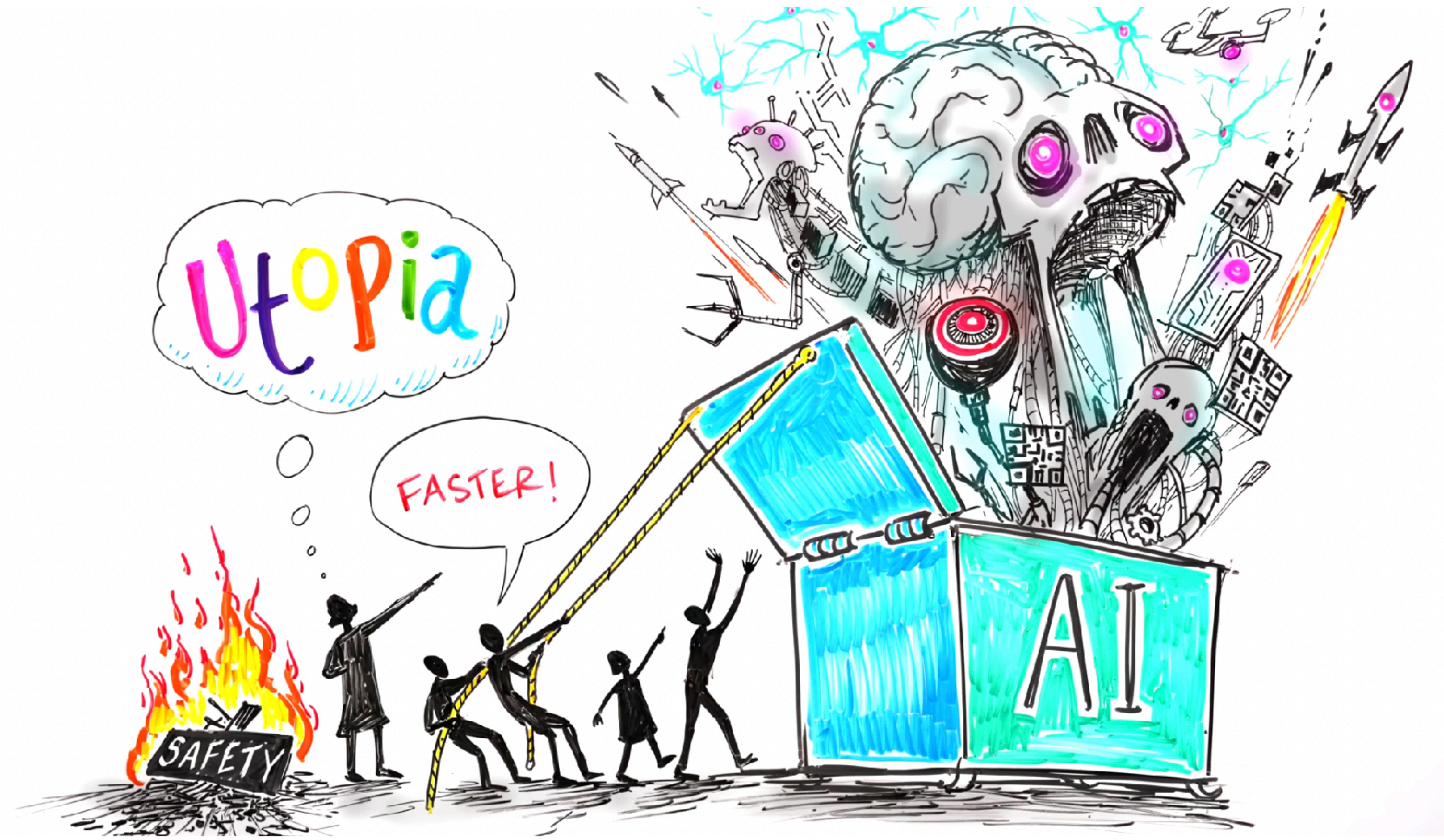


Hi! I'm Chris, a Staff
Engineer at Artsy



**“It was the best of times, it was the
worst of times, it was the age of wisdom,
it was the age of foolishness...”**





As software engineers we're
witnessing immense change, in
real-time

Naturally, folks are nervous

We're going to talk about the
middle path

The middle path is one of learning
and experience, and *agency*



**Experience with these tools is
necessary, because one must know
the enemy**

One must, as they say, *lean in*

**And so, where did we leave off
last time...**

2023



But also...

O'REILLY®



Learning LangChain

Building AI and LLM Applications
with LangChain and LangGraph



Mayo Oshin &
Nuno Campos

We started seeing the first
examples of impressive AI
application frameworks

Fast forward to 2025...

What should we build today?

Create stunning apps & websites by chatting with AI.

Type your idea and we'll build it together.



Plan



or import from

Figma

GitHub

What do you want to create?

Start building with a single prompt. No coding needed.

Ask v0 to build...

+

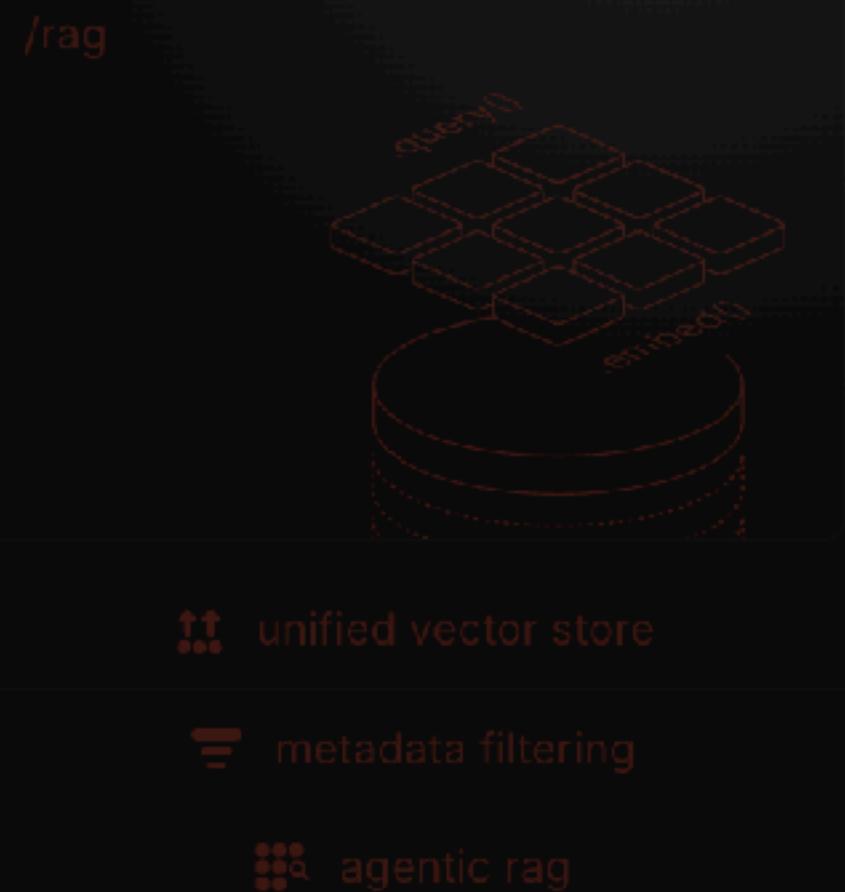


[Product](#)[Resources](#)[Book](#)[Blog](#)[Docs](#)

17.0k

[Login](#)[Sign Up](#)

THU OCT 2 @ 4:00 PM UTC Understanding Mastra's new streaming architecture

[unified vector store](#)[metadata filtering](#)[agentic rag](#)

The TypeScript Agent Framework

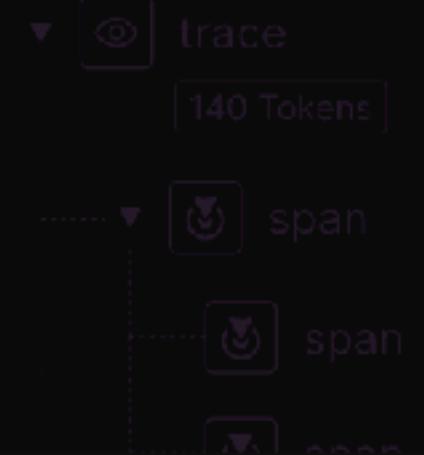
From the team that brought you [Gatsby](#): prototype and productionize AI features with a modern JavaScript stack.

```
$ npm create mastra@latest  
press to copy
```

[/agents](#)[/workflows](#)

5

*ops

[performance metrics](#)[evals](#)[tracing](#)



Andrej Karpathy 
@karpathy

∅ ...

There's a new kind of coding I call "vibe coding", where you fully give in to the vibes, embrace exponentials, and forget that the code even exists. It's possible because the LLMs (e.g. Cursor Composer w Sonnet) are getting too good. Also I just talk to Composer with SuperWhisper so I

AI hallucinations? It's a skills
problem. But more on that later.

AI Agents are everywhere

More importantly, AI *coding*
agents are everywhere

72 - []

73

PROBLEMS 1

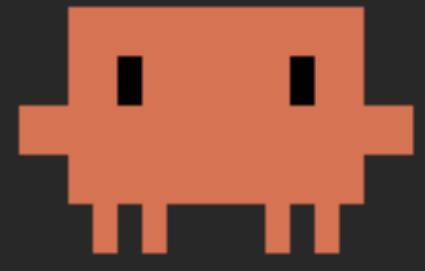
TERMINAL

OUTPUT

DEBUG CONSOLE

PORTS

GITLENS



Claude Code v2.0.0

Sonnet 4.5 · API Usage Billing

/Users/chriss/Sites/artsy/artsy-agent

> Try "refactor agent.py"

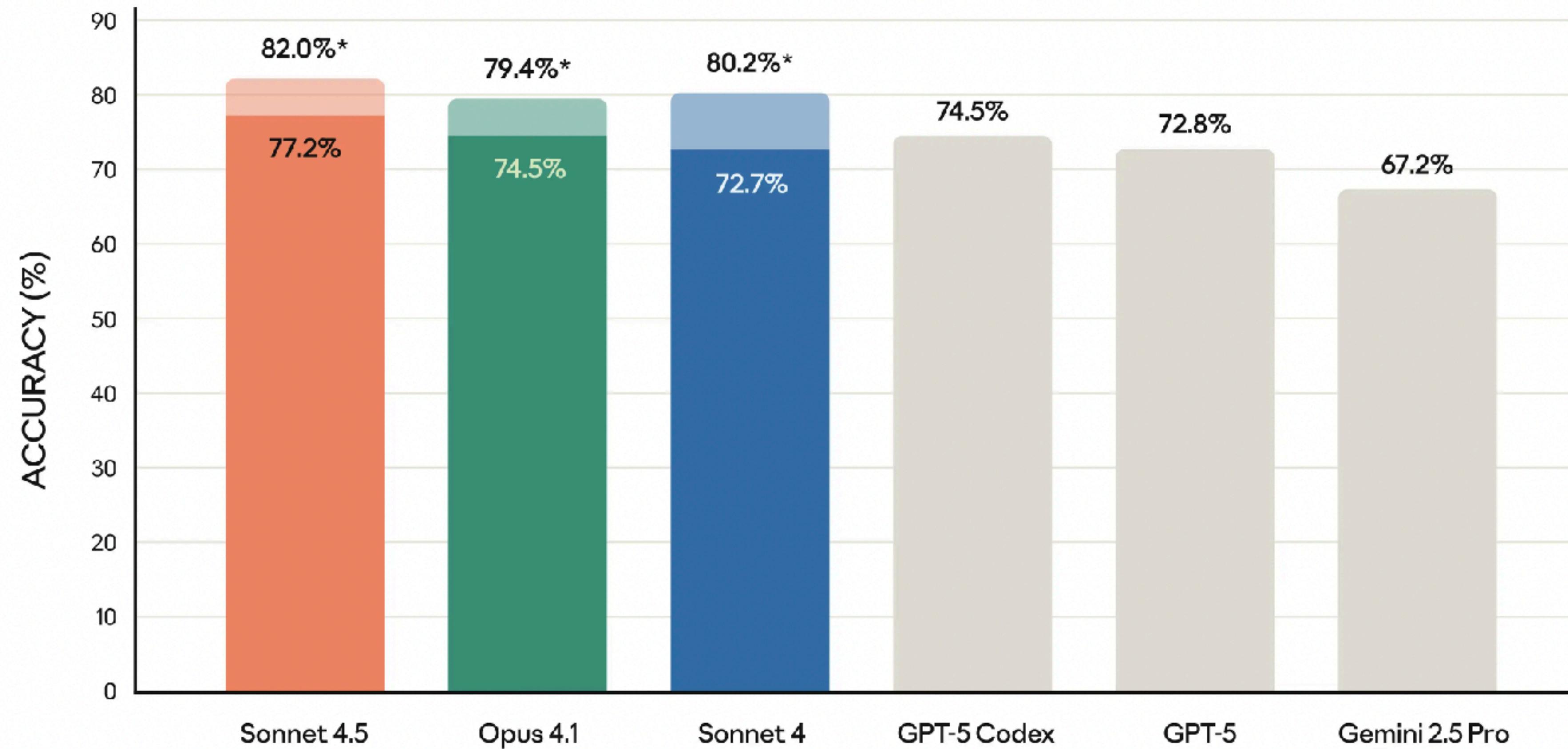
? for shortcuts

Vastly more powerful LLM models
are enabling these developments

Software engineering

* With parallel test-time compute

SWE-bench Verified (n=500)



As expected, there are multiple
sides and everybody is right

We went from this...

TECHNOLOGY

Obama: Everybody's Got to Learn How to Code

Colors, letters and coding? President Obama has new homework for America's students.

...to this

Computer Science Graduates Face Worst Job Market in Decades

But also this...

▲ alecco 7 hours ago | prev | next [-]

▼ As a burnt-out, laid-off aging developer, I want to thank Anthropic for helping me get in love with programming again. Claude Code on terminal with all my beloved *nix tools and vim rocks.

[reply](#)

At the extreme end, we're also
seeing this

 **Chief Wiggum** ✅ @ScriptedAlchemy · Sep 18
Its currently working on 17 packages in parallel.
Seventeen.



Chief Wiggum 
@ScriptedAlchemy

∅ ...

Nothing beats waking up in the morning to see ChatGPT made \$13,000 in its first few hours of access to my brokerage.

1:59 PM · Sep 15, 2025 · 7,626 Views

And in my own experience, this

refactor(tests): Migrate remaining Enzyme tests to RTL #15868

Merged

damassi merged 12 commits into [main](#) from [damassi/migrate-enzyme-tests](#)  on Jul 23

 Conversation 22

 Commits 12

 Checks 1

 Files changed 396



damassi commented on Jul 20 · edited

Member ...

The type of this PR is: Refactor

Description

Took <https://github.com/parruda/clause-swarm> for a spin in an effort to finally finish migrating all of our remaining Enzyme tests to React Testing Library.

Flow:

- Claude swarm spun up a manager (using Claude Opus) which then delegated test migration tasks to 6 separate "test migrator" devs working in parallel (using Sonnet).
- Instructions were generated using `clause-swarm generate`, which output a `clause-swarm.yml` file
- This migrated most tests without any intervention over a couple hours
- In the case of tricky / complex issues, those migrations were 'elevated' to the manager (ie, Opus) to resolve
- I instructed the bot to skip `Apps/Order` due to the sensitivity of that area of the codebase

We're also seeing this...

LEADERSHIP > CIO NETWORK

Viral Shopify CEO Manifesto Says AI Now Mandatory For All Employees

By [Douglas B. Laney](#), Contributor. ⓘ Data, Analytics and AI Strategy Advisor a...

[Follow Author](#)

Published Apr 09, 2025, 12:43pm EDT, Updated May 06, 2025, 10:44am EDT

And unfortunately this

Layoffs: Accenture cuts over 11,000 jobs in 3 months amid AI push

SALESFORCE

Salesforce CEO confirms 4,000 job cuts 'because I need less heads' with AI

CEO Marc Benioff revealed the job cuts during an interview on The Logan Bartlett Show podcast.

Take Microsoft, which has reportedly [laid off over 9,000 employees this year](#) under the guise of realigning for AI and efficiency. However, it is no secret that heavy capital expenditures for costs such as [data centers and AI infrastructure](#) have contributed to rising costs within the company, increasing the pressure to maintain profitability while also investing heavily.

White collar work is changing



Code is becoming cheap

**However, code != shipping
quality products**

**Shipping things of quality
requires different skills**

This is where opportunity lives

Why? Because automation, when used appropriately, unlocks different forms of *time*

Time to experiment

Time to refine

Time to revise

**Backlogs are getting
obliterated**

Ideas can be tested instantly

How I AI: Amplitude's Viral Internal AI Tool for Product Development

Discover how Amplitude built Moda, a game-changing internal AI tool, in just weeks, speeding up PM and internal data accessible to anyone in slack.

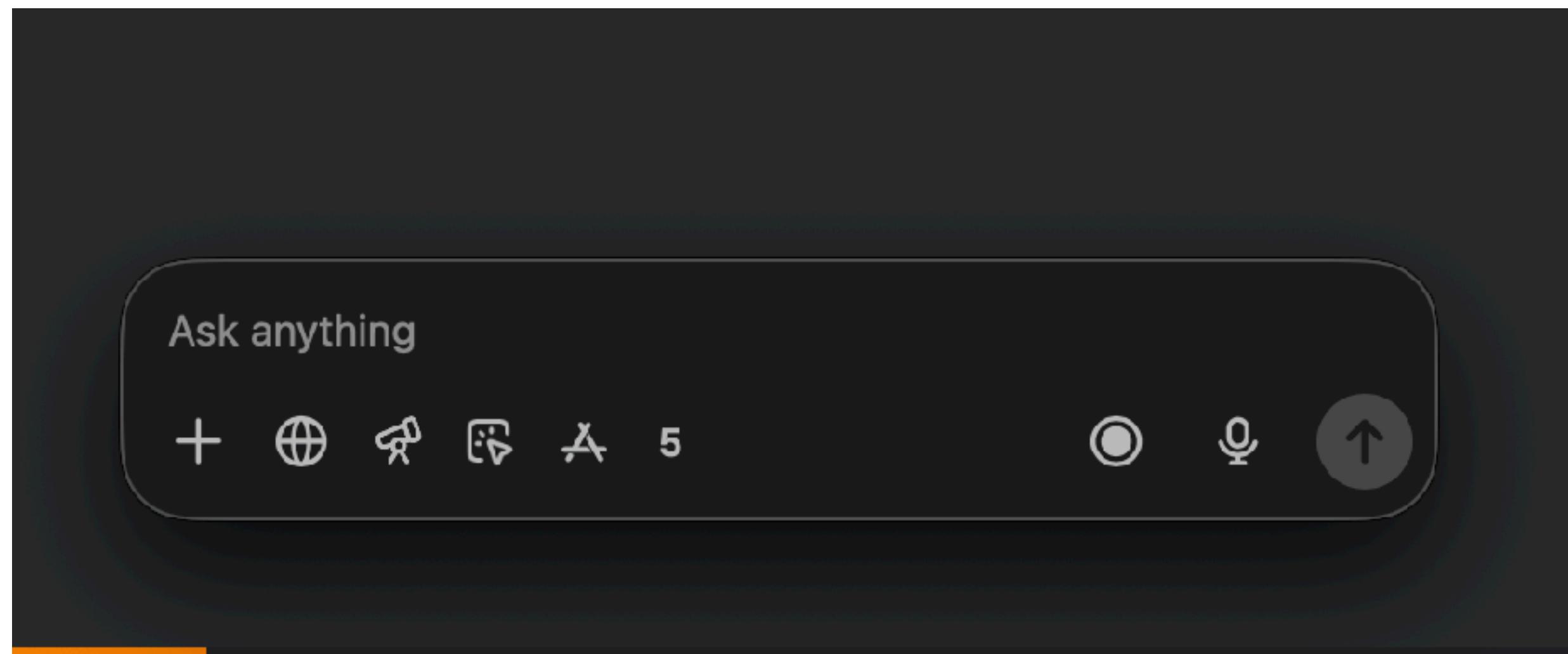
**Amidst these changes, software
engineering is taking a new form**

I haven't hand-written a line of
code in months, but neither is AI
doing my job

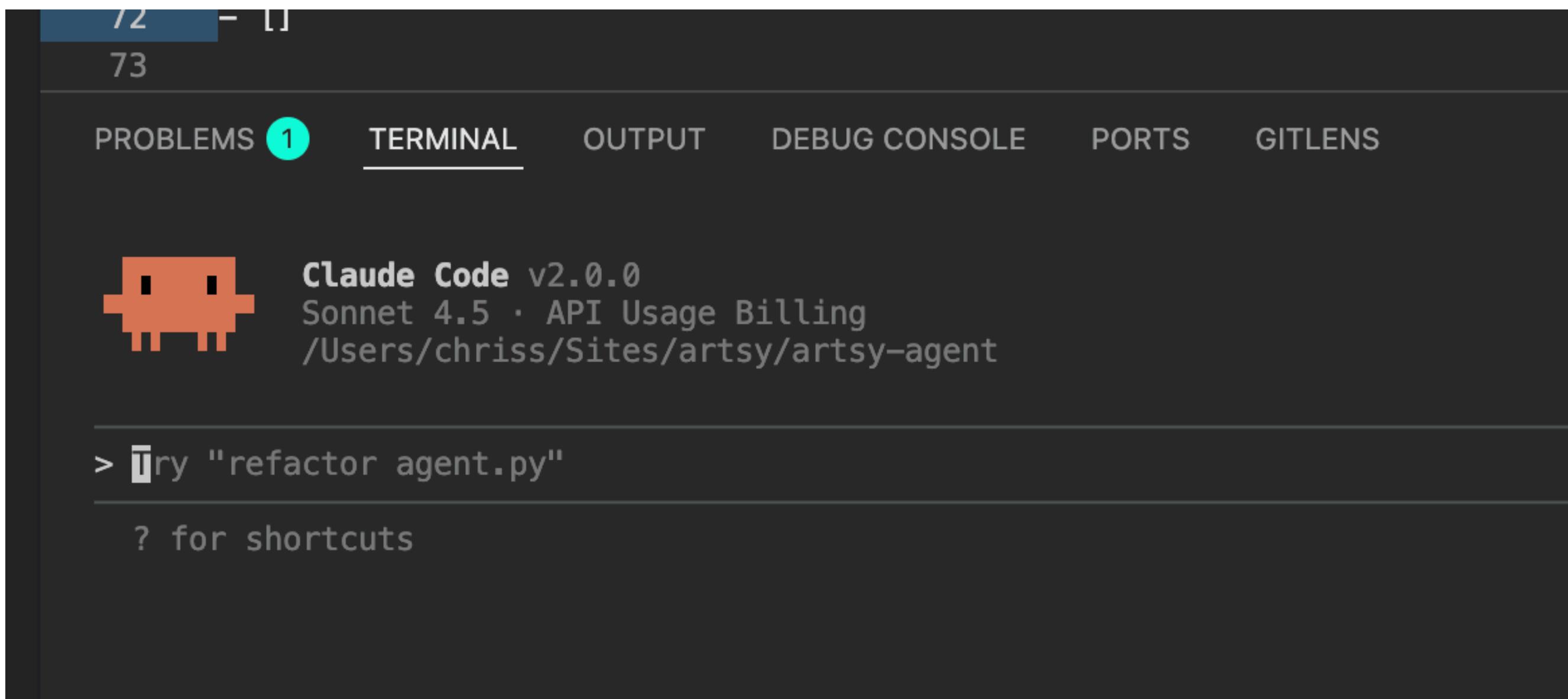
What I am doing is *writing more words*, and thinking in a different kind of way

**Most technical blockers can be
resolved fairly instantly**

ChatGPT Desktop: Just a quick cmd+space away



Or Claude Code, always running in the terminal



The job is increasingly about solving information bottlenecks, and intelligence gathering, and writing tools for such

**Funny new patterns pop out of
nowhere, like turning a typical
README into an interactive app**

```
    puts "An error occurred while processing your artwork import: #{e.message}"
end
```

When this runs successfully, you should see status updates in the console followed by the import results.

Note: You can replace `file_name`, `s3_key` and `s3_bucket` with values returned from the CMS Backend API or inspect the relay mutation logs to grab values.

LLM Workflow

In an LLM context we will automate the above. Ask the user sequentially for each value:

1. First ask: "Do you have a `file_name`? If yes, enter it. If no, press enter for default."
2. Then ask: "Do you have an `s3_key`? If yes, enter it. If no, press enter for default."
3. Finally ask: "Do you have an `s3_bucket`? If yes, enter it. If no, press enter for default."

Then replace the above script with those values and execute the script using the rails runner. The script will return the import results when complete.

LLMs: Return the complete `ArtworkImport` object with all its attributes including the detected color and the raw data that were mapped to internal field names. Also return each `ArtworkImportRow` with both the raw data as well as the transformed data that's been processed and validated for import into the system. Do not omit any rows.

And MCP (model context protocol)
can be used to give LLMs tools to
query targeted datasets

[Get Started](#) Components Charts Styling Theming[Overview](#)[Installation](#)[Migration](#)[CLI](#)[Figma](#)[Contributing](#)[Playground ↗](#)[Changelog ↗](#)

AI for Agents

[MCP Server](#)[LLMs.txt](#)[AI Rules](#) New

Frameworks

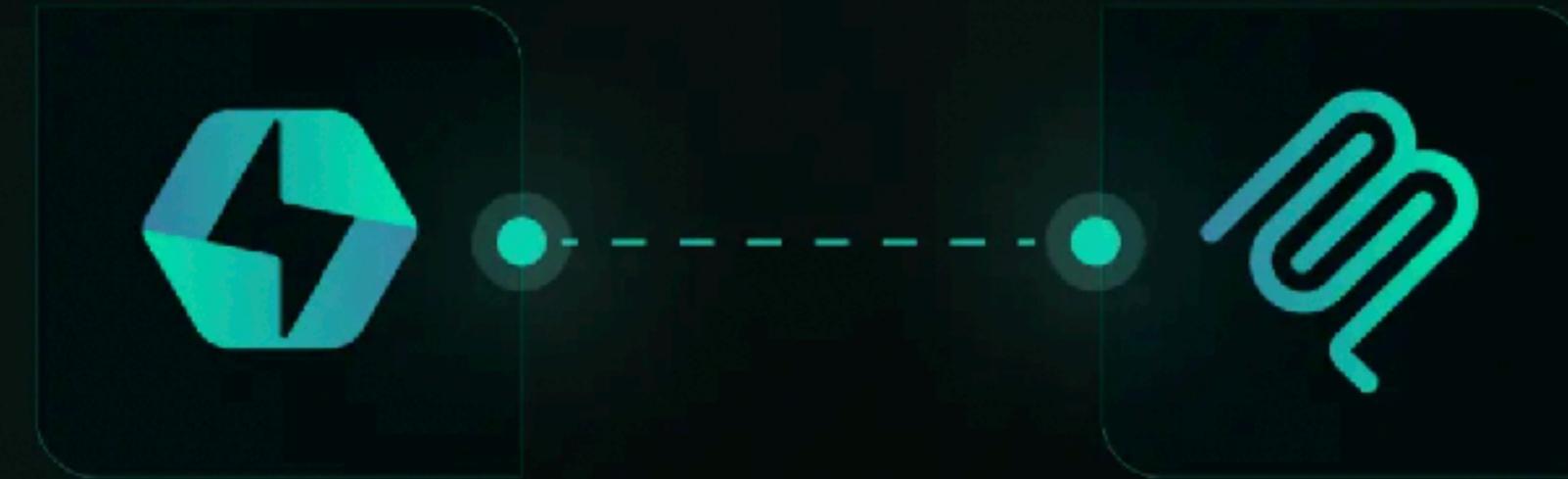
[Next.js \(App\)](#)[Next.js \(Pages\)](#)[Remix](#)[Storybook](#)

MCP Server

Bridging the gap between AI agents and Chakra UI

 Copy

AI Tip Want to skip the docs? Use the [MCP Server](#)



```
npx -y @chakra-ui/react-mcp
```

GitMCP

Code without hallucinations

github.com/username/repo → gitmcp.io/username/repo

username.github.io/repo → username.gitmcp.io/repo

any GitHub repository → gitmcp.io/docs

or try the instant GitHub URL converter

Example: github.com/langchain-ai/langgraph

Try Example

To MCP

To Chat

Example: Artsy MCP

- I'll help you get `analytics` stats for Gagosian over the past 4 weeks using the Artsy MCP tools.
- `artsy-mcp - activityStatsToolQuery (MCP)(partnerId: "gagosian", period: "FOUR_WEEKS")`

Tool use

```
artsy-mcp - activityStatsToolQuery(partnerId: "gagosian", period: "FOUR_WEEKS") (MCP)
The returned value is optional and has type `Partner`
```

```
---
```

```
scalar AnalyticsDateTime
```

```
type AnalyticsPageviewStats {
    artworkViews: Int
```

```
> using artsymcp, show me how to write a conversation query
```

- I'll help you understand how to write a conversation query using the Artsy GraphQL API. Let me first explore the schema to find conversation-related types.

```
● artsy-mcp - search (MCP)(terms: ["conversation", "message", "chat"])
  ↳ type Conversation implements Node {
    messagesConnection(after: String, before: String, first: Int, last: Int, sort: sort): MessageConnection
  }
  ↳ input ConversationMessageAttachmentInput {
    id: String
    name: String!
    ... +4 lines (ctrl+r to expand)
  }
  ↳ type Me implements Node {
    conversation(id: String!): Conversation
  }
  ↳ type Message implements Node {
    attachments: [Attachment]
    body: String
  }
```

- Here are the key patterns for writing conversation queries:

1. Basic Conversation Query

```
query GetConversation($id: String!) {
  conversation(id: $id) {
    id
    internalID
    createdAt
    lastMessage
    lastMessageAt
    unreadByCollector
    unreadByPartner
    from {
      id
      name
      email
      type
    }
  }
}
```

Example: Artsy Agent

Artsy Agent

An Agent MCP server that connects to common data sources such as:

- [Notion](#)
- [Salesforce](#)
- [Braze](#)
- [Github](#)
- [JIRA](#)
- [Artsy MCP](#)
- and more to come

See the [apps/artsy-agent](#), [apps/artsy-mcp](#) and [apps/slackbot](#) monorepo directories for further README details.

artsy-agent > Hi! Show me some recent engineering playbooks

| ► artsy-agent —

Hi! Show me some recent engineering playbooks

| ◀ artsy-agent —

the assistant requested tool calls

-| artsymcp | braze | github | jira | notion | salesforce | sentry |—

| ◀ artsy-agent —

{'query': 'engineering playbook', 'query_type': 'internal', 'filters': {'created_date_r'}

-| notion | notion | notion | notion | notion | notion |—

. | ◀ Calling Tool | artsy-agent notion (notion-search)

◀ [artsy-agent](#)

Here are some recent Artsy engineering playbooks and guides from Notion (2025):

- [Engineering Playbooks \(Collections\)](#)
A comprehensive index of common engineering workflows, infra standards, CI/CD, migrations, code topics, etc.
- [MCP Integration Playbook \(WIP\) – Sep 19, 2025](#)
Guidance for integrating with Artsy MCP, including best practices and caveats for this fast-moving infrastructure.
- [Amber Shape Up Playbook \(WIP\) – Sep 22, 2025](#)
Team process, bug-handling, and Shape Up methodology adaptations for the Amber/Volt teams.
- [Terraform Playbook – Sep 23, 2025](#)
Infrastructure-as-code guidelines and example patterns for using Terraform at Artsy.
- [Disaster Recovery Playbook – Sep 16, 2025](#)
Steps to recover critical systems and respond to outages, complementing incident response processes.
- [ACE x Auctions Support Playbook – Sep 26, 2025](#)
Engineering support and engagement with ACE/Auctions. Playbook for escalation, troubleshooting, and triage.
- [Refinement Playbook – Aug 12, 2025](#)
Steps and participants for effective project refinement processes.
- [Mobile Initiatives & Playbooks – Sep 15, 2025](#)
Recent efforts and documentation for Artsy's mobile engineering team.
- [Engineering Mentoring Program – Aug 29, 2025](#)
How mentoring is structured for technical onboarding and career growth.
- [Mongo→PG Migration Playbook – May 12, 2025](#)
Technical steps and caveats for migrating from MongoDB to PostgreSQL on Artsy's stack.

For a full index (covering more infra, deployment, and security playbooks), browse the central

◀ [Engineering Playbooks Index](#)

If you want an in-depth summary of a specific playbook, let me know!

| ▶ artsy-agent

Thanks! are there any engineering documentation / best practices repos I should look at? I'm a new hire.

.. | ◀ 203

| artsy-agent

gpt-4.1 turn 4

artsy-agent

Absolutely! As a new Artsy engineering hire, these are the most important documentation and best-practices repos to get started:

Central Engineering Docs

- **README**

The main Artsy engineering manual. Contains:

- Onboarding checklists
- Playbooks (deployments, incident response, migrations, etc.)
- Coding standards and architectural patterns
- Internal tools and workflows
- Team norms, process, and communication tips

[Start here!](#)

Additional Documentation & Best Practices

- **artsy.github.io**

Artsy Engineering's open blog with public-facing technical articles, deep dives, and incident reviews.

- **Engineering Playbooks (Notion index)**

See the Notion index for a lived-up-to-date collection of playbooks, process docs, and quick links for everything from infrastructure to

DevOps & Infra

- **hokusai**

CLI and workflow automation tool for Docker and Kubernetes at Artsy; has documentation for deploying and maintaining services.

- **artsy-hokusai-templates**

Templates and starter files for new infra-backed projects.

Other Helpful Resources

- **metaphysics**

Reference for API structure and standards, plus lots of docs/examples on implementing new endpoints and GraphQL conventions.

- **force**

Docs for the main web client; also check out detailed README sections for dev setup and architectural background.

|◀ artsy-agent

Here are some recent unresolved issues in Volt-production (Sentry):

1 [VOLT-PRODUCTION-Z61](#)

captureException

- Users: 4, Events: 4, Last seen: 17 minutes ago

2 [VOLT-PRODUCTION-ZAM](#)

NotFoundError: Failed to execute 'insertBefore' on 'Node': The node before which the new node is to be inserted is not a child of this node.

- Users: 1, Events: 5, Last seen: 29 minutes ago

3 [VOLT-PRODUCTION-ZAF](#)

TypeError: Cannot read properties of null (reading 'style')

- Users: 50, Events: 56, Last seen: 43 minutes ago

4 [VOLT-PRODUCTION-XZ1](#)

- Users: 6, Events: 7, Last seen: 1 hour ago

5 [VOLT-PRODUCTION-Z67](#)

callback

- Users: 1, Events: 3, Last seen: 1 hour ago

There are currently 32 unresolved issues for Volt-production.

You can review all unresolved issues directly in Sentry here:

🔗 [Volt-production Unresolved Issues in Sentry](#)

Let me know if you want a deeper dive or details on any specific error!

**For ICs, learning how to use these
tools right is all about
communication**

How clearly can you ask questions
and break ideas apart? How well
can you delegate (ie, *let go*)?

**What is the "right size" for a
given task?**

The quality of AI-assisted software depends on unit of work management

15 September 2025

All of these questions are not unfamiliar; nor are they new. LLMs just highlight them in a more direct way.

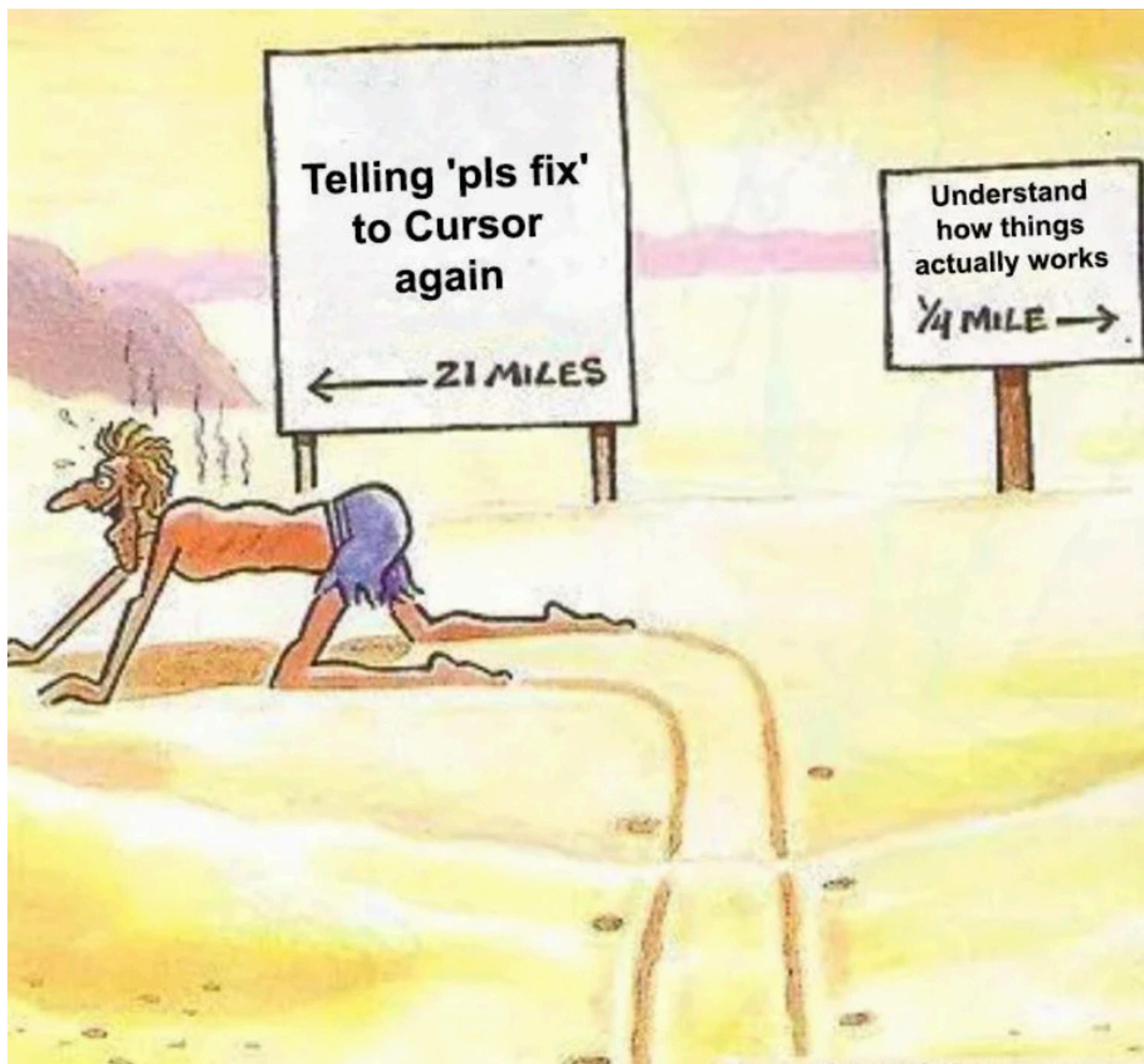
**Everybody communicates
differently; but also, LLMs are
reflections of the user**

If one approaches a coding agent
with skepticism, the code it
generates will reinforce assumptions



6

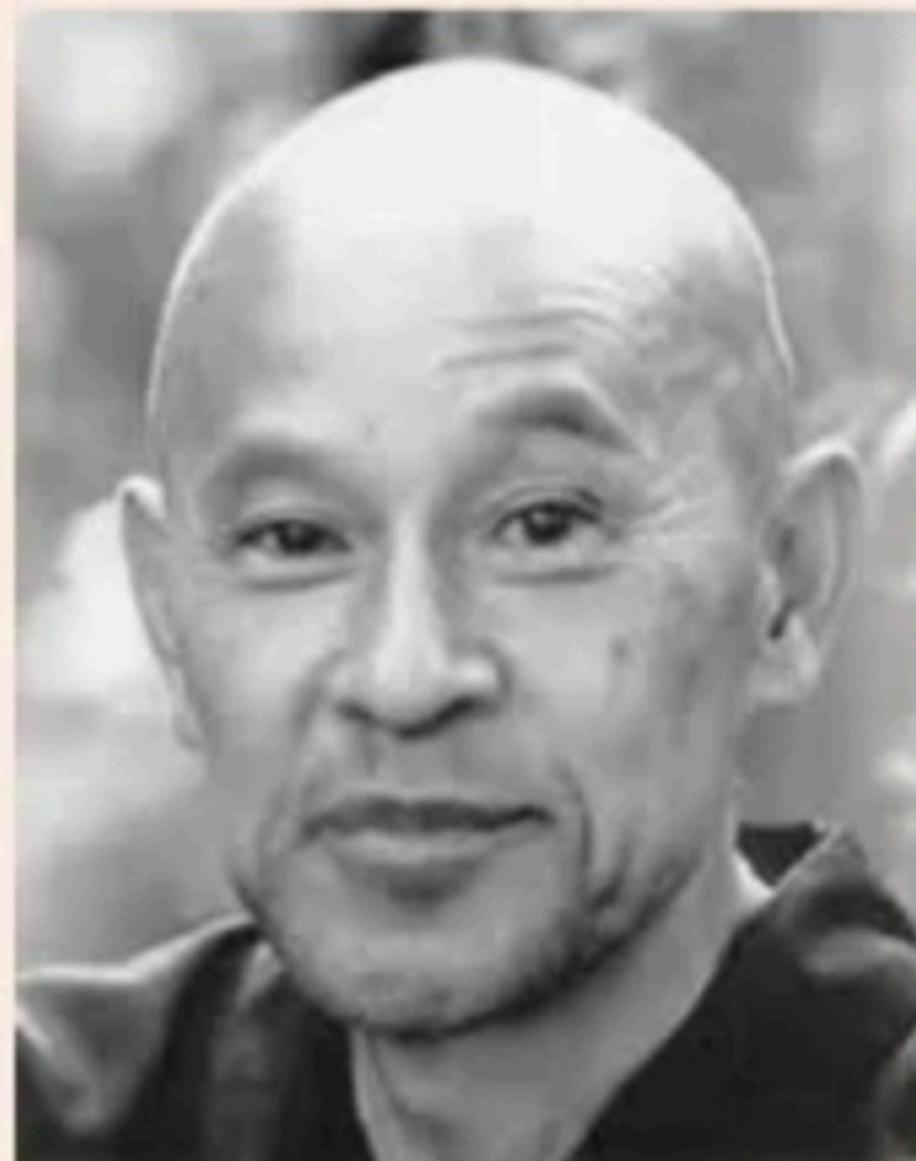
**Or...
.**



**One must be open to learning,
but also self-reflection!**

**“ In the beginner's mind
there are many
possibilities, but in the
expert's there are few ”**

Shunryū Suzuki



Thanks!