Category

Data & AI

AI Agent Orchestration & Multi-Agent Systems Playbook

Coordinating multiple AI agents without the coordination itself becoming an unmanageable black box

- Practitioner
- Advanced
- Template Included

- Administrator
- 18 December 2021
- 3 minute(s)

Overview

A framework for designing and orchestrating multi-agent AI systems — clear agent role definition, coordination protocol design, and orchestration-level monitoring — addressing the specific complexity multi-agent systems introduce beyond single-agent deployment, where failures can emerge from agent interaction, not just individual agent behavior.

Is multi-agent AI orchestration just multiple single-agent

deployments running in parallel? No — multi-agent systems introduce coordination complexity that single- agent deployment doesn't face, including emergent behavior from agent interaction that can't be predicted from understanding each individual agent alone,

requiring dedicated orchestration-level design and monitoring.

What's the biggest risk specific to multi-agent AI systems?

Emergent failure modes arising from agent interaction — individual agents behaving as designed can still produce problematic collective outcomes through their interaction patterns, a risk that testing individual agents in isolation wouldn't reveal.

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