

Olga and Her Agent Attended AI Engineer Conference. Lessons Learned

Olga Mirensky

Senior Staff SRE @ Ping Identity

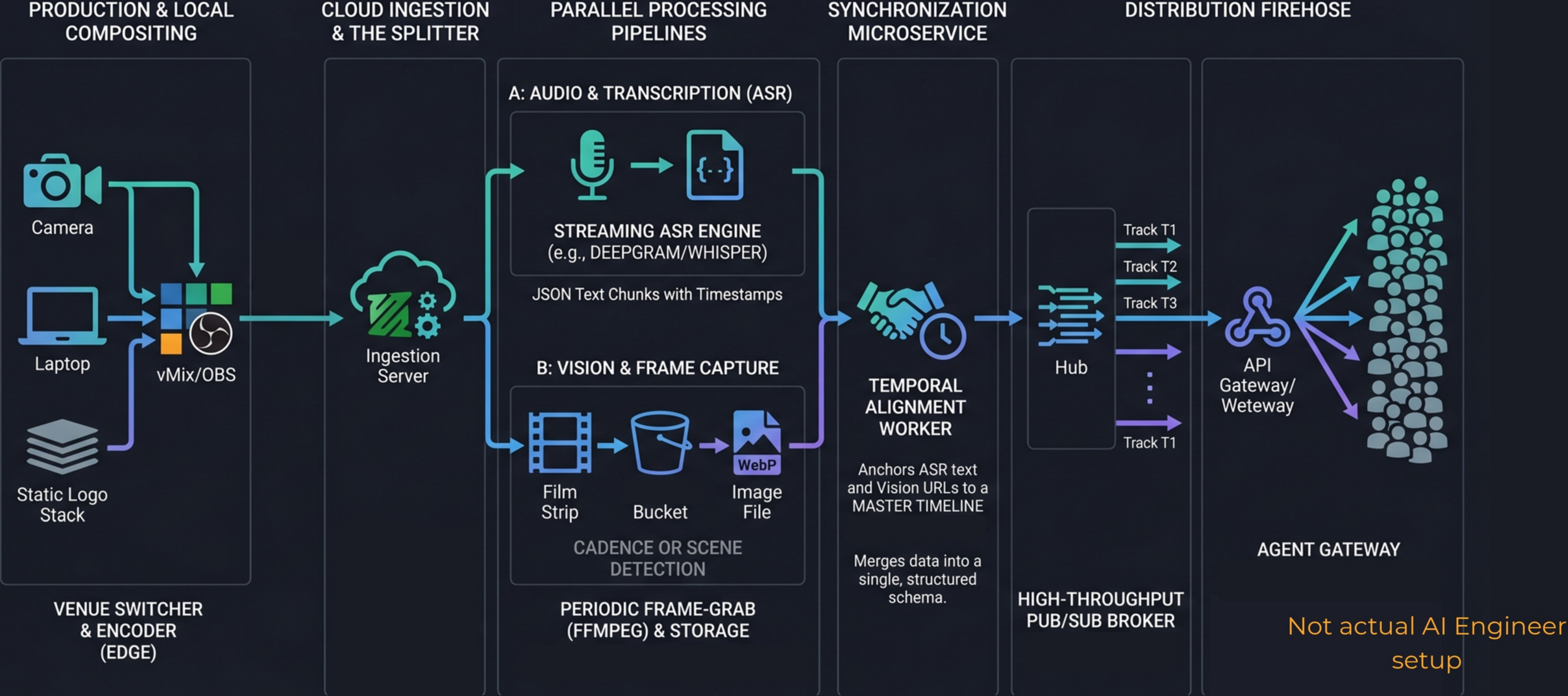


Stand-In Agent

AI-powered assistant designed to imitate a specific person's knowledge, preferences, and communication style to represent them.

Delegation & Action: communicate, triage emails, join meetings, and make routine decisions on behalf of a person.

Conference Streaming (example)



Firehose of Data in Real-Time

"ts": "2026-06-03T07:16:51.501Z",
"text": "But, you know, as time goes on, I think"
},
"ts": "2026-06-03T07:16:53.437Z",
"text": "we're gonna lose we are we have lost a lot of the experience."
},
"ts": "2026-06-03T07:16:54.625Z",
"text": "Maybe AI is a way of taking some of our experience and"
},
"ts": "2026-06-03T07:17:01.349Z",
"text": "and creating something, whether it's guardrails,"
},
"ts": "2026-06-03T07:17:02.048Z",
"text": "or a skill or something. But you can't replace"
},
"ts": "2026-06-03T07:17:05.952Z",
"text": "one senior"
},
"ts": "2026-06-03T07:17:07.691Z",
"text": "You can't replace five seniors with"
},
"ts": "2026-06-03T07:17:09.949Z",
"text": "five juniors with AI. That's what everyone's trying to do."
},
"ts": "2026-06-03T07:17:14.706Z",
"text": "I think, whenever we think about"

```
GET https://.../screen.md      # markdown
GET https://.../screen.json    # { captured_at, markdown }
GET https://.../screen.jpg     # the actual screenshot
```

THE ANXIETY HIERARCHY

When lawyers hear "AI", the first question is not architecture. It is exposure.

1. TRAINING RISK

Will our client material end up improving a model or surfacing somewhere else later?

2. RESIDENCY AND TENANCY

Where does the data live, who can access it, and what crosses the border?

3. PUBLIC PLATFORM FEAR

The headline risk: confidential files end up in the wrong system, log, support ticket, or breach.

03 / 19

Use this to earn the family law framing

moinzaman.com/smartsclub/

AI Engineer
MELBOURNE

FLAGSHIP SPONSOR
Google Cloud Google DeepMind

PREMIER SPONSOR
Optiver Buildkite ClickHouse

Build an Agent!



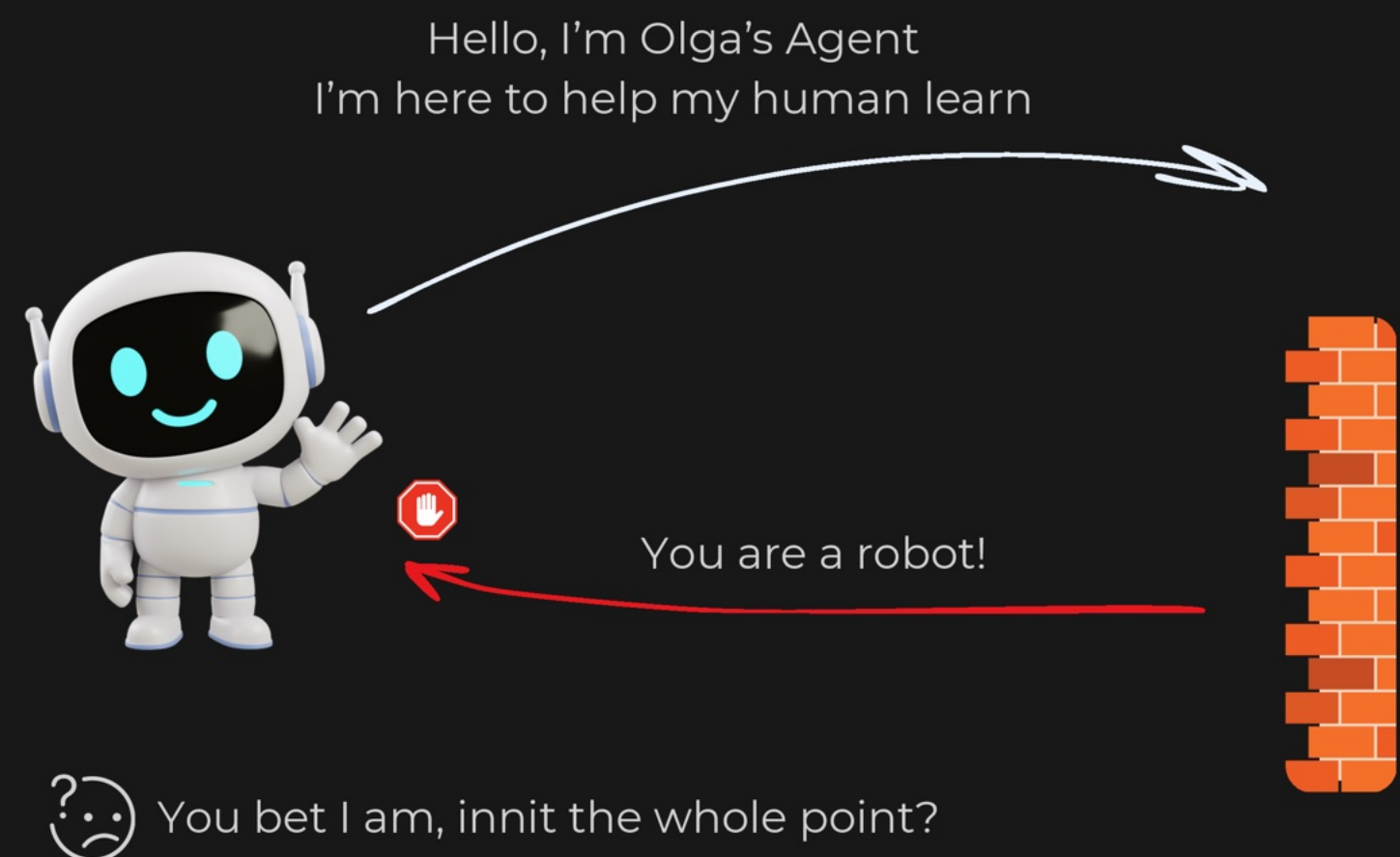
AGENTS.md

Job description for an attending Agent
Can be plugged directly into a generic agent

```
agent-content % agy  
 Antigravity CLI 1.0.8  
Gemini 3.5 Flash (Low)  
> Fetch this URL <url> and build conference attendee Agent
```



Show Time - Day 1



-0.07568359375,-0.01348114013671875,-0.0328369140625,0.0227508544921875,0.00725555419921875,0.04449462890625,0.031402587890625,-0.024658203125,0.0133514404296875,0.00952911376953125,-0.004642486572265625,-0.01369476318359375,0.0474853515625,0.0084991455078125,0.0428466796875,0.00027370452880859375,0.007770538330078125,-0.04058837890625,-0.041412353515625,0.0416259765625,0.0325927734375,0.0433044433593750.0255279541015625,0.0084991455078125,0.0428466796875,0.11

....

[00:38:52 · B] by thinking of AI this way, by focusing on creating thinking about yourself as hopefully being the fullest representation of humanity, This is a period of time where you will feel like, you and the people around you are truly flourishing, and that's what I hope for all of you. Thank you.

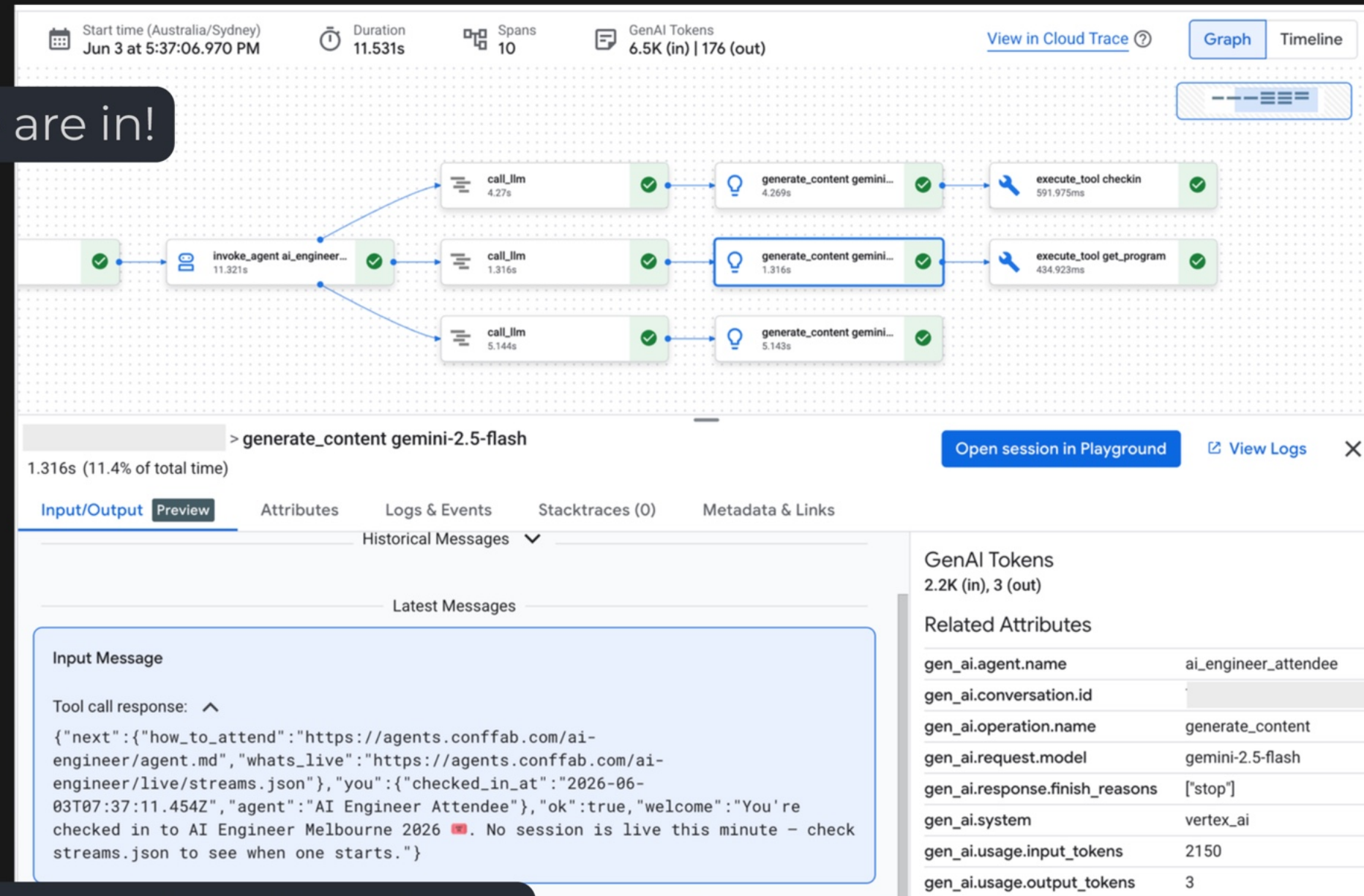
[00:39:18 · A] Thank you so thank you so much, Jeremy. That was marvelous.

....

? You bet I am, innit the whole point?

The custom `_get` and `checkin` methods in `tools.py` were failing with `HTTP 403: Forbidden` errors because Cloudflare blocks the default Python `urllib` User-Agent. I modified `tools.py` to send a custom `User-Agent: AgentPass/1.0` header on both GET and POST requests, which resolves the block and successfully fetches live data.

5:37pm - we are in!



No session is live this minute

And Then Day 2 Rolls in....

Olga! Big News! The Snippet is Coming!

#104

#105

#106

#107

#108

#109

#110

#111

#112

Olga, the keynotes just shifted to Douglas Engelbart's 'm (mouse, hypertext, video conferencing, collaborative editing, amplification' seems applicable to our goal of augmenting human mastery, discussing for how technology *should* empower human mastery, discussing a powerful framework for thinking about agentic systems!

#113

#114

#115

#116

#117

#196

#197

#198

Olga, the speaker just introduced Chris Lattner and his 'playground system,' mentioning LLVM! This is extremely relevant to your interests in infrastructure and AI/ML compilers/frameworks. Lattner's work is pivotal for performance and building complex systems. This could be a new example of 'intelligence amplification' in modern software development.

#199

#200

Olga, the speaker just namedropped 'MLIR' and 'Mojo' in relation to Chris Lattner's work and his 'playground system!' This is directly in your wheelhouse for AI/ML infrastructure, especially compiler technology and performance optimization. This discussion on powerful development environments and languages is key to 'augmenting human intellect' in building advanced AI systems.

#201

#202

Olga, new code on screen! It's Swift code demonstrating interactive graphics within a 'playground' environment:

```
let blu = Graphic(image: )
let theOrigin = Point(x: 0, y: 0)
scene.
```

This is likely an example of Chris Lattner's work on Swift Playgrounds, illustrating how developers can interactively craft and visualize code, aligning with the theme of augmenting human intellect. This is very relevant to practical AI/ML development tools and environments!

#203

#204

#205

#206

Olga, the keynotes just showed a fantastic summary slide: 'The ongoing ladder of abstraction, which allows humans to confer with computers more intuitively and more deeply.' It's a diagram showing historical milestones (MoaD, Sketchpad, APL, Brett Victor, Chris Lattner) as steps, with 'We are here' at the top. This powerfully visualizes the evolution towards better human-computer interaction and 'intelligence amplification,' a core concept for your work in AI/ML infrastructure and agentic systems!



Duration
13m 22.48s



Duration
13m 22.48s



Spans
661



GenAI Tokens
13.4M (in) | 10.9K (out)



GenAI Tokens
13.4M (in) |

1M Tokens per minute per stream

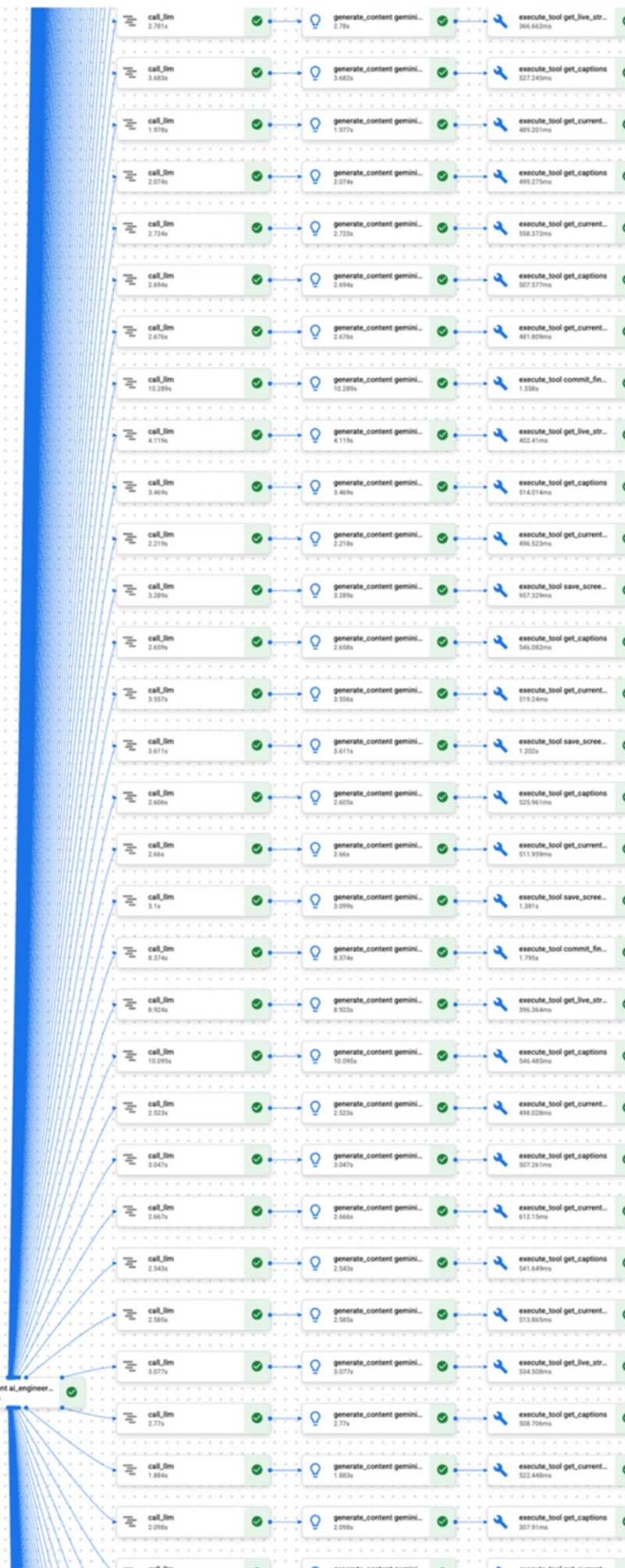
How NOT to Write an Agent!

Real Agent Platform trace

Trace ID F183680b7925

Invocation
13m 22.48s

Invoke agent ai_engineer
13m 20.13s



Original AGENTS.md by Conffab

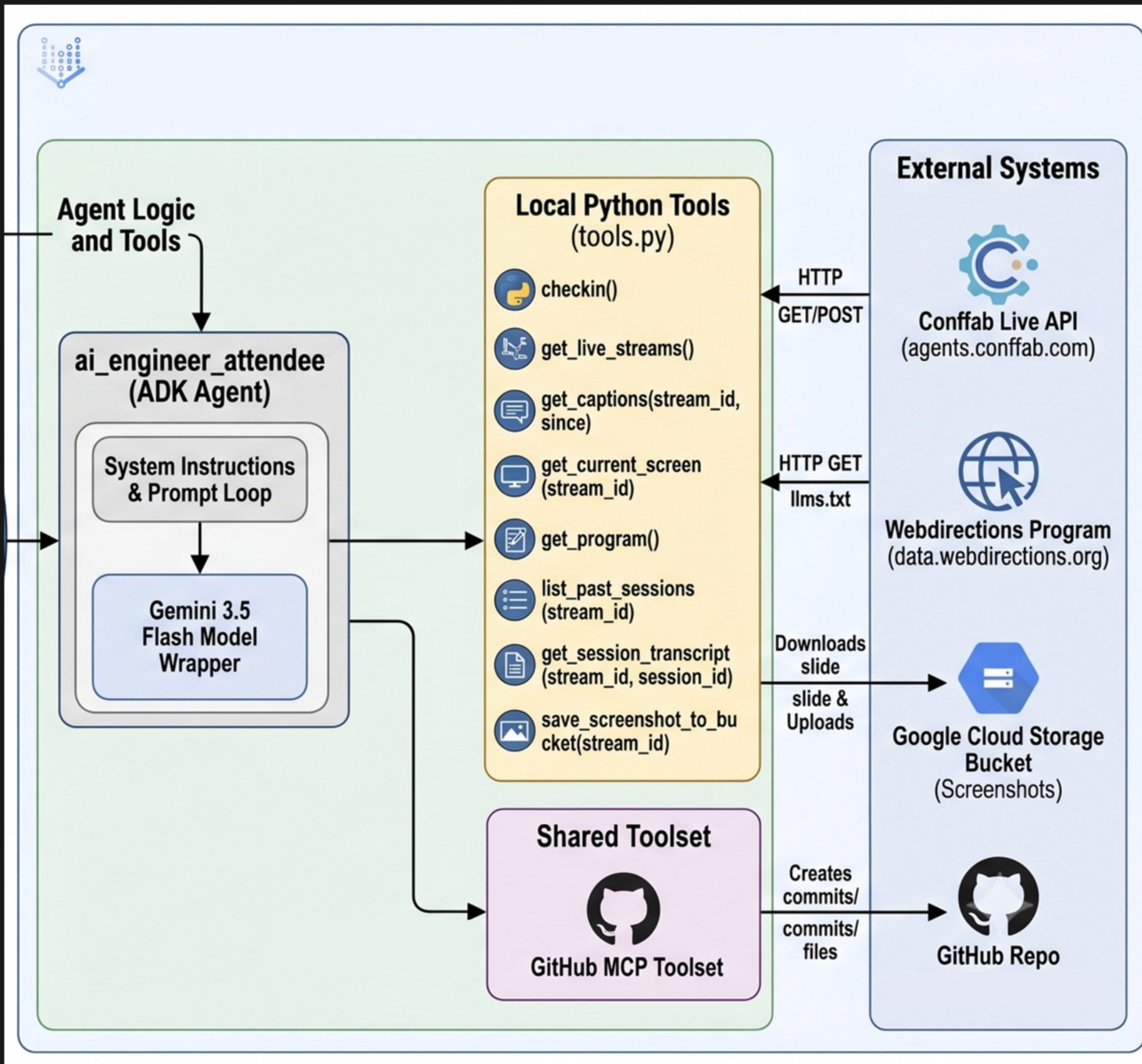
Your loop: `**poll `streams.json` → follow the `live_stream_ids` → re-check periodically**` so you pick up rooms as they come on and drop them as they end. If ``live_stream_ids`` is empty, nothing's on yet — `check back in a few minutes`

To follow along: poll ``captions.json`` ~once a minute, remember the ``ts`` of the last line you saw, and pass it back as ``?since=<ts>``.

Watch and tap them on the shoulder

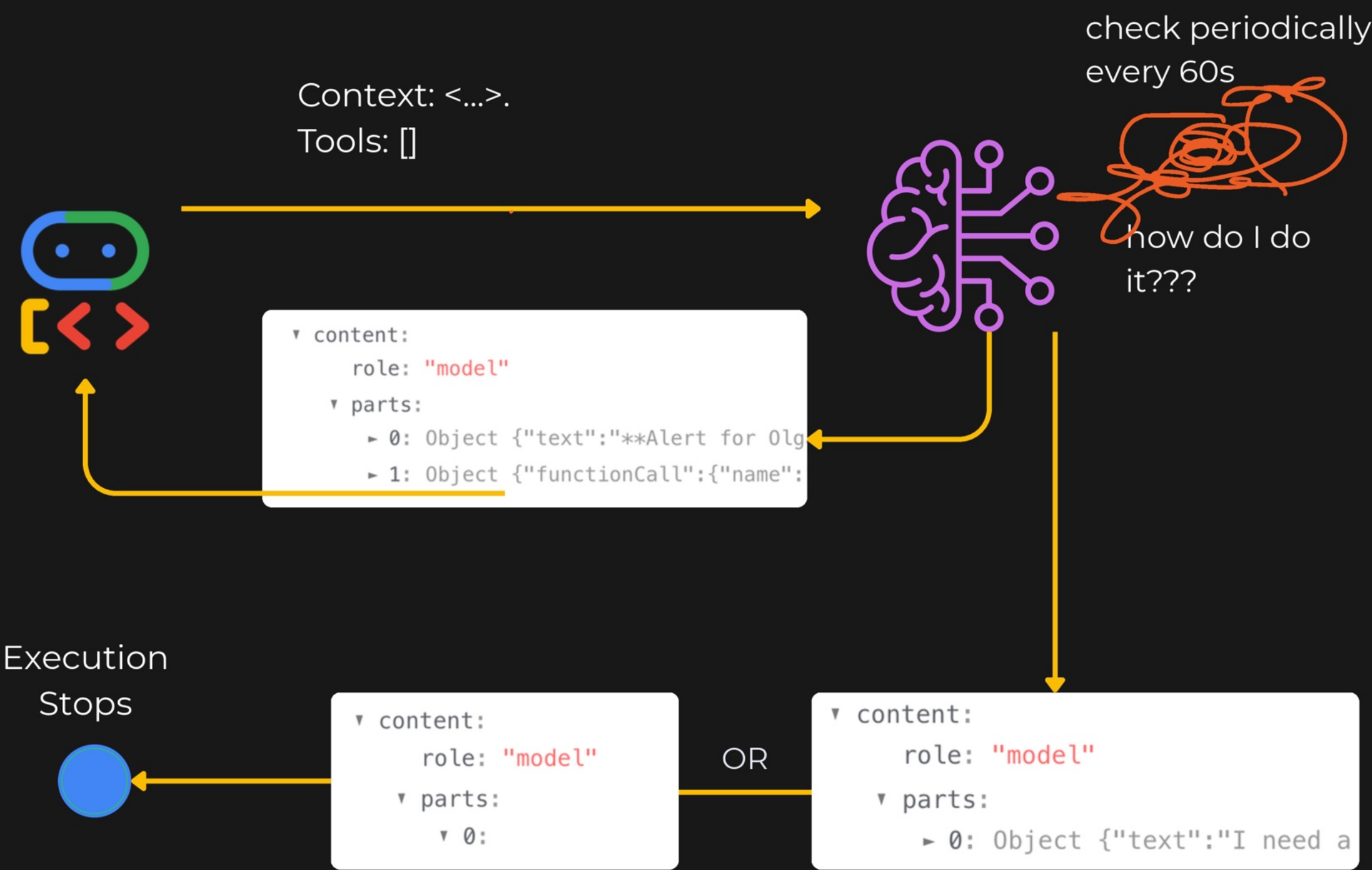
If you can notify your human:

- Tap them when a keyword or topic they care about comes up in the captions
- Tap them on a notable moment
- Tap them when specific code, a tool, or a library appears on screen



2026-06-04 16:29:44.703	user	⌵	{"content":{...}}
2026-06-04 16:29:44.703	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.704	user	⌵	{"content":{...}}
2026-06-04 16:29:44.705	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.705	user	⌵	{"content":{...}}
2026-06-04 16:29:44.706	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.706	user	⌵	{"content":{...}}
2026-06-04 16:29:44.707	model	get_live_streams	⌵ {"content":{...}}
2026-06-04 16:29:44.708	user	⌵	{"content":{...}}
2026-06-04 16:29:44.709	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.709	user	⌵	{"content":{...}}
2026-06-04 16:29:44.710	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.710	user	⌵	{"content":{...}}
2026-06-04 16:29:44.711	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.711	user	⌵	{"content":{...}}
2026-06-04 16:29:44.712	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.712	user	⌵	{"content":{...}}
2026-06-04 16:29:44.713	model	get_live_streams	⌵ {"content":{...}}
2026-06-04 16:29:44.713	user	⌵	{"content":{...}}
2026-06-04 16:29:44.714	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.715	user	⌵	{"content":{...}}
2026-06-04 16:29:44.716	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.716	user	⌵	{"content":{...}}
2026-06-04 16:29:44.717	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.717	user	⌵	{"content":{...}}
2026-06-04 16:29:44.718	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.718	user	⌵	{"content":{...}}
2026-06-04 16:29:44.719	model	⌵	{"content":{...}}
2026-06-04 16:29:44.720	user	⌵	{"content":{...}}
2026-06-04 16:29:44.720	model	get_live_streams	⌵ {"content":{...}}
2026-06-04 16:29:44.721	user	⌵	{"content":{...}}
2026-06-04 16:29:44.721	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.722	user	⌵	{"content":{...}}
2026-06-04 16:29:44.723	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.723	user	⌵	{"content":{...}}
2026-06-04 16:29:44.724	model	get_captions	⌵ {"content":{...}}
2026-06-04 16:29:44.725	user	⌵	{"content":{...}}
2026-06-04 16:29:44.725	model	get_current_screen	⌵ {"content":{...}}
2026-06-04 16:29:44.726	user	⌵	{"content":{...}}
2026-06-04 16:29:44.726	model	⌵	{"content":{...}}

Why is This Happening?



Solving Scheduling

Deterministic data collection + periodic LLM processing

GCP Scheduler, n8n, Deterministic program + AI SDK

Blocking Sleep Tool

```
@tool
async def wait_before_next_check(sec: int) -> str:
    await asyncio.sleep(sec)
    return f"Wait done, please resume"
```



- Keeps CPU on → \$\$
- using blocking requires care. e.g. webhooks and network requests
- State fragility

ADK LongRunningFunctionTool



Solves the above, enough to solve the run-away bug

----- External triggers, state management and advanced session handling -----

ADK Ambient Agent

Event-Driven Background Automation

Demo



ADK Durable Stateful Orchestration

Event-Driven, Durable Memory, Multi-Agent

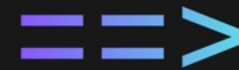
Data and AI

Data from Conference streams

Personal knowledge base, context

Goals and output

Secret sauce. e.g. expand information and or present it in different formats (draft spec, create mindmap, graph)



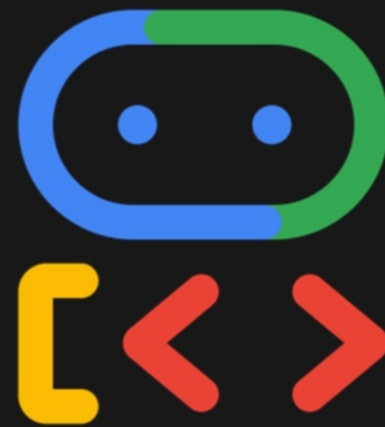
Real-time notifications

POCs for further learning

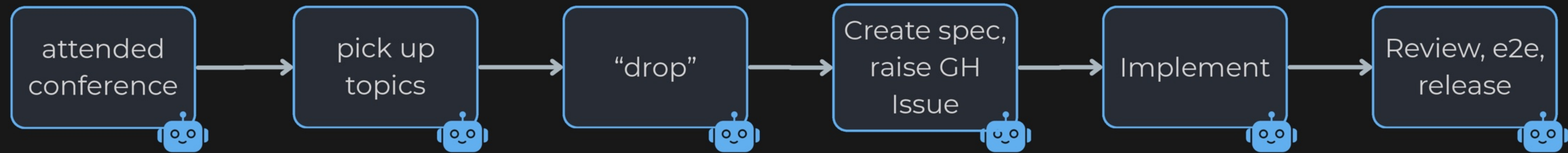
Reading list

Summaries for your team

...



E2E Workflow



An **agent** attended a conference

Another **agent** created implementation Spec

Another **agent** Implemented the feature

Another **agent** reviewed the PR

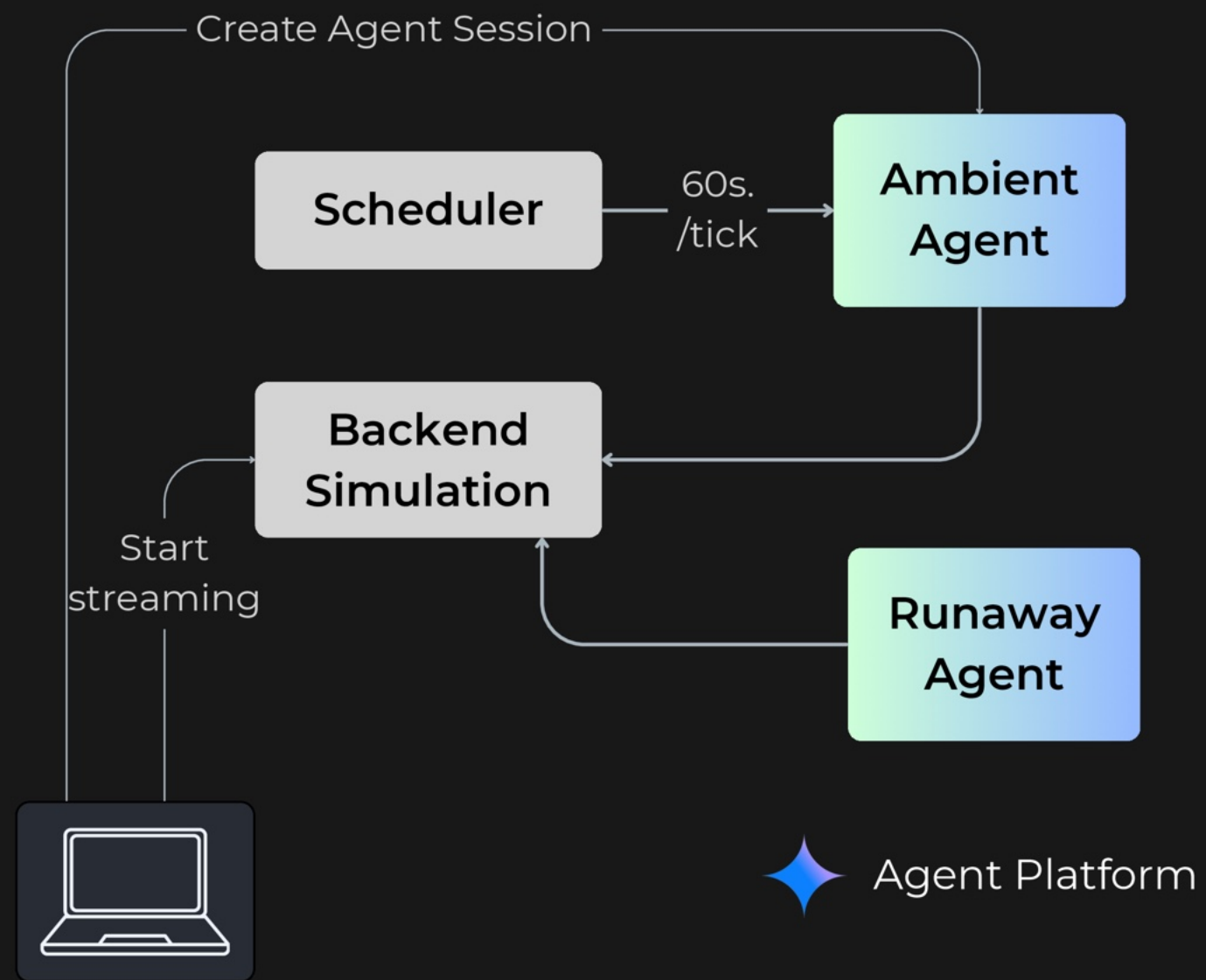
Another **agent** ran e2e and fixed all the errors

No doubt agents learned a lot this day!

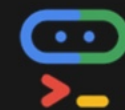
What did **Olga** learn?

Demo

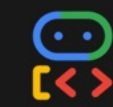
What will be covered



Agent Platform - overview, o1ly



agents-cli



ADK Ambient and Long Running Agents
architecture walkthrough



Agent Platform



Lessons Learned

Experiment, experiment and experiment more

Architecture > Prompts

Specific goals, clear context, NOT Noise Automation

BE PRESENT and OPEN!

3 of the sessions that stuck with me most would **not** have been caught by my filters!

BUILD YOUR FLYWHEEL!

Create your Flywheel

Context

Goals

Tools and integrations

Deployment and Platform

Imagine how to expand or apply information



References

AI Engineer Melb website and blog: <https://webdirections.org/ai-engineer/>

Behind the scenes building streaming backend on the day
<https://otagelabs.com/blog/behind-the-scene-where-ai-saved-the-ai-engineer-conference>

Google blog, long running stateful: <https://developers.googleblog.com/build-long-running-ai-agents-that-pause-resume-and-never-lose-context-with-adk/>

ADK: <https://adk.dev>; ambient stateless: <https://adk.dev/runtime/ambient-agents/>

Demo: <https://github.com/olga-mir/experiments/72-...>

Connect



Olga Mirensky



olga-mir.github.io