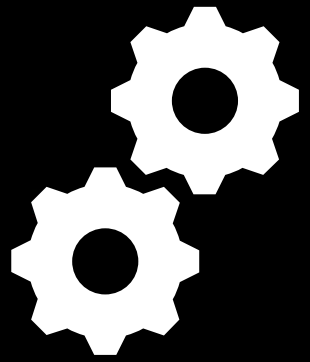
- Intelligent
- Deterministic
- Grounded

Generative AI

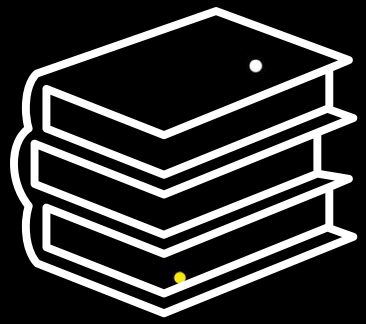
can not:

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

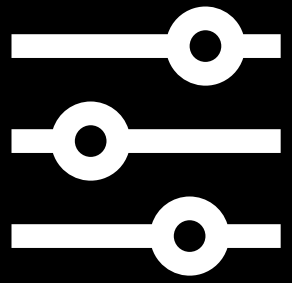
Effective Coaching



- Effective prompt engineering



- Provide validated data sources
- Ask for citations



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

Takeaway

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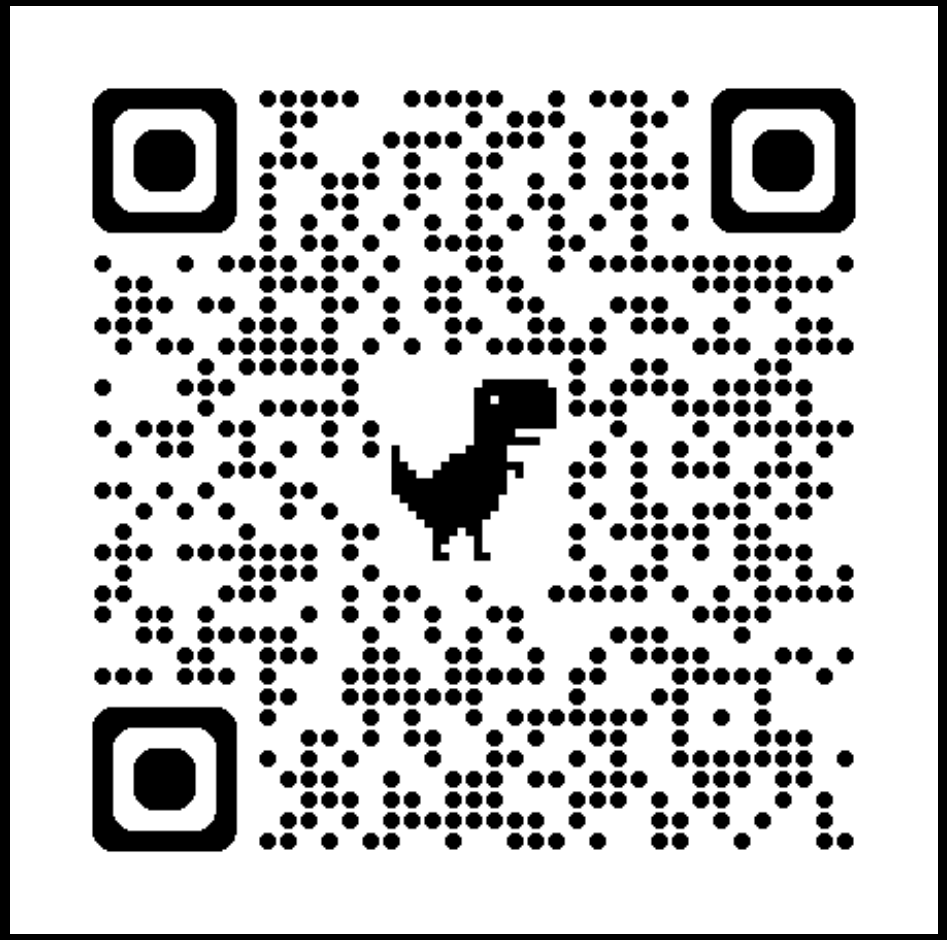
Relevant Links

1. https://www.deeplearning.ai/short-courses/multi-ai-agent-systems-with-crewai/
2. https://www.deeplearning.ai/short-courses/ai-agentic-design-patterns-with-autogen/
3. https://platform.openai.com/docs/guides/prompt-engineering



https://github.com/rondagdag/coaching-ai-agents

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- Linked In
  www.linkedin.com/in/rondagdag/
- Thanks for geeking out with me about AI Agents

Please provide feedback

THANKS