



# Context Engineering for AI Agents in Open-Source Software

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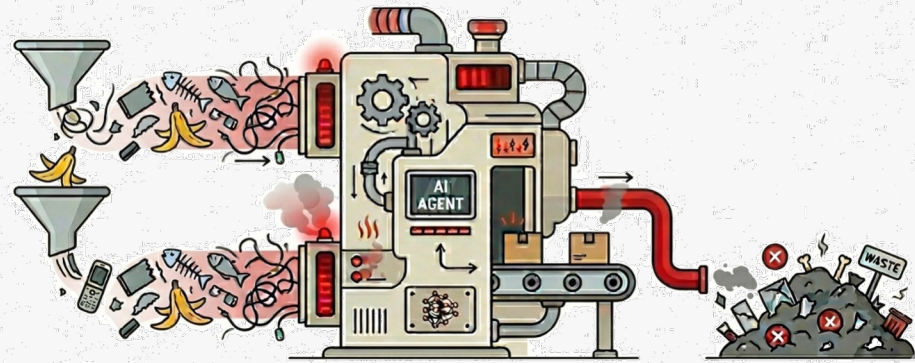
# What is Context Engineering?

*Context engineering is the deliberate process of designing, structuring, and **providing task-relevant information to large language models.***

- **Prompt engineering** focuses on how a **task is described** to the model (e.g., instructions, output indicators).
- **Context engineering** focuses on what **task-relevant information** the model has access to (e.g., relevant guidelines, documentation, source code).

# Why Context Engineering?

## Garbage in, garbage out



Generated with Gemini

# What are Context Files?

*One way to “engineer” context is to add **machine-readable AI context files** to source code repositories. The AI agents then automatically add the content of these files to their prompts.*

- **README.md** files are written for **humans**.
- **AGENTS.md** files are written for **AI agents**.  
(CLAUDE.md is a vendor-specific file serving the same purpose)
- Both are **plain Markdown files** with no required structure.


# What are Context Files?

## AGENTS.md

A simple, open format for guiding coding agents, used by over [60k open-source projects](#).

Think of AGENTS.md as a **README for agents**: a dedicated, predictable place to provide the context and instructions to help AI coding agents work on your project.

Explore Examples

 View on GitHub

```
# AGENTS.md
```

```
## Setup commands
```

- Install deps: ``pnpm install``
- Start dev server: ``pnpm dev``
- Run tests: ``pnpm test``

```
## Code style
```

- TypeScript strict mode
- Single quotes, no semicolons
- Use functional patterns where possible

<https://agents.md/>

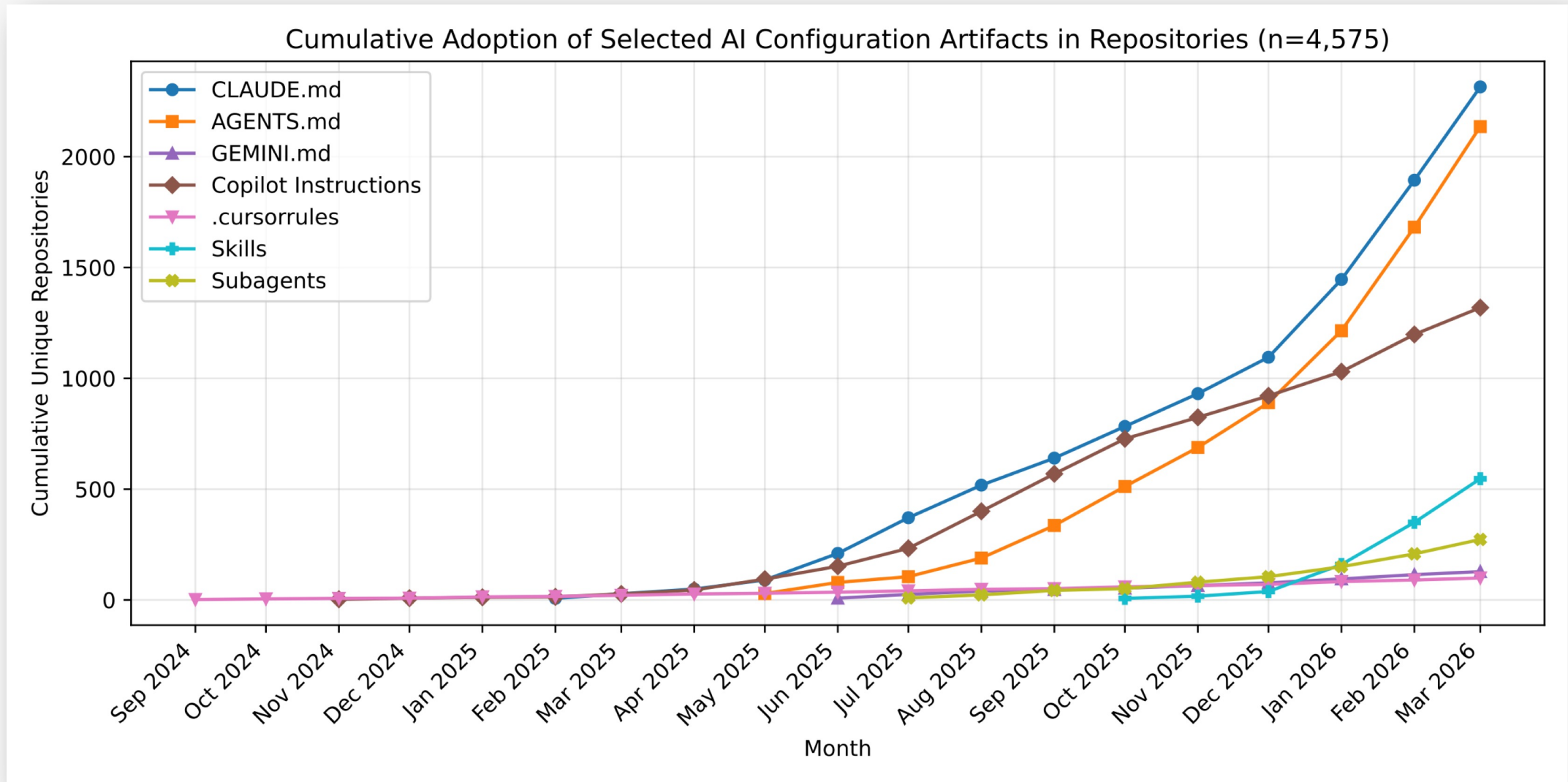
# Why Study Context Files?

AI context files offer a **unique opportunity to study...**

- how developers **customize** AI agents to their needs,
- what information they consider **relevant** to include,
- how they **present** it, and
- how instructions and contextual descriptions **evolve**.

**Note:** The initial of version of context files can be AI-generated, with later manual changes in response to issues or changed requirements.

# Context Files vs. Other Configuration Mechanisms



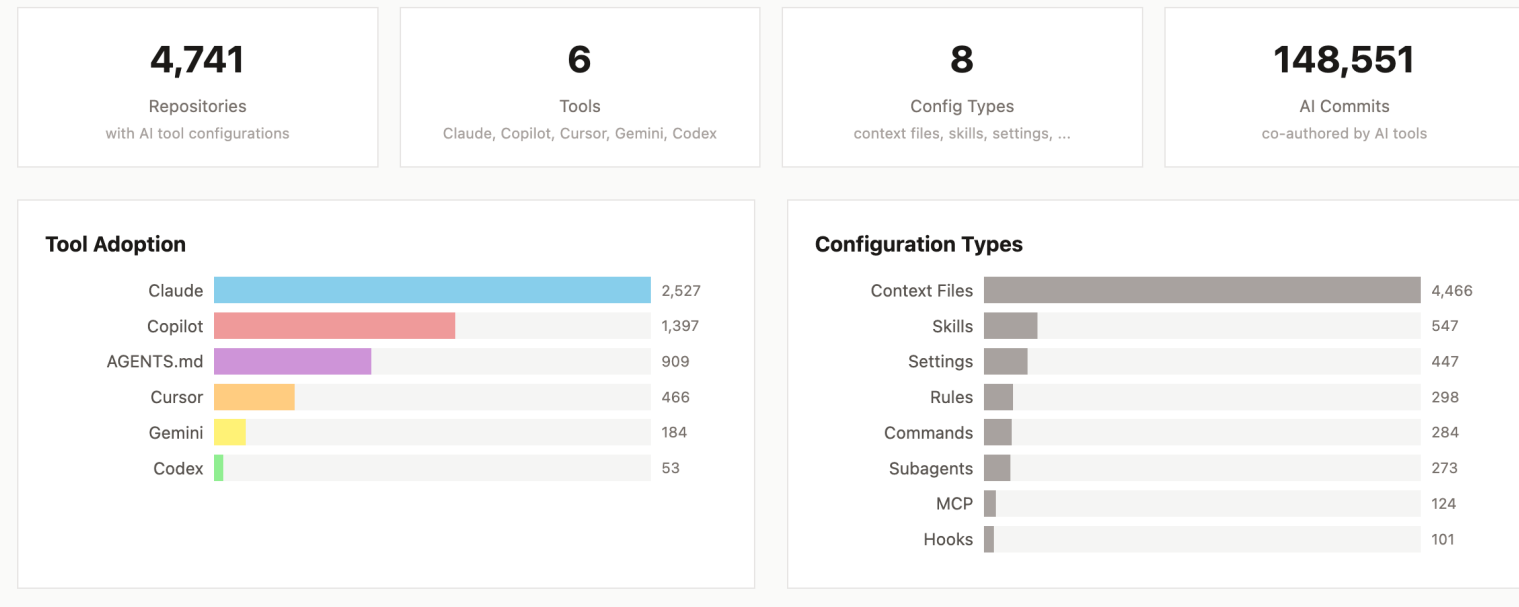
<https://se-uhd.de/ai-config-dataset/#visualizations>

# How To Study Context Engineering In OSS?

## Agentic AI Coding Tool Configurations

A dataset of configuration artifacts and AI-co-authored commits for Claude Code, Gemini CLI, Codex CLI, Copilot CLI, and Cursor across GitHub repositories.

### Dashboard



<https://se-uhd.de/ai-config-dataset/>

# Questions?