

Orchestrating the Pipeline with Strands Agents

Build a multi-agent video pipeline in one hackathon session

Hack Video Agent Context Graph · Jul 30 2026





Elizabeth Fuentes Leone

Developer Advocate @ AWS



Resources

bit.ly/strands-hackathon



What Is Strands Agents?

Open-source Python SDK for building production AI agents



Model-agnostic

Bedrock, Anthropic, OpenAI-compatible endpoints



Built-in tools

30+ ready tools: files, HTTP, shell, memory, MCP



Multi-agent

Compose agents as tools — pipelines, subagents, loops



MCP native

Connect any MCP server as a tool source out of the box

```
pip install strands-agents → from strands import Agent
```



A Strands Agent in 10 Lines

```
from strands import Agent
from strands.models import BedrockModel
from strands_tools import file_read, http_fetch

model = BedrockModel(
    model_id="us.anthropic.claude-sonnet-4-5",
    region_name="us-east-1"
)

agent = Agent(
    model=model,
    tools=[file_read, http_fetch],
    system_prompt="You are a video pipeline agent."
)

result = agent("Summarize this transcript: transcripts/ep01.txt")
```



Strands Agents MCP Server

bit.ly/strands-mcp-server

Gives Claude Code, Kiro, and Cursor live access to Strands documentation while you code

What It Exposes

```
search_docs(query, k)
```

TF-IDF ranked search over Strands doc titles

```
fetch_doc(page)
```

Full page content — section-aware for token efficiency

Add to Your Agent

Install:

```
uvx strands-agents-mcp-server
```

Claude Code:

```
claude mcp add strands uvx strands-agents-mcp-server
```

Kiro · Cursor · VS Code:

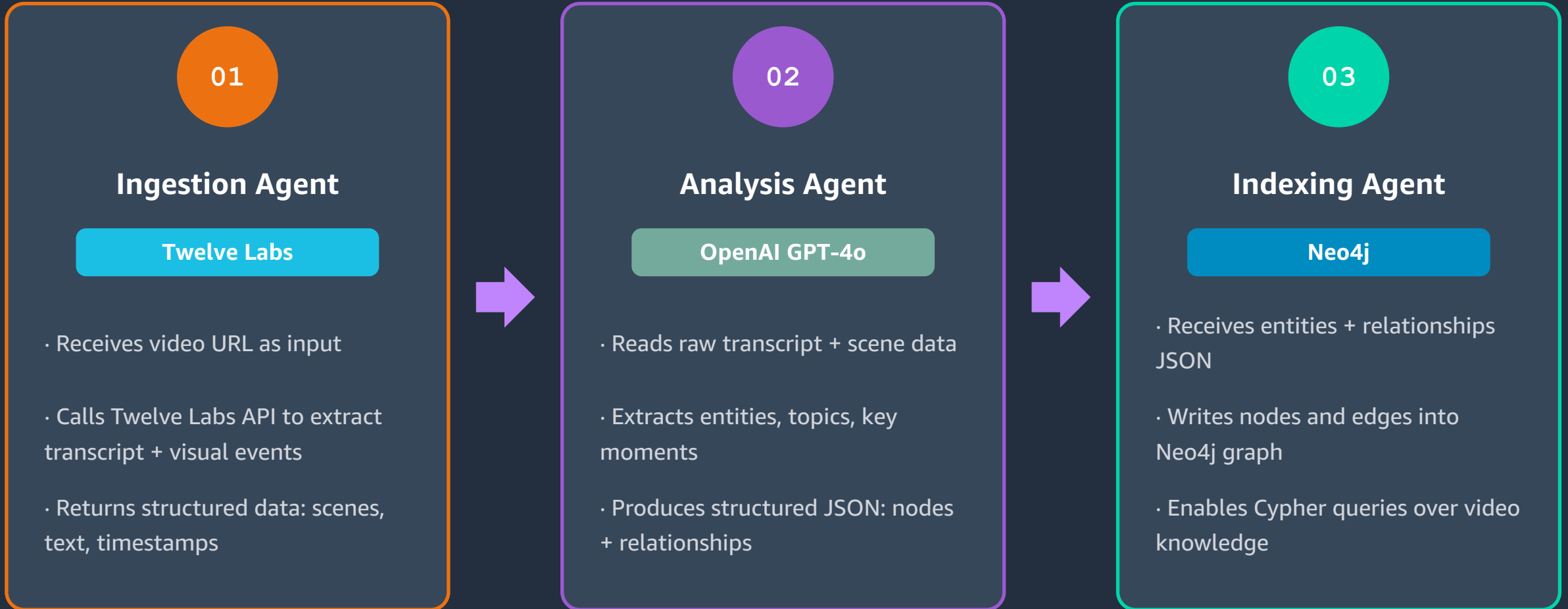
```
"strands-agents": {  
  "command": "uvx",  
  "args": ["strands-agents-mcp-server"] }
```

Package: strands-agents-mcp-server · Your agent can query Strands docs inline during the hackathon



Build Your Agent Pipeline

orchestrated with Strands — one agent calls the next as a tool



To qualify:

✓ Strands Agents

✓ Twelve Labs

✓ OpenAI

✓ Neo4j



AWS Agent Toolkit

`go.aws/4vXC07s`

Free · No additional charge

Gives any coding agent the tools, knowledge, and guardrails to build on AWS

AWS MCP Server

- 300+ AWS services, 15,000+ API actions
- Sandboxed Python script execution
- Real-time AWS docs access
- CloudWatch monitoring + IAM policies

Agent Skills

- Service decision guides
- Step-by-step procedures
- Troubleshooting runbooks
- Load only when relevant — saves context

Agent Plugins

- Pre-bundled: MCP Server + curated skills
- One-command setup per coding agent
- Works with Strands, LangChain, AgentCore
- Supports Claude Code, Kiro, Codex, Cursor

Claude Code: `/plugin install aws-core@claude-plugins-official` | Kiro/Cursor: `add MCP JSON config`



Workshop Access

Workshop

Building AI Agents with Strands SDK

From Simple Loops to Multi-Agent Swarms

bit.ly/strands-agents-workshop

Workshop

Stop AI Agent Hallucinations

with Strands Agents and Amazon Bedrock
AgentCore

bit.ly/stop-agent-hallucinations-workshop



Demo Time

Multi-agent video pipeline · Strands Agents + MCP



Thank You!

Elizabeth Fuentes Leone

Developer Advocate @ AWS



Resources

bit.ly/strands-hackathon



Blog & Socials

elifuentes.tech



© 2026, Amazon Web Services, Inc. or its affiliates. All rights reserved.