Self-Compacting Agents, Bigger IDEs, and Review-First Dev Workflows

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By Coding Agents Alpha Tracker • March 12, 2026

LangChain's autonomous context compression was the clearest practical release of the day, while Karpathy's bigger-IDE thesis, LangSmith's eval loops, and new Cursor/OpenClaw/Codex workflows showed where coding-agent leverage is actually moving. The common thread: better control planes around agents, not just better raw models.

TOP SIGNAL

LangChain's latest Deep Agents release adds **autonomous context compression**: the model can decide when to summarize older context instead of waiting for a fixed token threshold or a human `/compact`, while retaining the most recent 10% of messages and preserving full history in the virtual filesystem for recovery [1]. The good trigger points are semantic, not token-based: new task boundaries, after extracting a result from a large context, before big reads or long drafts, before lengthy refactors, and when new requirements invalidate earlier context [1]. Zoomed out, this matches Karpathy's bigger thesis: if the unit of programming is shifting from files to agents, the leverage moves into the control plane around those agents—memory, visibility, stats, and orchestration [1, 2, 3].

TOOLS & MODELS

- **Deep Agents SDK/CLI — autonomous compaction, opt-in.** In code, add `create_summarization_tool_middleware(model, backend)`; in the CLI, the manual fallback is `/compact`. LangChain says the feature is tuned conservatively and keeps history recoverable after summarization [1].

- **OpenClaw v2026.3.11-beta.1.** Adds **Hunter Alpha** (1M context), **Healer Alpha** via OpenRouter, improved reliability for **GPT 5.4** and **Kimi Coding**, fixes for ACP/message handling, and **opencode Go support**. Practical bug note: maintainer Peter Steinberger traced a GPT 5.4 "yes I will do x" stall to a missing `phase` parameter in the WebSocket implementation; the release also fixes Kimi coding tool-call handling [4, 5, 6]. Release notes [4]
- **Cursor Marketplace — 30+ new plugins.** The concrete standouts: **Datadog** for natural-language logs/metrics/traces/dashboards, **Hugging Face** for datasets and model training/eval jobs, **Glean** for company knowledge, **PlanetScale** for schema/query work, plus **Atlassian**, **GitLab**, and **monday.com** integrations [7, 8, 9, 10, 11, 12, 13, 14]. Jediah Katz's summary of the Datadog side: **"Datadog + Cursor = Joy"** [15]. This is what Karpathy's "bigger IDE" starts to look like in product form: the editor reaching into observability, data, knowledge, and project systems, not just files [2, 7]. Details [16]
- **Codex review UX.** Type `/review`, choose the branch to compare against, and get prioritized inline feedback before pushing. Romain Huet calls the flow "delightful" [17].
- **CodeRabbit as the review backstop.** Theo says it is consistently the best code reviewer on his team, catches the small AI-written mistakes humans skip, adapts when you tell it to stop commenting on something, and prevented **dozens of bugs in the last two weeks**; it ships as a VS Code extension and CLI [18].
- **Model routing in the wild: Kimi K2.5 for the fast lane.** DHH says it remains his daily driver for basic work where he wants speed, not "PhD-level intelligence," running at **200 tps** via Fireworks inside opencode [19].

WORKFLOWS & TRICKS

- **Semantic compaction loop**
  1. Compact on task boundaries or completion acknowledgments, after extracting a result from lots of context, before a big read/draft/refactor, or when old assumptions are invalidated [1].
  2. In code, add `create_summarization_tool_middleware(model, backend)`; in the CLI, keep `/compact` as the human override [1].
  3. Keep it conservative; LangChain preserves full history in a virtual filesystem so recovery is possible post-summarization [1].
- **Trace → eval → dataset → baseline**
  1. Turn on tracing or instrument with OpenTelemetry [20].
  2. Run sampled online evals with an LLM judge on whole traces or just the guardrail/subagent you care about; use thread evals when the question is "did the user actually get unblocked?" [20].
  3. Pipe thumbs-downs or high-signal traces into annotation queues, then edit them into cleaner gold outputs [20].
  4. Keep a **50-100 example** dataset with both easy and hard cases,

and compare new prompts/models against a baseline while watching quality, latency, cost, and token counts side by side [20].

- **Bad trace → better prompt**
  1. Pull the exact failing LLM call from a trace into Prompt Playground [20].
  2. Ask Polly to rewrite it using best practices; Victor's demo added XML tags, clearer context, and concrete examples [20].
  3. Add dynamic variables for runtime allowances or memory, then save the prompt into Prompt Hub with versioning [20].
- **Review-first agent coding**
  1. In Codex, run `/review`, choose the comparison branch, and work through the prioritized inline feedback before push [17].
  2. For steady-state PR review, Theo's pattern is to let CodeRabbit catch the small mistakes humans won't spend time on, then tune its behavior by explicitly telling it what to stop flagging [18].
- **Ground the implementation, then ask a second model to be mean**
  1. Tell the builder model to inspect the authoritative repo/docs, not just generate from memory.
  2. Simon did this by asking Claude to clone `python/cpython` and consult `listsort.txt` and `listobject.c` before adding Timsort [21].
  3. Then hand the result to another model for critique; GPT-5.4 Thinking said Claude's first pass was only a **"simplified, Timsort-inspired adaptive mergesort"** [21].
  4. The whole prompt chain is public: full sequence of prompts [21]

PEOPLE TO WATCH

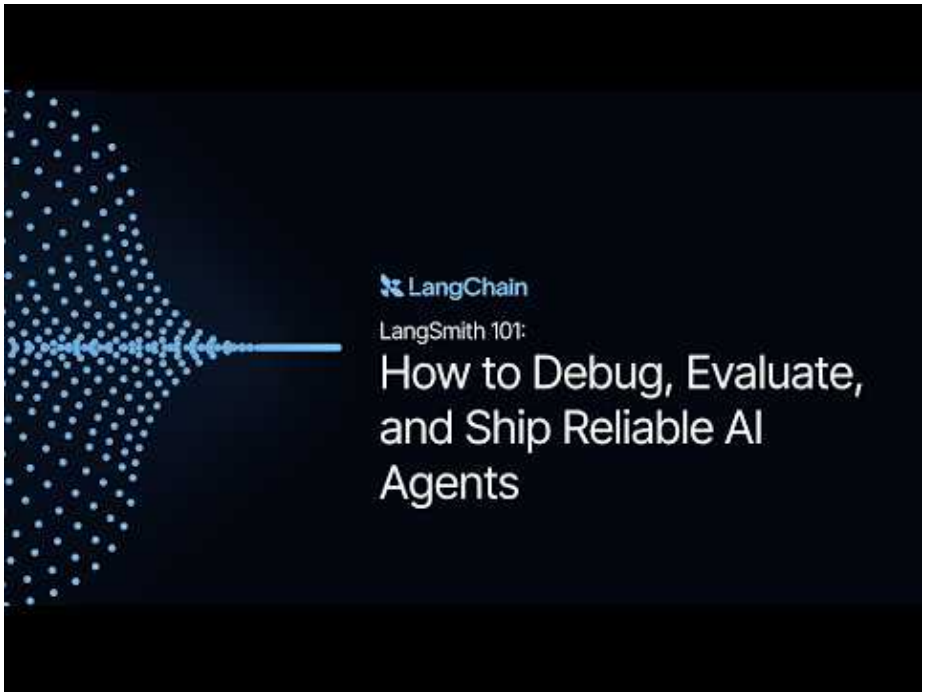
- **Andrej Karpathy** — still the clearest public thinker on agent-native developer UX: bigger IDEs, agent command centers, and even **"org code"** that can be built, run, managed, and eventually forked [2, 3, 22, 23].

  "Expectation: the age of the IDE is over
  Reality: we're going to need a bigger IDE … the basic unit of interest is not one file but one agent. It's still programming." [2]

- **Victor @ LangChain** — if you build agents, today's LangSmith walkthrough is one of the better public demos of trace-driven improvement loops instead of blind prompt fiddling [20].
- **Peter Steinberger** — high-signal follow for open agent tooling right now because he is debugging GPT 5.4/Kimi compatibility issues in public and shipping fixes quickly [6, 4].
- **Simon Willison** — still one of the best at publishing full transcripts and cross-model audits, which makes his experiments replayable instead of mystical [21].
- **Theo** — good reality check from a team already living with coding agents daily: as agents write more code, AI review becomes more important, not less [18].

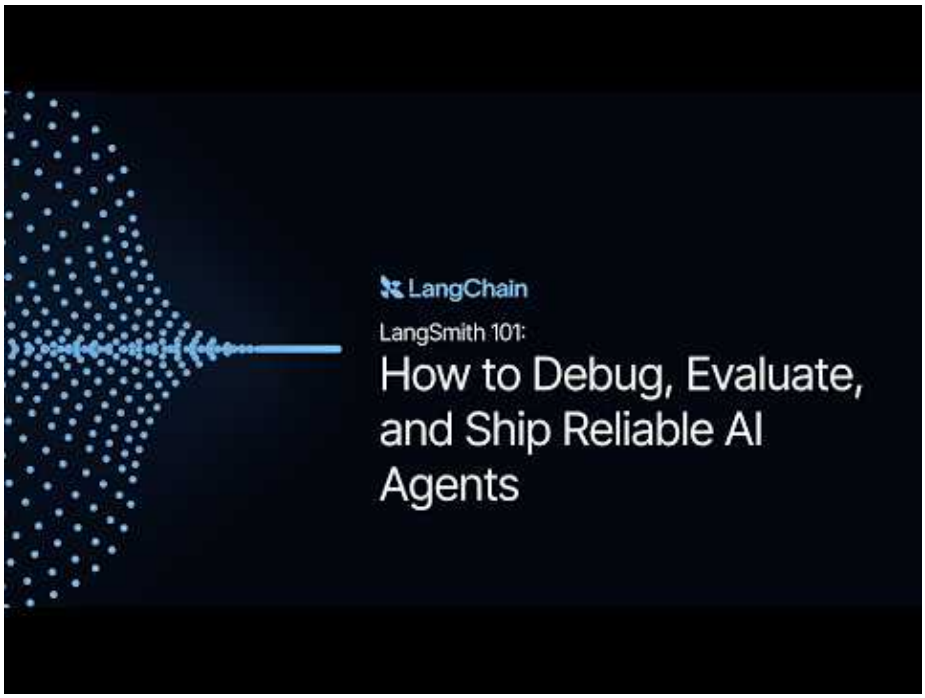
WATCH & LISTEN

- **30:34–32:43 — model baseline comparison in LangSmith.** Victor shows how to set a production baseline, compare alternatives side by side, and make the real tradeoff call: better scores vs more latency and higher cost [20].



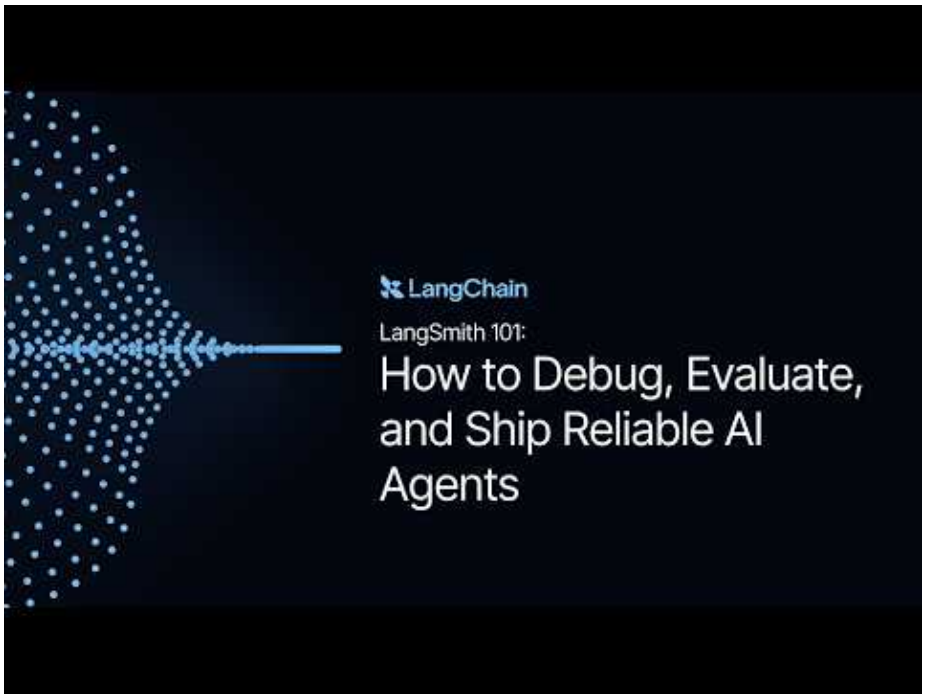
How to Debug, Evaluate, and Ship Reliable AI Agents with LangSmith (30:34)

- **33:20–36:53 — fix a bad prompt from a real trace.** Great short demo of pulling an LLM call into Prompt Playground, having Polly improve it with XML tags/examples, injecting dynamic vars, and saving the result into Prompt Hub [20].



How to Debug, Evaluate, and Ship Reliable AI Agents with LangSmith (33:20)

- **20:20–22:50 — let the system cluster your failure modes.** Useful if you're drowning in raw traces: the Insights agent groups failures and usage patterns across thousands of traces and lets you compare shifts over time [20].



How to Debug, Evaluate, and Ship Reliable AI Agents with LangSmith (20:20)

PROJECTS & REPOS

- **OpenClaw** — v2026.3.11-beta.1 release notes: Hunter Alpha (1M context), Healer Alpha, GPT 5.4/Kimi reliability work, ACP/message handling fixes, and opencode Go support [4, 5].
- **Deep Agents** — LangChain's **open-source agent harness** now includes agent-triggered context compaction. If you're designing your own harness, the linked system prompt is worth reading because it shows the exact scenarios they want the model to use [20, 1].
- **ask-search** — emerging self-hosted search layer being recommended for **OpenClaw** and **Claude Code** users who want better privacy and fewer scraping-rate-limit problems, instead of paid Brave/Google Custom Search or harder-to-set-up Bing [24, 25].
- **Simon Willison's Sorting algorithms** — the live Sorting algorithms artifact plus the full sequence of prompts is a compact public example of repo-grounded feature building and second-model review [21].

Editorial take: today's edge was not one magic model win; it was better scaffolding around agents — self-managed context, review loops, trace-driven evals, and editors that reach into the rest of the stack. [1, 20, 17, 7, 2]

Sources

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2. X post by @karpathy
3. X post by @karpathy
4. X post by @steipete
5. X post by @steipete
6. X post by @steipete
7. X post by @cursor_ai
8. X post by @cursor_ai
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10. X post by @cursor_ai
11. X post by @cursor_ai
12. X post by @cursor_ai
13. X post by @cursor_ai
14. X post by @cursor_ai
15. X post by @jediahkatz
16. X post by @cursor_ai
17. X post by @romainhuet
18. I can't take it anymore.
19. X post by @dhh
20. How to Debug, Evaluate, and Ship Reliable AI Agents with LangSmith
21. Sorting algorithms
22. X post by @karpathy
23. X post by @karpathy
24. X post by @jasonzhou1993
25. X post by @hqmank