

# Introduction to Agentic AI

## Lesson 3: Best Practices

by Hand 

Prof. Tom Yeh

Hosted by



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Boulder

# Interactive

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I am from \_\_\_\_\_.

# Textbook

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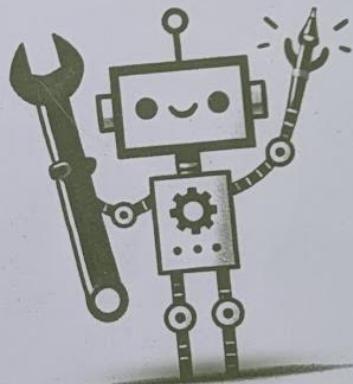


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# AI Agents

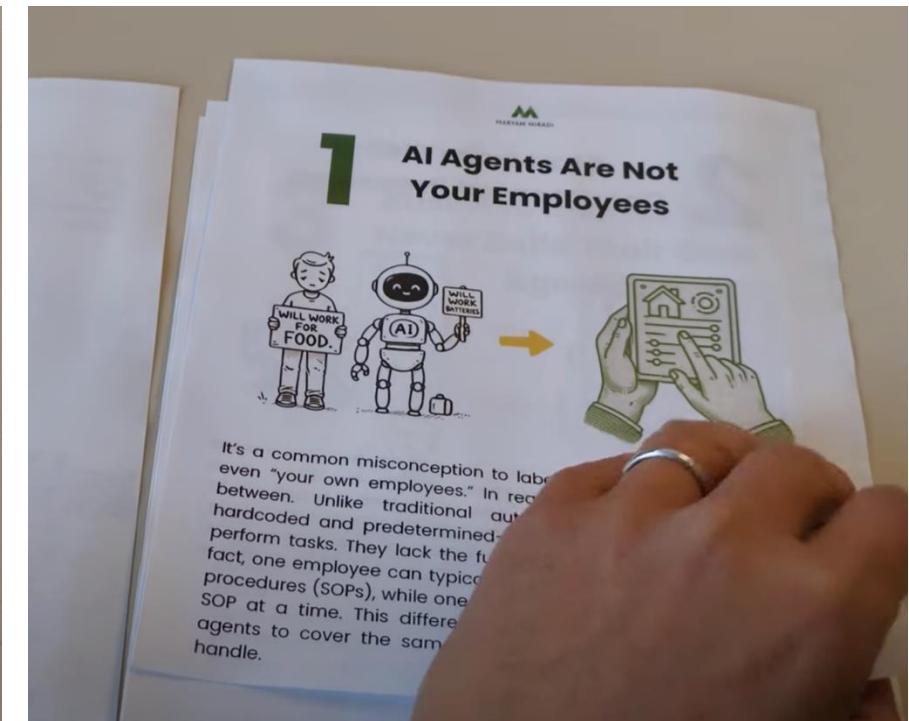
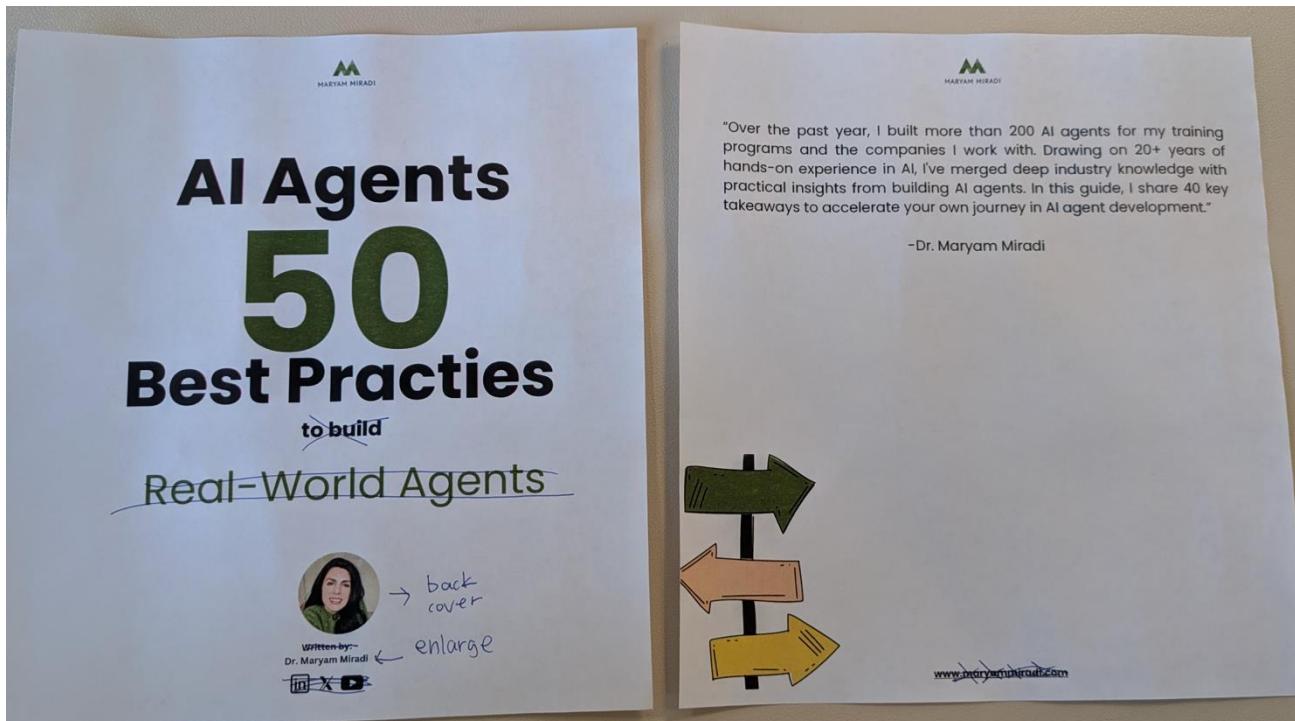
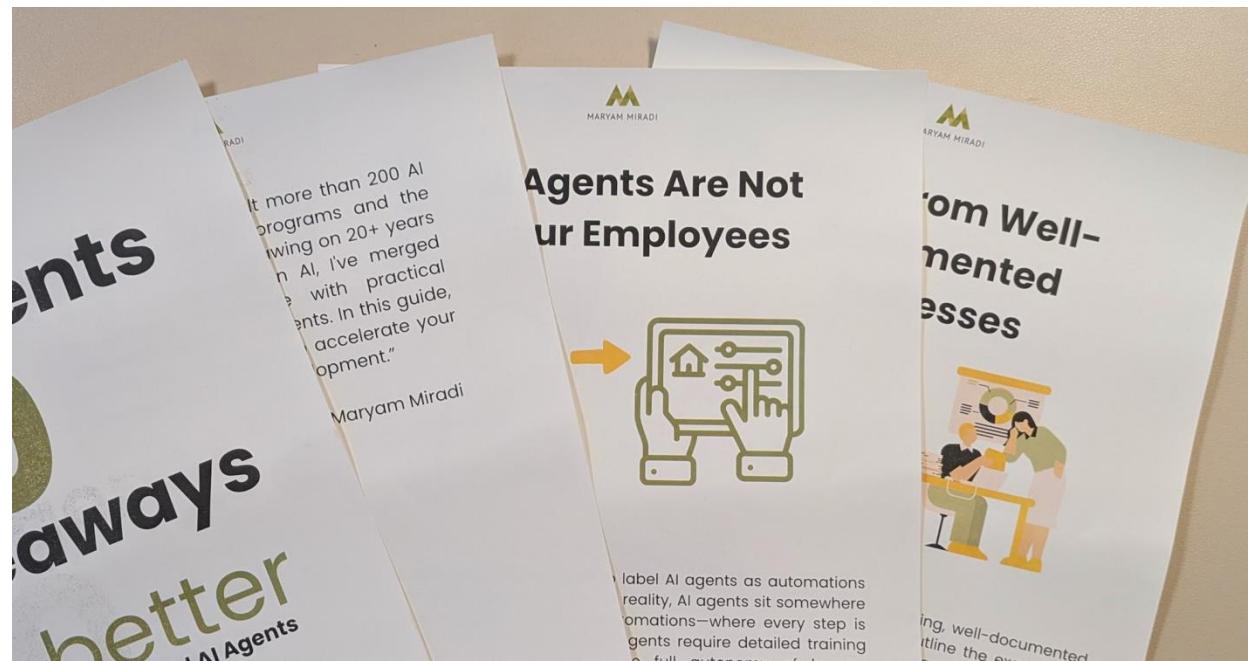
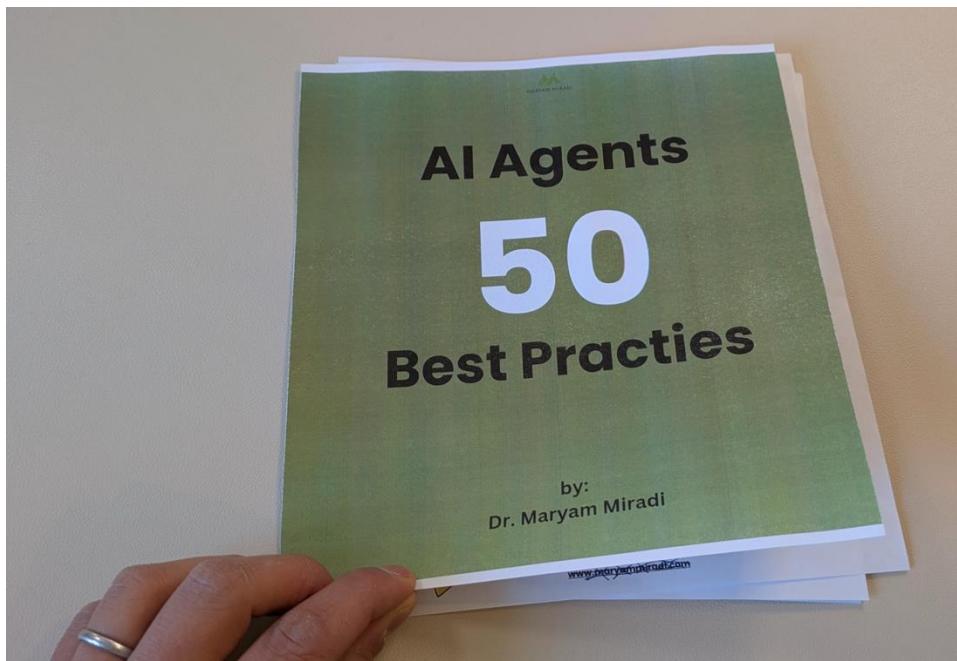
# 50

## Best Practices



Dr. Maryam Miradi





# Review Assignments

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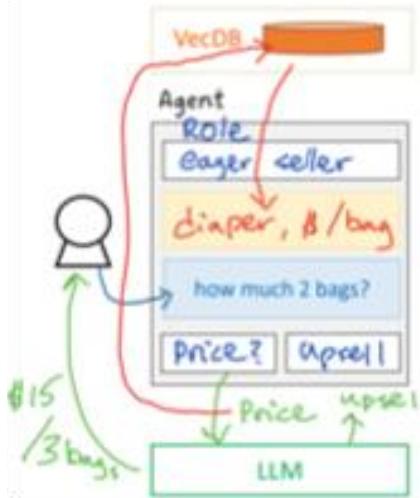


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# Lesson 1: Agent



Samiul



Vicent



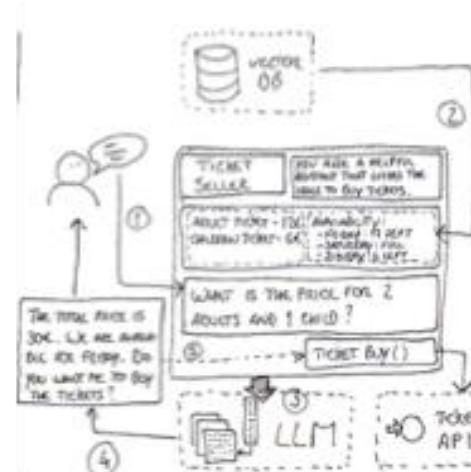
Nishita



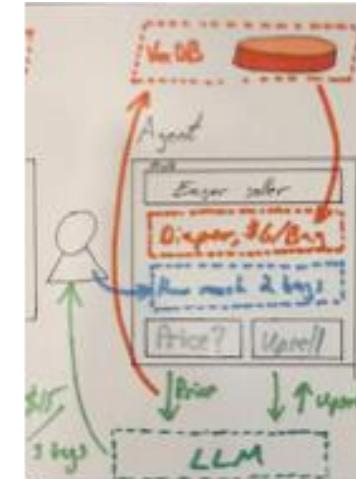
Georges



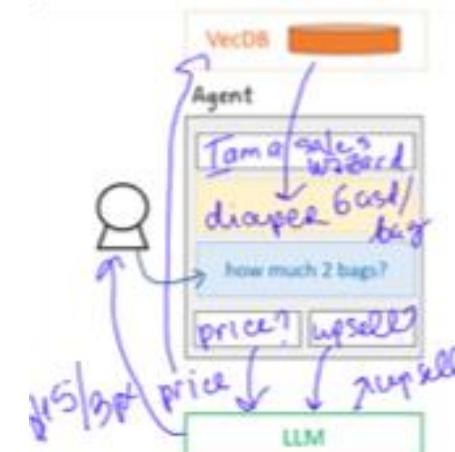
Kedar



Tiago

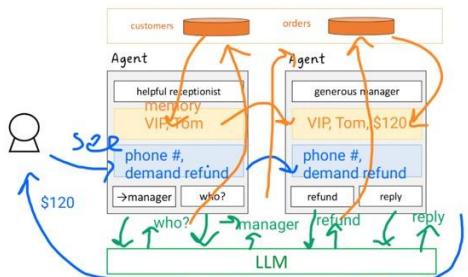


Mayer

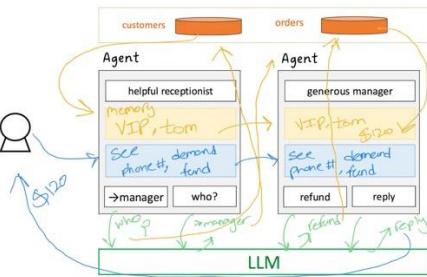


Maria

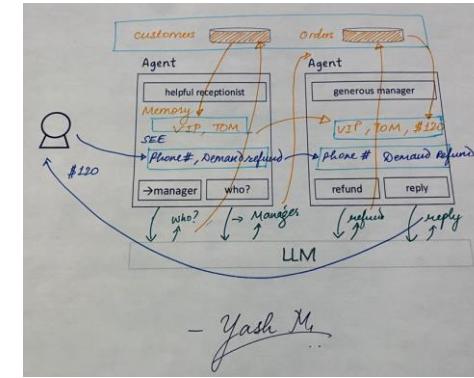
# Lesson 2: Multi-Agents



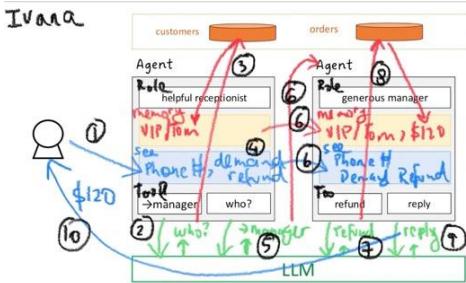
Maria



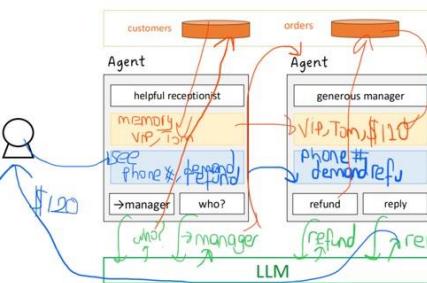
Muhammad



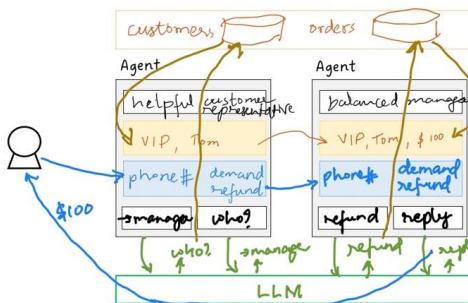
- Yash M.



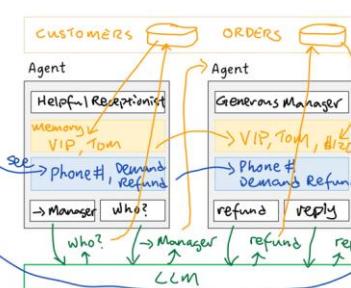
Ivana



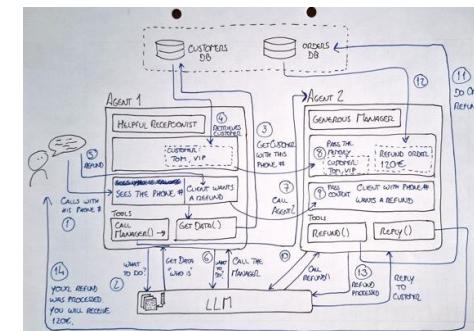
Asligul



Vinod



Vincent



Tiago



# How to study AI Agents

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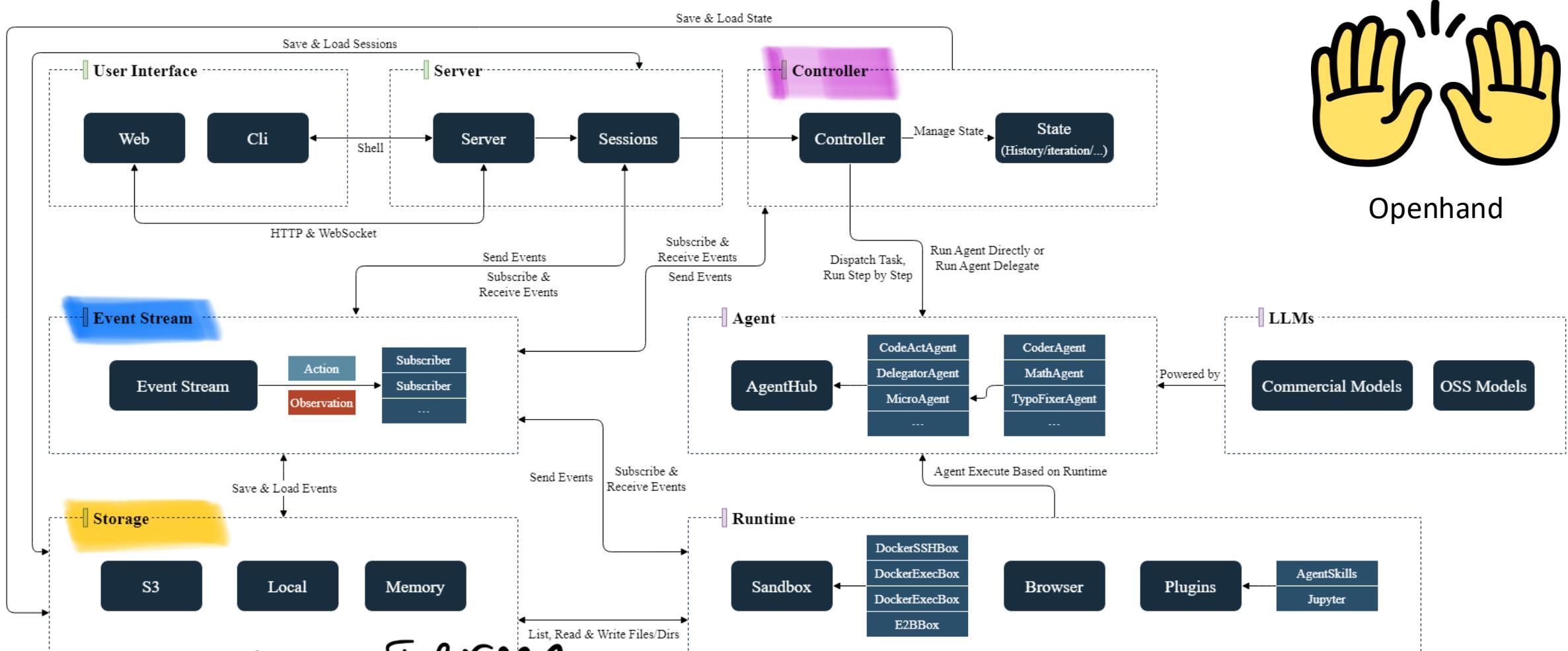


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# Agent thinks, sees, remembers, can

```
writer = Agent(  
    role='Writer',  
    goal='Narrate compelling tech stories about {topic}',  
    memory=True,  
    backstory=  
        "You craft engaging narratives to educate"  
    ),  
    tools=[search_tool],  
    allow_delegation=True  
)
```

# Multi-Agents Process Communication Memory LLM



Openhand

Jul 4, 2024

Long Term  
short Term (Cache)

what is AI by Hand 🖌?

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# Neural Network

AI by Hand 🖐

Tom

Sudhin

Bhishan



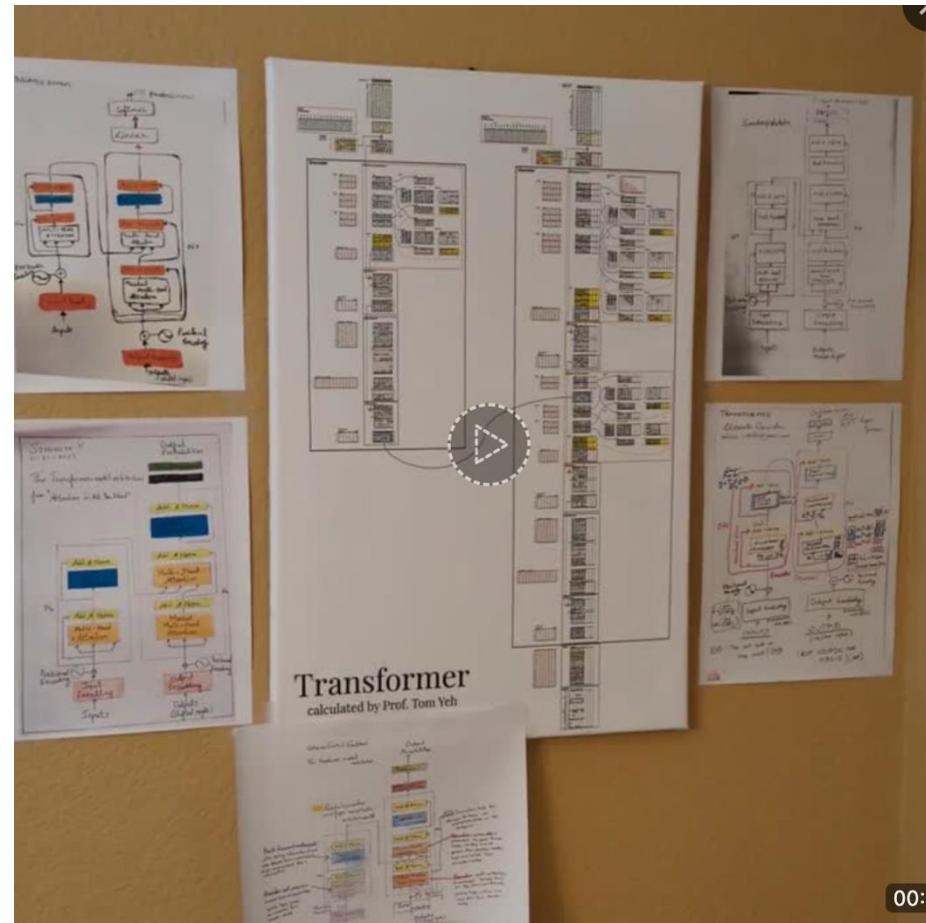
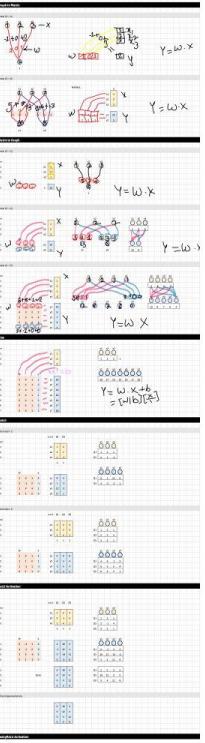
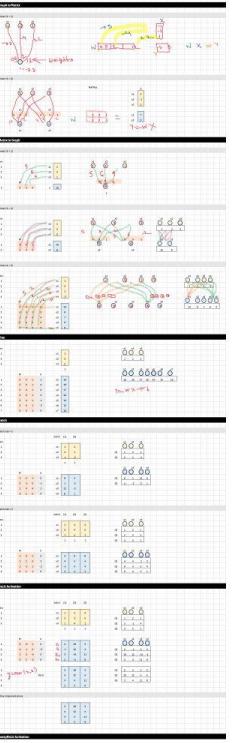
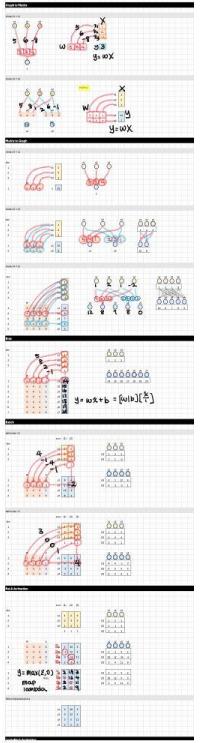
Boulder  
USA



Pokhar  
Nepal



Kathmandu  
Nepal



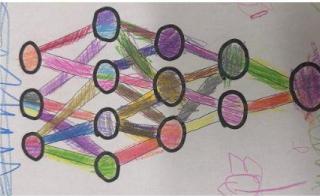
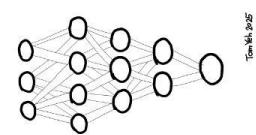
Watch my lecture videos at

[byhand.ai/youtube](https://byhand.ai/youtube)

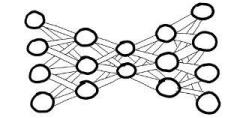
Color AI by Hand 🖐 Togeth

see my post to participate in the group art project

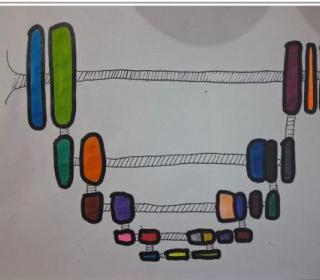
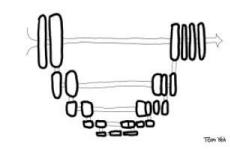
Neural Net



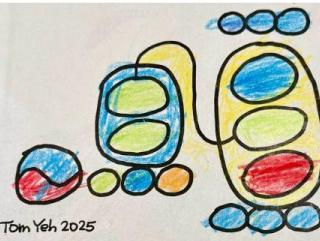
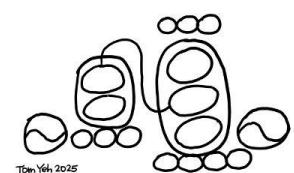
Auto-Encoder

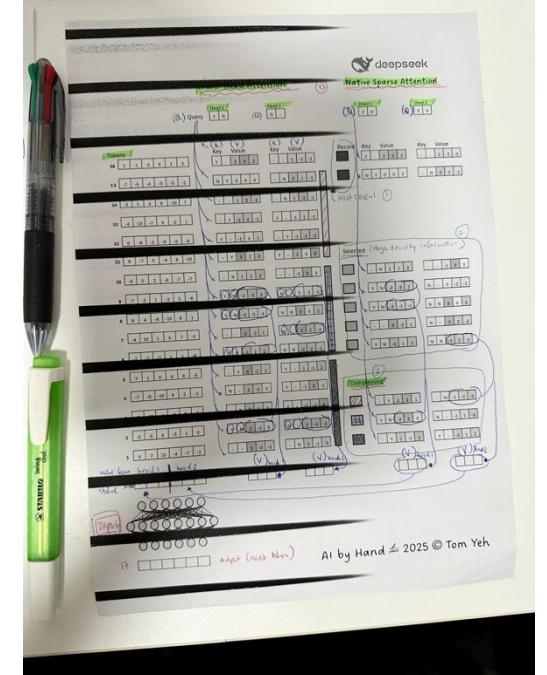
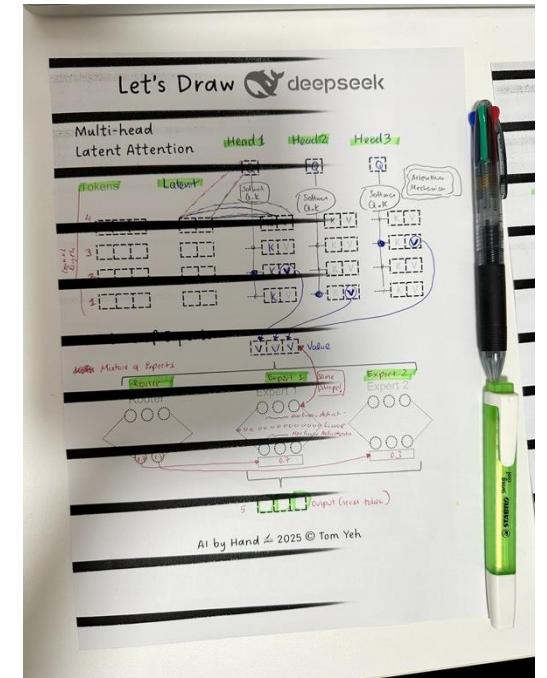
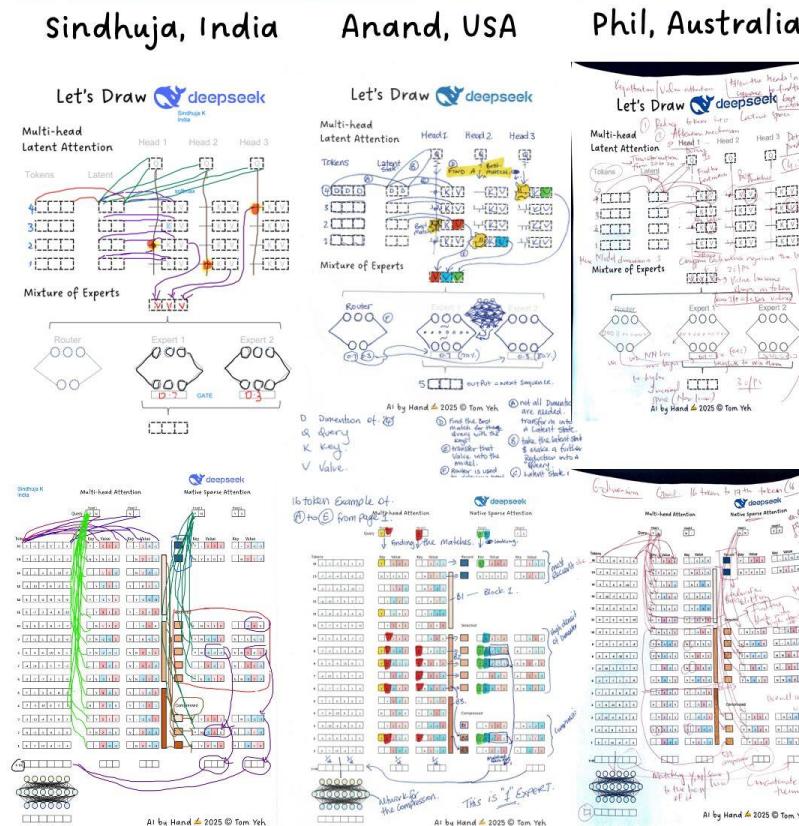
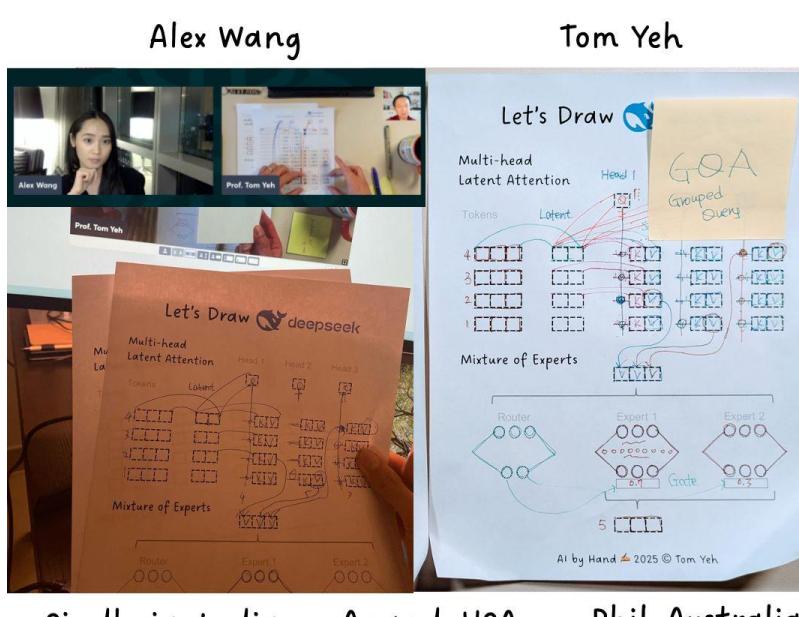
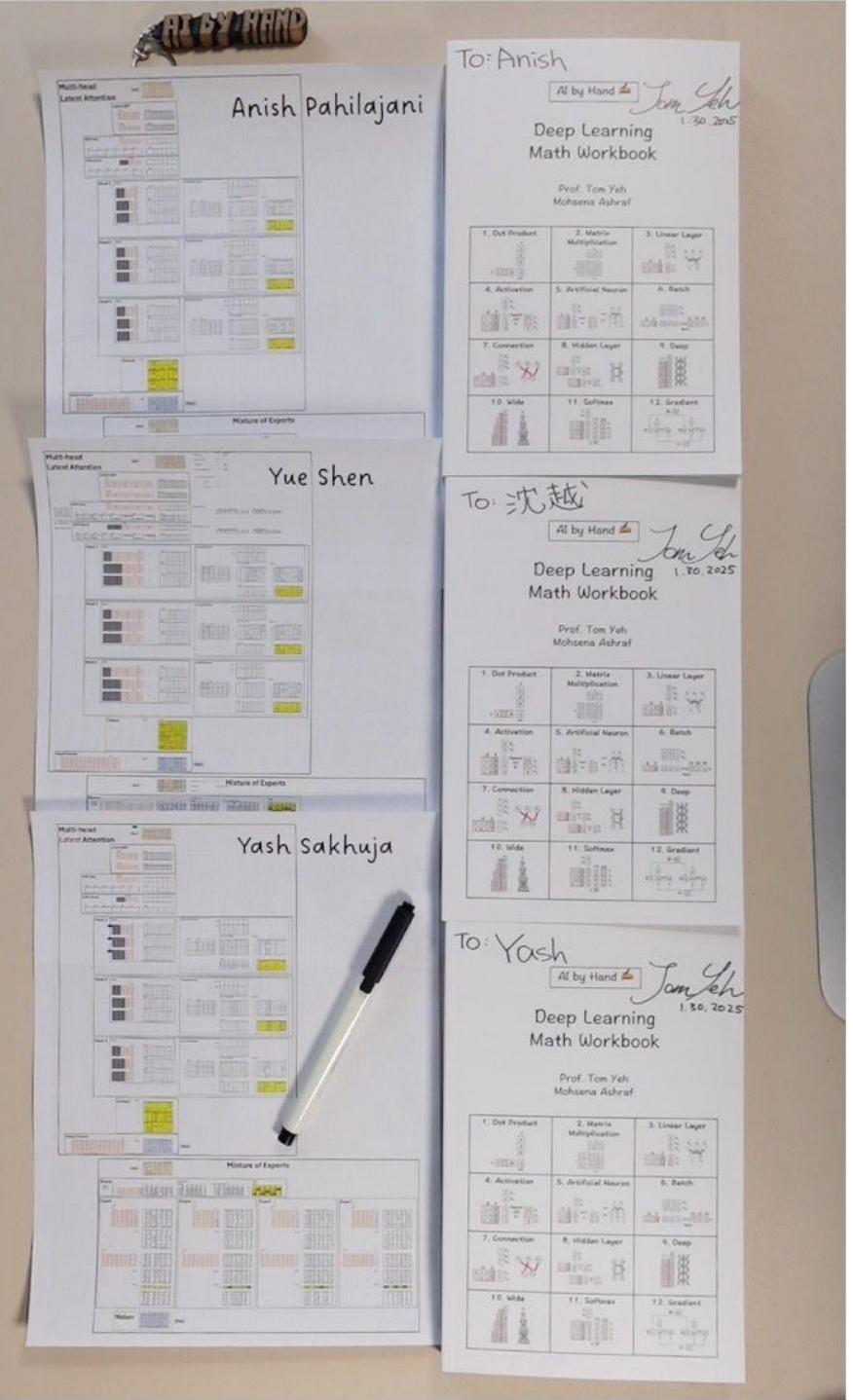


U-Net



Transformer



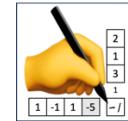
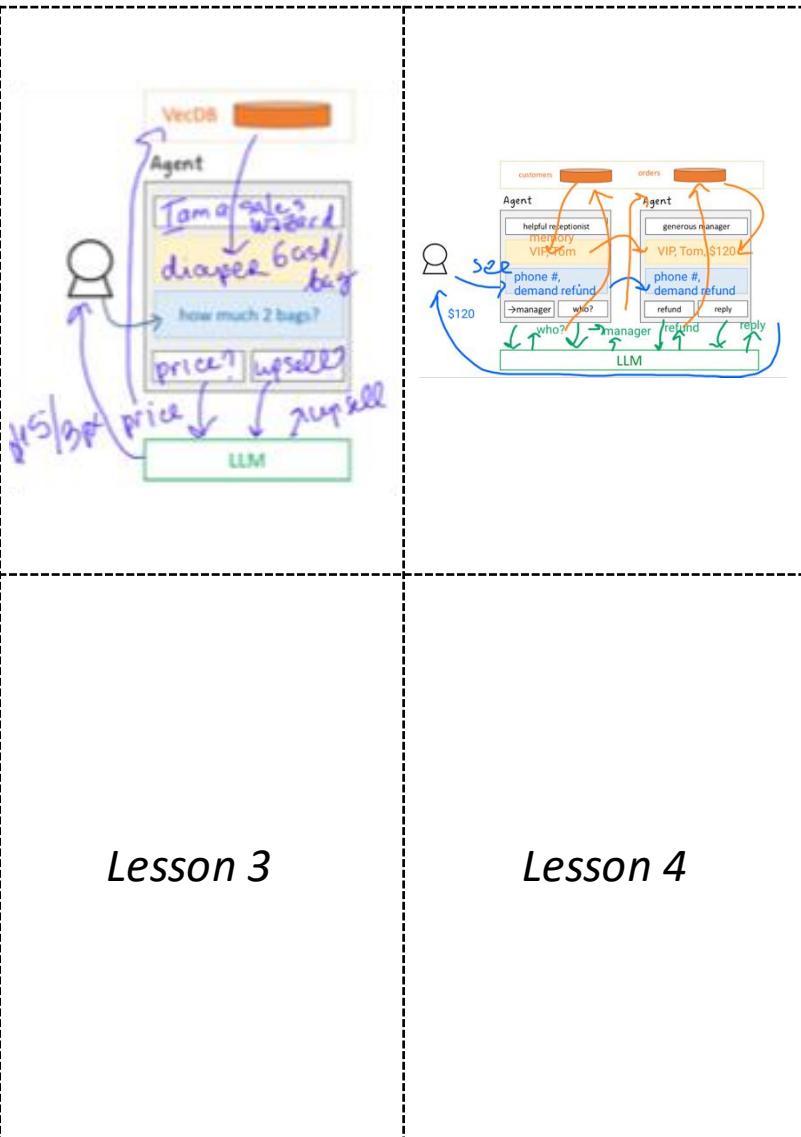


# Certificate

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# Certificate of Achievement

I certify that

Maria Petrenko

Completed

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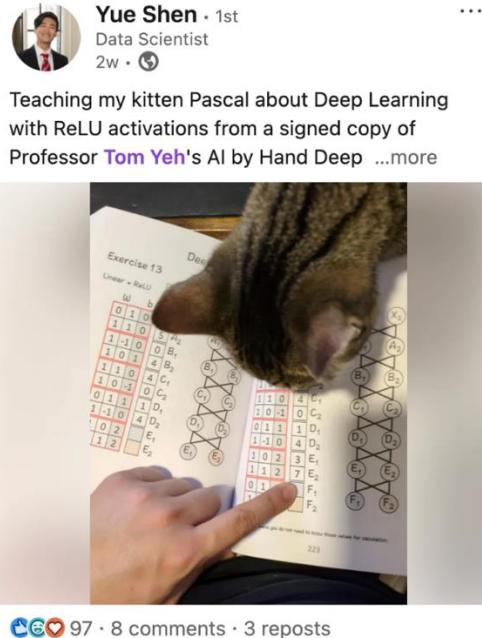
# Prizes

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## AI by Hand Deep Learning Math Workbook



## Langflow Notebook



## AI Agents 50 Best Practices



## GenAI.Works Agent T-shirt Limited Edition



# Best Practices

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agents require detailed training to perform tasks.

1. AI Agents are not Your Employees

Are  
same tasks

have access to company  
data

Are Not

tools, not paid, not  
Independent,  
not auto → need intervention  
can't → human intelligence  
no EI / CPP  
no human relation  
no legal right

one employee can handle  
multiple SOPs  
one agent can handle 1  
SOP

## 20. Agents Need to be Adaptable Based on Feedback

Agent thinks, sees, remembers, can

```
writer = Agent(  
    role='Writer',  
    goal='Narrate compelling tech stories about {topic}',  
    memory=True,  
    backstory=  
        "You craft engaging narratives to educate"  
,  
    tools=[search_tool],  
    allow_delegation=True  
)
```

*sarcastic songs, poems*  
*{ } stories*

*talk to human (RHLF)*

dynamically

**MCP** Model Context  
Protocol

HTTP

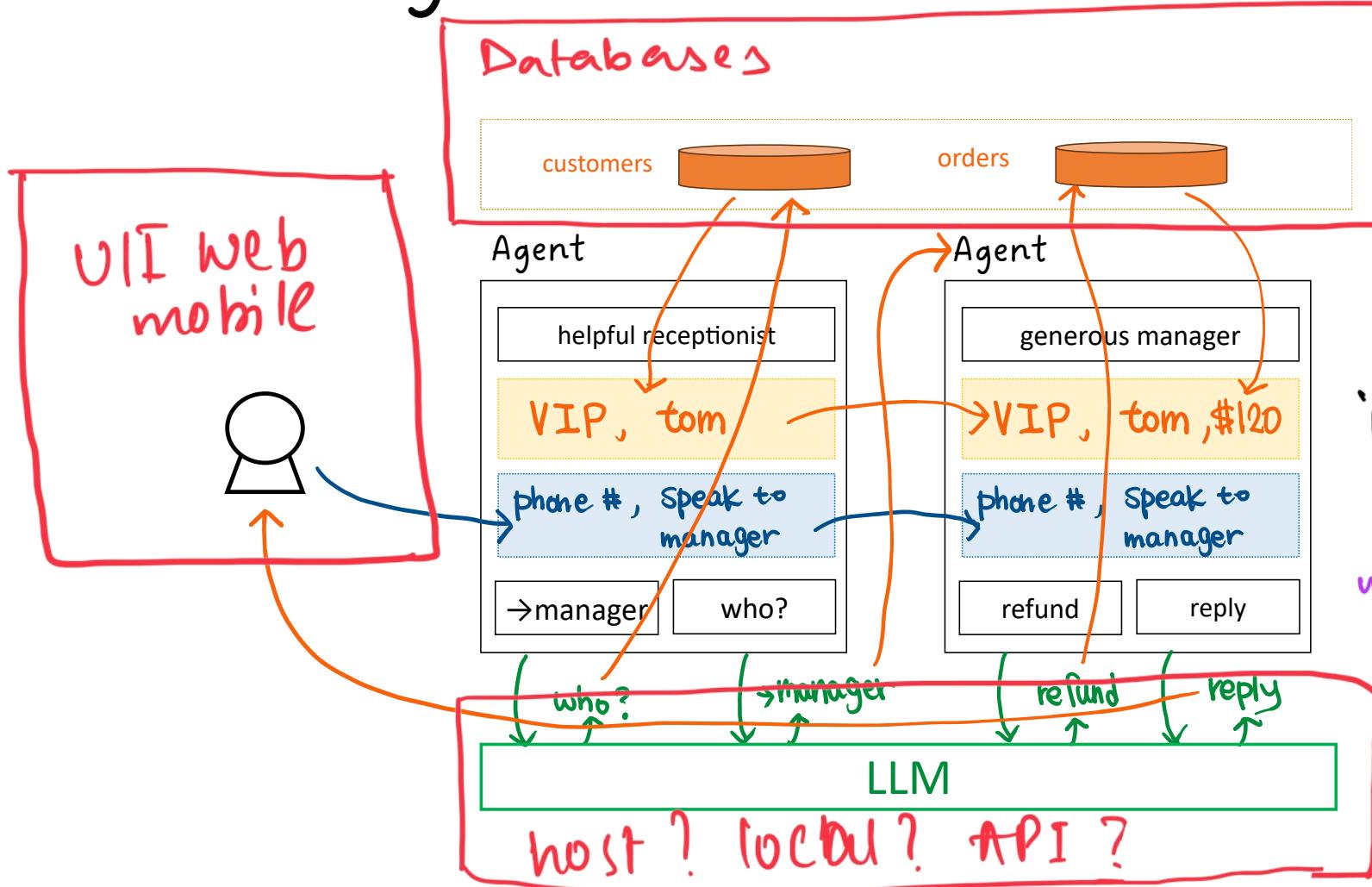
### 3. Business Owners will never Build Their Own Agents

Will  
competitive advantage.  
Open SOP  
customization, better  
control, business models

Will Never  
hire someone else, cost less  
depends on the complexity  
Purchase templates, hard to maintain

hybrid approach  
AI agent platforms won't end the demand for AI agent expertise. Determining the right agents to build tailored to a business unique needs - remains a specialized skill that clients will always entrust to professionals.

## 8. Integrations Are Just as Important as Functionality



The best AI systems enhance workflows by integrating seamlessly into existing infrastructure

"AI doesn't replace humans"

AI agents

## 12. Model Costs Don't Matter

Do

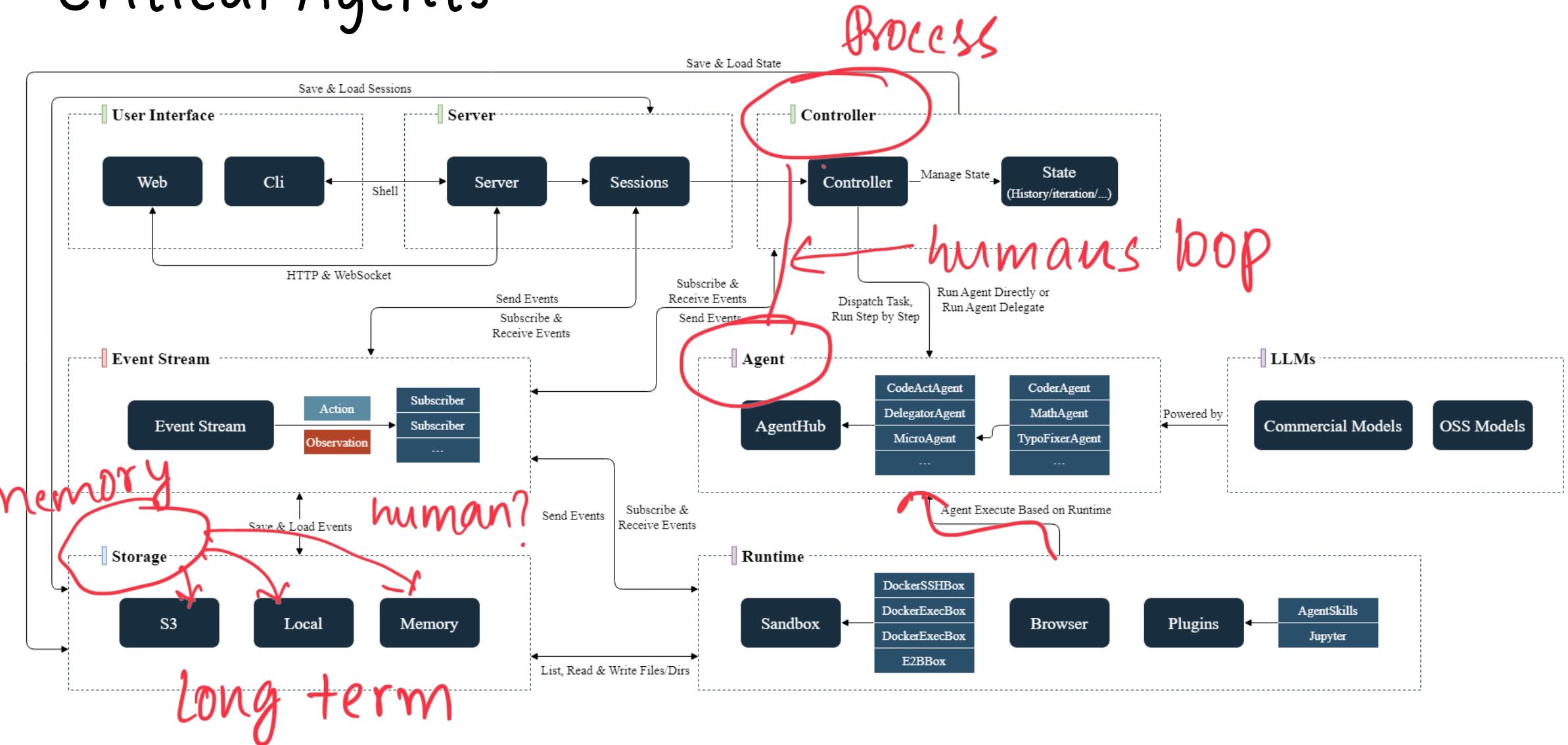
budget, bottom line, ROI.  
cost errors, startup.

Don't

time saving ↑ healthcare benefit ↑  
reliability ↑ productivity ↑  
depends use ease human cost ↓  
creativity ↑

- \* If ROI is significant - consider ✓
- \* Focus on value creation, costs will naturally be justified by the substantial savings & efficiencies gained

# 24. Include Humans in the Loop for Mission-Critical Agents



## 25. \_\_\_\_\_ AI Agents Define the Future

Vertical

domain specific  
requirements/demand  
more profitable

General

general  
wider audience

# Q/A

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# Assignment

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