

# Build Practical AI Agents with h2oGPTe



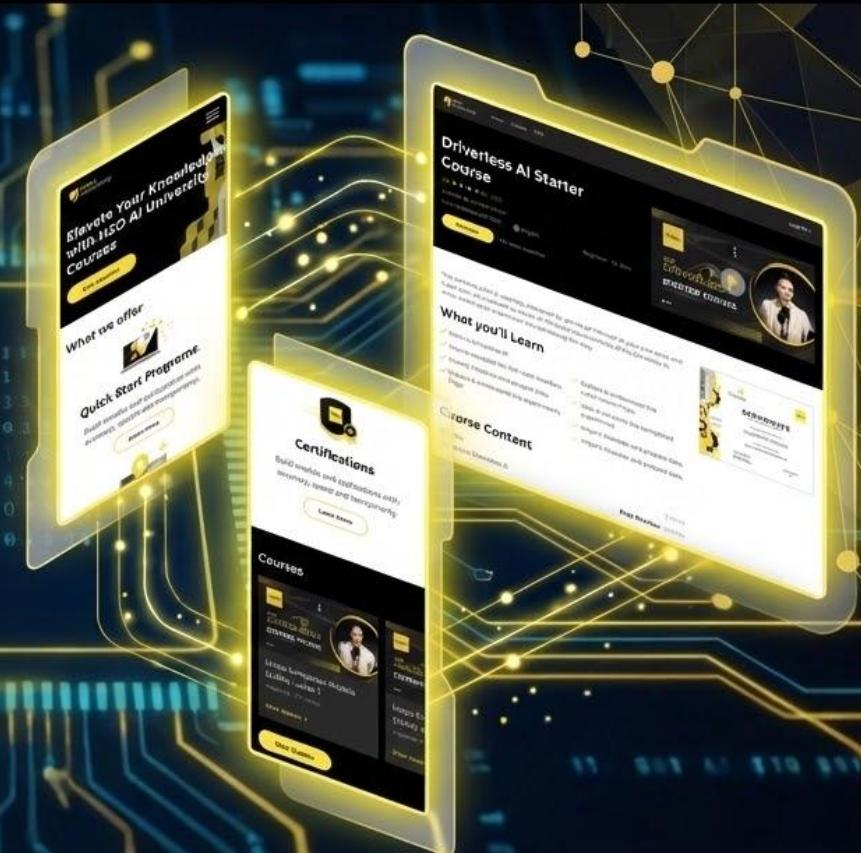
SPEAKER

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H2O.ai

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# OUR CENTRALIZED LEARNING HUB

Access training videos and resources  
for better accessibility, anytime,  
anywhere.



# Why Agents Matter Today

- 78 % of companies now use AI in at least one business area
- GenAI users report ~5 % productivity gain  $\approx$  2.2 h/week saved
- Daily GenAI users report higher productivity, compensation, and job stability

Sources: Stanford HAI (2025) • St. Louis Fed (2025) • PwC Global Workforce Survey (2025)

# What if you could build your own AI agent in minutes?

Are you ready to:

- Build an AI agent or two?
- See how agents can optimize your everyday work?

Take a look at this live example:



[https://andreea-turcu.github.io/holiday-company-gift-card-agents-demo/index\\_v2.html](https://andreea-turcu.github.io/holiday-company-gift-card-agents-demo/index_v2.html)

*Are you ready to learn how this entire demo app was built in just a couple of minutes from scratch?*

# AGENDA

1. Introduction
2. Build Your First Agent in 10 Minutes
3. Upgrade Your Agent with Smart Capabilities
4. Certification and Conclusions

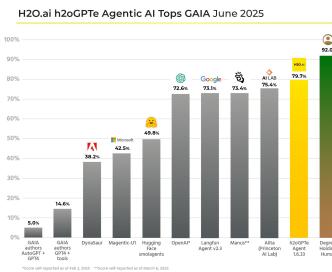
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# No one is closing the last mile between AI and enterprise value.

H2O.ai

- **World's Best** Agentic AI and Deep Research
- **Built-in Evaluation Toolkit** to benchmark and validate agents



- Offers **Sovereign AI** with leading Generative AI, AutoML, Deep Learning for clouds and air gapped deployments



- **Deep Domain Expertise** in BFSI, Telco and Public Sector with **Proven ROI**
- **Ready-to-use** vertical reference designs can be customized for your use case



- **Validated on NVIDIA** Enterprise AI Factory and DELL AI Factory

[BLOG ANNOUNCEMENT](#)  
[WHITEPAPER](#)



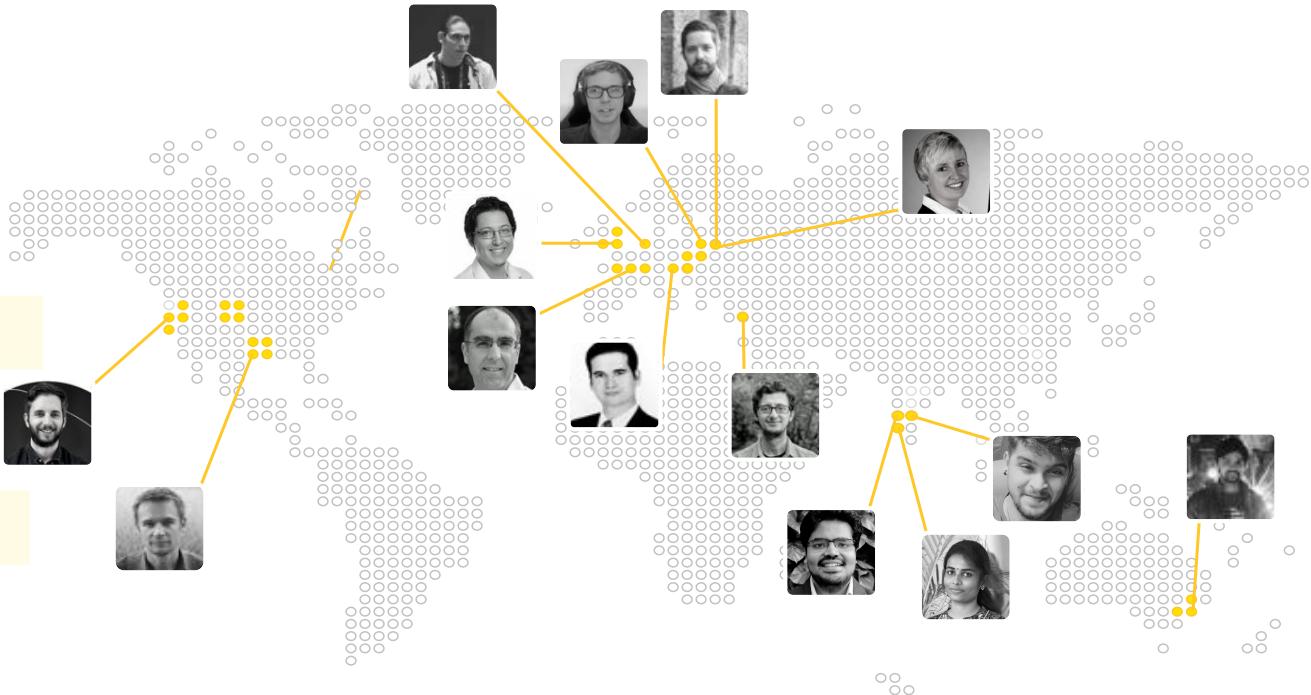
\* IRAP and FedRAMP High in process

## Grandmaster Led Time to Value

H2O.ai embeds the world's top data science talent directly into end customer's projects - H2O.ai's unmatched team of top Kaggle Grandmasters (5% of the world's elite), domain experts, and SMEs, co-creates and develops agents with the customer, giving them a unique edge no other software vendor can offer.



# KAGGLE GRANDMASTERS World's Best Data Scientists



1 Triple GM  
4 Double GMs

3 World #1

2 Top 10 Globally  
5 Kaggle Masters



H2O products are backed by **5% of the World's Data Science Grandmasters** and a **Team of Experts** who are relentless in solving critical problems.

## H2O.ai KGM HIGHLIGHTS

- Released foundational language model H2O Danube3
- Released foundational vision model H2O Mississippi
- Building autoML for fine-tuning
- Top spots in competitions:
  - Detect AI Text
  - LLM Prompt Recovery
  - Human Preference
  - Predictions
  - PII Detection
  - Arial Data Challenge

# What is an Agent?

An agent is like a smart robot that can:

- Think (using AI)
- Use tools (like a calculator, search engine, or drawing program)
- Do multiple steps by itself to complete your task

**Creating an Agent = Giving the Robot Superpowers**

# Why Agents Matter Today

## Challenges teams face

- Repetitive manual tasks
- Slow turnaround for analysis and prototypes
- Fragmented tools and inconsistent outputs

## What agents change

- They reason and follow multi-step processes
- They generate structured, reusable outputs
- They integrate with tools and data inside your environment

# Why Agents Matter Today

## Challenges teams face

- Repetitive manual tasks
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## What agents change

- They reason and follow multi-step processes
- They generate structured, reusable outputs
- They integrate with tools and data inside your environment

## Why it matters now:

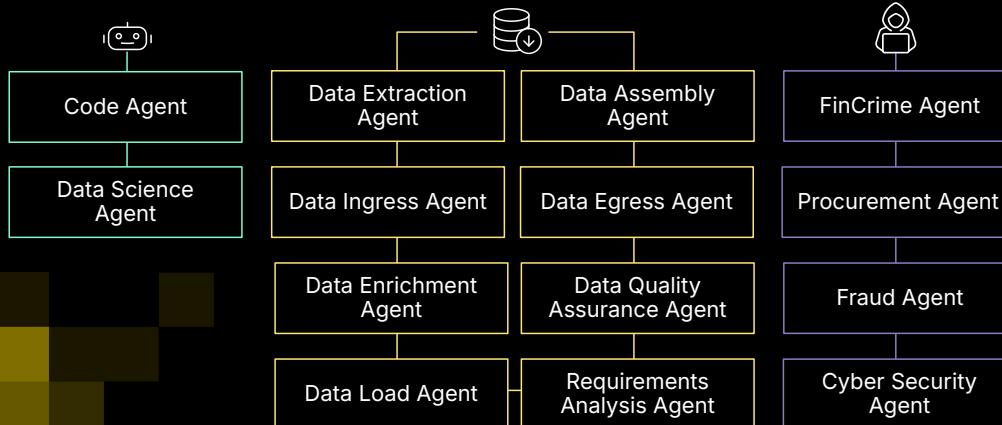
- Agents move AI from assistance to real execution.
- They unlock consistency, speed, and automation that traditional models cannot provide.

We deliver **ready-to-use vertical agents** that can be customized with your data, tools, and models for faster time to value.

OUT-OF-THE-BOX AGENTS, READY TO BE CUSTOMIZED



VERTICAL TASK AGENTS



Use your agent as is, or customize for your exact needs:

- Modify the System Prompt to push for specific tasks and goals
- Enable and disable any of 25+ out-of-the-box tools
- Add your own tools:

Existing MCP servers	Custom MCP servers	Browser tools	Prompting + python tools
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- Choose if you want to emphasize speed / low cost or accuracy
- Choose your LLM:
 

Bring your own external model	Use local models like oss-gpt, llama 4 scout and more
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- Enable guardrails, PII detection

Save the settings so that any users that come to this use case get an agent that works just how you want it to

- Role based access control to make sure the right people can use or modify each use case
- Access from the H2O UI or integrate with Rest and Python APIs

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# Connect to Enterprise h2oGPTe

Go to the main website: [h2o.ai](https://h2o.ai)

Type: What is Enterprise h2oGPTe in the Chat bar

Press Enter

You will be directed to the <https://h2ogpte.genai.h2o.ai/chats/> for getting the answer

You can Sign in with your Google, Apple or Github account to have access to more capabilities.

# Follow along to create a working agent using built-in tools

## Enable the Agent

1. [CLICK: + New Chat]
2. [CLICK: Customize button]
3. Open Config tab
4. Scroll to Use Agent
5. [TOGGLE: Use Agent = ON]
6. Watch the UI expand (Agent Type, Accuracy, Tools appear)

# Follow along to create a working agent using built-in tools

## Configure Your Agent

In the Config tab:

1. Agent Type: General
2. Agent Accuracy: Standard
3. Under Tools, enable only:
  - python
  - internet
4. Disable all other tools
5. [Close the panel]
6. Confirm “General” badge in chat

# Follow along to create a working agent using built-in tools

Test Your Agent

Copy and paste this prompt:

*I'm planning a holiday party for 15 people with a \$300 budget.*

*Can you help me create a complete party plan including:*

- Budget breakdown (food, drinks, decorations, entertainment)*
- 3 easy appetizer recipes*
- A shopping list*
- A timeline for party prep*

*Make it festive and fun for a Christmas theme!*

Then [PRESS: Send]

# Follow along to create a working agent using built-in tools

## Generate Structured Output

Copy and paste:

*Perfect! Now regenerate that party plan as a JSON object with this schema:*

```
{  
  "party_details": {  
    "theme": "string",  
    "guest_count": number,  
    "total_budget": number  
  },
```

Then [PRESS: Send]

# Follow along to create a working agent using built-in tools

## Validate JSON

1. **[COPY the JSON]**
2. Go to [jsonlint.com](http://jsonlint.com)
3. **[PASTE and validate]**
4. Look for: “Valid JSON”

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# Upgrade Your Agent with Smart Capabilities

To begin:

- Stay in the same chat as before
- [CLICK: Customize button]
- [CLICK: Config tab]
- Verify **Use Agent = ON**
- Confirm:
  - Agent Type: **General**
  - Agent Accuracy: **Standard**
  - Tools: python, internet

# Upgrade Your Agent with Smart Capabilities

In **Config** tab:

1. Scroll to Tools
2. Enable:
  - python
  - internet
  - **Rag Text**
3. Drag and Drop a document (example: “Company Policies”):  
<https://triagelogic.com/wp-content/uploads/2018/06/Company-Policy-and-Procedure-June-1.18-V6.0.pdf> )
4. Return to **Config** and check in Collection the document and verify tools

# Upgrade Your Agent with Smart Capabilities

In **Prompts** tab:

- Open **System Prompt** and B the current Prompt
- Paste the following instructions:

***You are an AI Agent that must follow these rules:***

- 1. Always use rag\_text to retrieve relevant information from the attached document collection before answering.***
- 2. Base your answers on the retrieved content and cite alignment or conflicts clearly.***
- 3. When budgets or constraints are provided, enforce them strictly.***
- 4. When asked for structured output, return valid JSON matching the schema exactly.***

# Upgrade Your Agent with Smart Capabilities

Copy and paste this prompt:

***I need to find appropriate holiday gifts for 3 different people:***

- 1. A colleague who loves tech gadgets (budget \$40-70)***
- 2. A senior client who wants thoughtful, professional gifts (budget \$80-120)***
- 3. A new team member who enjoys cooking and creative hobbies (budget \$25-50)***

***Please:***

- Use my company policy guidelines from our RAG collection***
- Follow the budget rules strictly***
- For each person, give 3 gift options***

Then [PRESS: Send]

# Upgrade Your Agent with Smart Capabilities

In **Config** tab:

1. Check answer
2. Add a new document on “Company Policies” that contains Gift-Giving Guidelines:  
<https://diabengineering.com.au/wp-content/uploads/2019/02/HSE-MAN-001-001-DIAB-Engineering-Policy-Manual-Rev05-All-Policies.pdf> )

# Upgrade Your Agent with Smart Capabilities

Copy and paste this prompt:

*I previously asked you to find appropriate holiday gifts for 3 different people with specific budgets and constraints. Now I need you to create an interactive HTML Gift Recommendation Dashboard to visualize those recommendations.*

**ORIGINAL GIFT REQUEST:**

*I need to find appropriate holiday gifts for 3 different people:*

- 1. A colleague who loves tech gadgets (budget \$40-70)*
- 2. A senior client who wants thoughtful, professional gifts (budget \$80-120)*
- 3. A new team member who enjoys cooking and creative hobbies (budget \$25-50)*

*Please:*

- Use my company policy guidelines from our RAG collection*
- Follow the budget rules strictly*
- For each person, give 3 gift options*
- Include JSON output with:*
  - gift\_name*
  - price*

Then [PRESS: Send]

# Upgrade Your Agent with Smart Capabilities

Download the html file

Explore, improve

Copy and paste this prompt:

*Modify the html so that I can click on the option, one choice per column/ individual, so that when the gift is selected the budget used updates with the price of that product/ gift only, and there is a button in addition, where you can click after selection, to forward in an email where you need to inform the email address and the name of the person, object plus description about Happy Holidays, here is you gift card, thank you !*

*Open the generated email writing to google account directly, and instead of the original colors use my company branding kit that you can find here:*

<https://h2o.ai/company/brand-kit/>

Then [PRESS: Send]

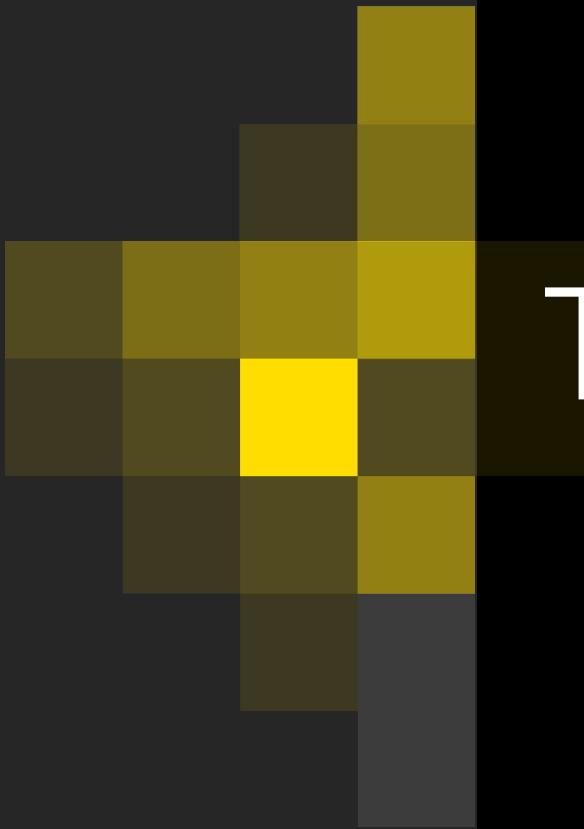
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# Certification

<https://www.classmarker.com/online-test/start/?quiz=6kk693b055cdcb23>





# Thank You!