

How to create your AI Assistant applying for jobs

Artur Kuzmin

Agents - iPhones?



Agenda

- [10 min] From LLM to Agents
- [10 min] Demo
- [30 min] Practice
- [10 min] Showcase

Goals

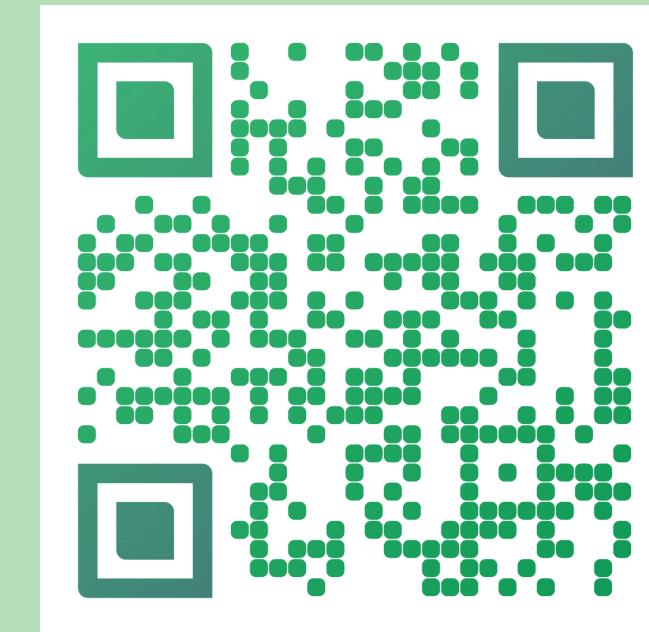
- This is not a deep technical workshop.
- The goal is to get you curious about AI Agents.
- And play with them with as little setup as possible.
- And to come up with your own ideas of how they can be used.

A close-up selfie of Artur Kuzmin, a man with short brown hair and a slight smile, standing next to a kangaroo. The kangaroo is brown with a white patch on its chest. They are outdoors on a beach with the ocean and sky in the background.

Artur Kuzmin

Director of Engineering at Squire,
Co-founder of Talent Agent
Google Developer Expert

linkedin.com/in/arturkuzmin/
twitter.com/ArtursTwit



Talent Agent

Free 7-day resume building bootcamp.



<https://a.gettalentagent.com/bootcamp/ar>

From LLM to Agents

Introduction: What are AI Agents?

- AI Agents are software systems that can perform tasks autonomously or with minimal human intervention.
- They can process information, make decisions, and take actions.

Early Days of LLMs - Text Input/Output

- Initial LLMs could only process text input and generate text output.
- Used for tasks like text completion and question answering.

Limitations of Early LLMs

- Limited to predefined tasks and data.
- No ability to interact with external systems or perform actions outside of text processing.

Introduction of Function Calling in LLMs

- LLMs gained the ability to call functions, allowing them to interact with external systems.
- Requires Structured Output.

Advantages of Function Calling

- You've got a function? LLM now can use it.
- Ability to integrate with APIs, browser network, etc.

AI Agents

- Get a goal.
- Plan how to achieve it.
- Use tools or tool sets as needed.
- Decide, when the goal was achieved.

Hugging Face's take on Agents

Agency Level	Description	How that's called	Example Pattern
☆☆☆	LLM output has no impact on program flow	Simple Processor	<code>process_llm_output(llm_response)</code>
★☆☆	LLM output determines an if/ else switch	Router	<code>if llm_decision(): path_a() else: path_b()</code>
★★☆	LLM output determines function execution	Tool Caller	<code>run_function(llm_chosen_tool, llm_chosen_args)</code>
★★★	LLM output controls iteration and program continuation	Multi-step Agent	<code>while llm_should_continue(): execute_next_step()</code>
★★★	One agentic workflow can start another agentic workflow	Multi-Agent	<code>if llm_trigger(): execute_agent()</code>

Free Agents course

<https://huggingface.co/learn/agents-course/>

Free APIs!



1. Google Gemini. 15 RPM for fast model
2. Groq. 30 RPM. Mistral / LLama / Qwen / Deepseek distilled
3. Hugging Face. 1000 RPD. Qwen / Deepseek distilled

Demo Use Cases

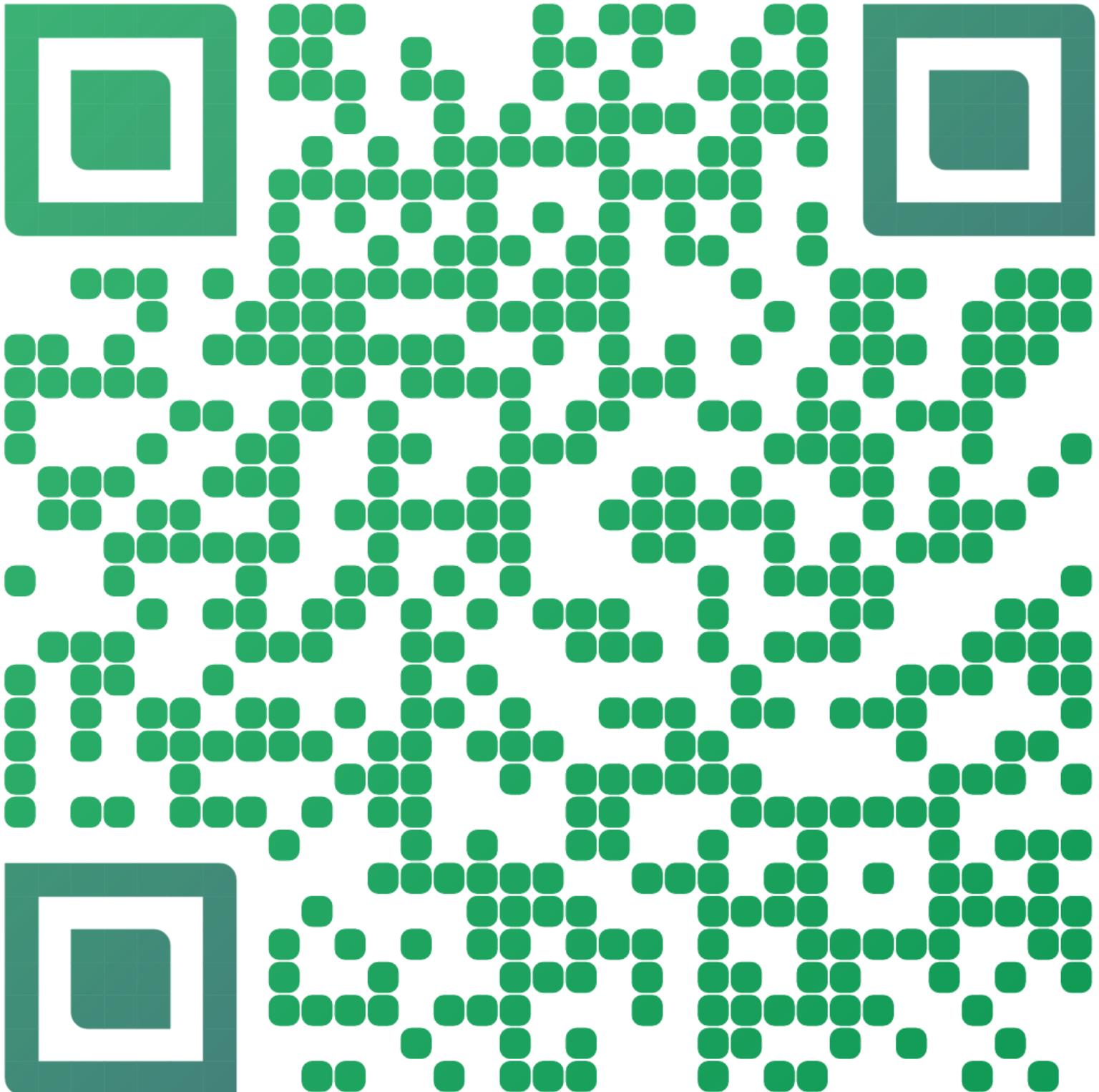
- Deep Research of a topic
- Creating activity on LinkedIn
- Connecting to people with a lot of followers
- Finding you the best deal for a laptop on Facebook Marketplace
- Booking a time slot at DriveTest or a country embassy

Demo

<https://github.com/Gaket/agents-workshop>

Practice

1. Generate Gemini API key: <https://aistudio.google.com>
2. Create SmollAgents CodeAgent with network access and Gemini as an LLM
3. Create Browser Use agent that would work with a browser on your behalf



Artur Kuzmin

Director of Engineering at Squire,
Co-founder of Talent Agent,
Google Developer Expert

linkedin.com/in/arturkuzmin/
twitter.com/ArtursTwit

Bonus

Do you want to have a deep dive how to move from LLM to Agents? Go through these examples:

<https://github.com/ashishpatel26/AIAgentWorkshop/tree/main>