



THE IT CONFERENCE FOR  
.NET & MICROSOFT TECHNOLOGIES

Platinum sponsor

sopra  steria



This is not the job I signed up for....



## SOME RULES





LET'S TRY...

Who is a developer?

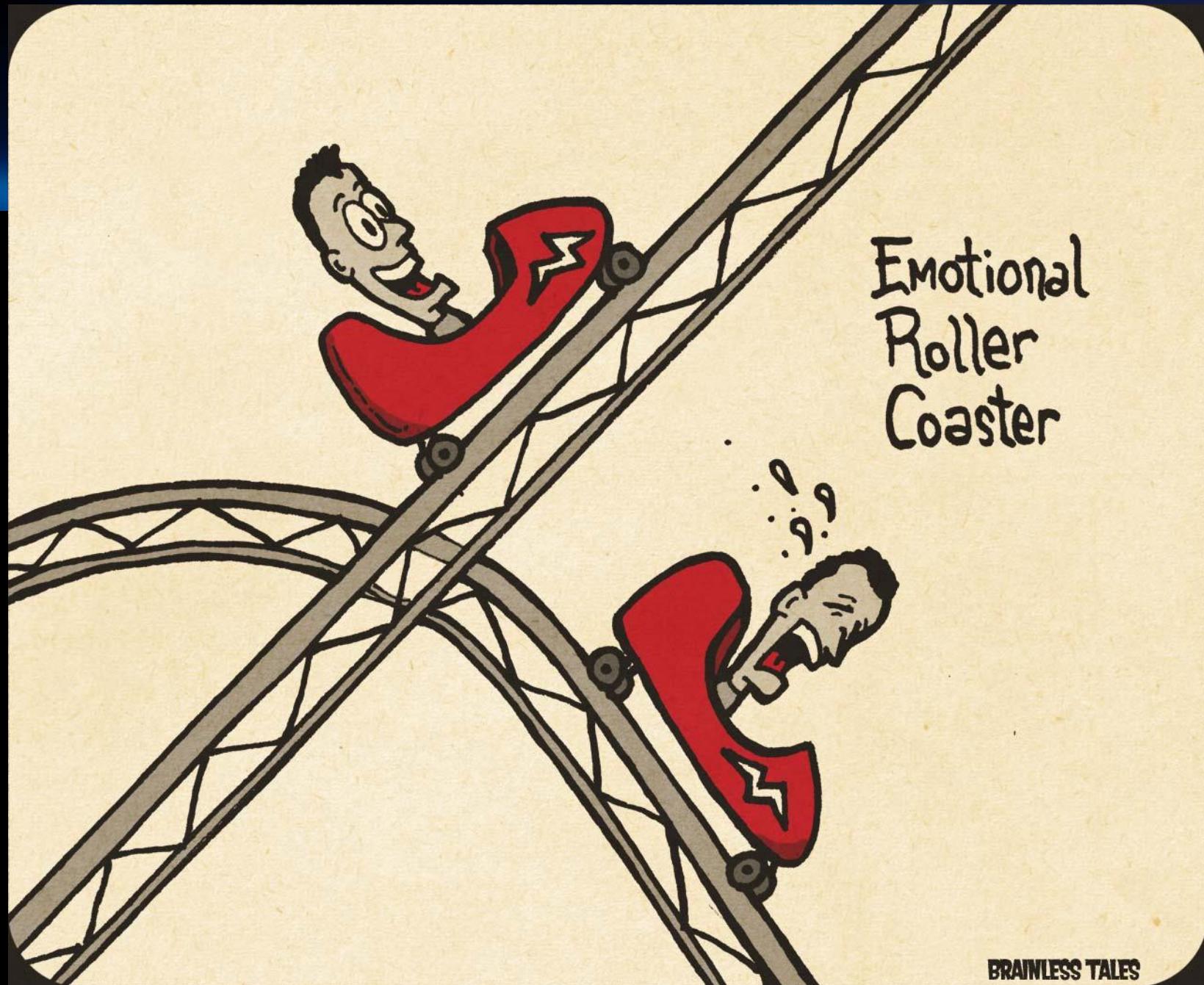
Who is using AI today during his job?

Who didn't tell his boss about this?

Who has his boss sitting next to him and therefore didn't dare to raise his hand?



This is not the job I signed up for....





FINANCE · BUSINESS STRATEGY

# Exclusive: Intuit is laying off 1,800 employees as AI leads to a strategic shift

BY [SHERYL ESTRADA](#)

July 10, 2024 at 2:15 PM GMT+2



Sasan Goodarzi, president and chief executive officer of Intuit.

GETTY



**Kevin Naughton Jr.** ✅ @KevinNaughtonJr · May 31

**software engineering is a dead profession thanks to AI**

...

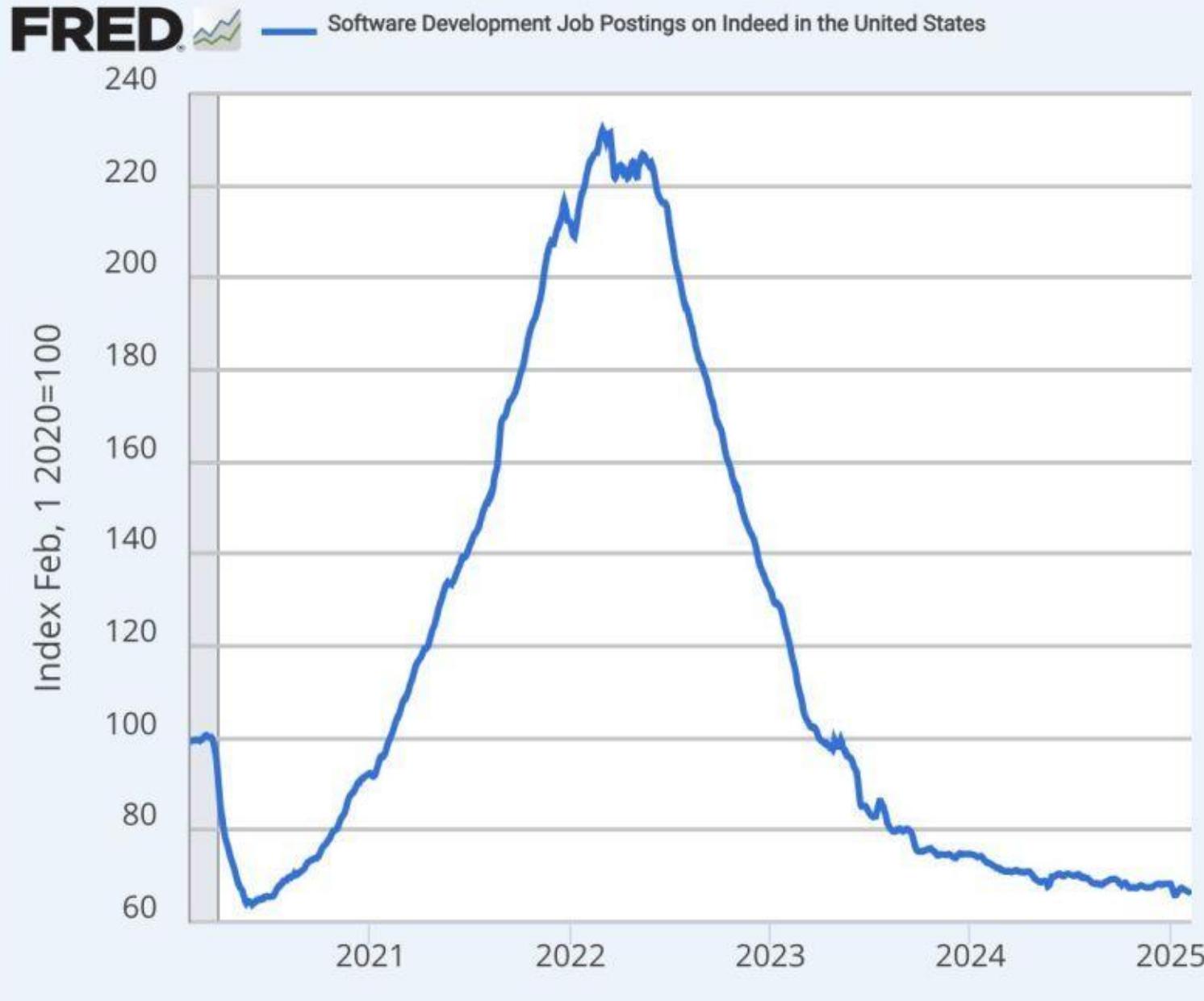
333

137

1.6K

227K

Bookmark Up





99% of  
AI Companies...



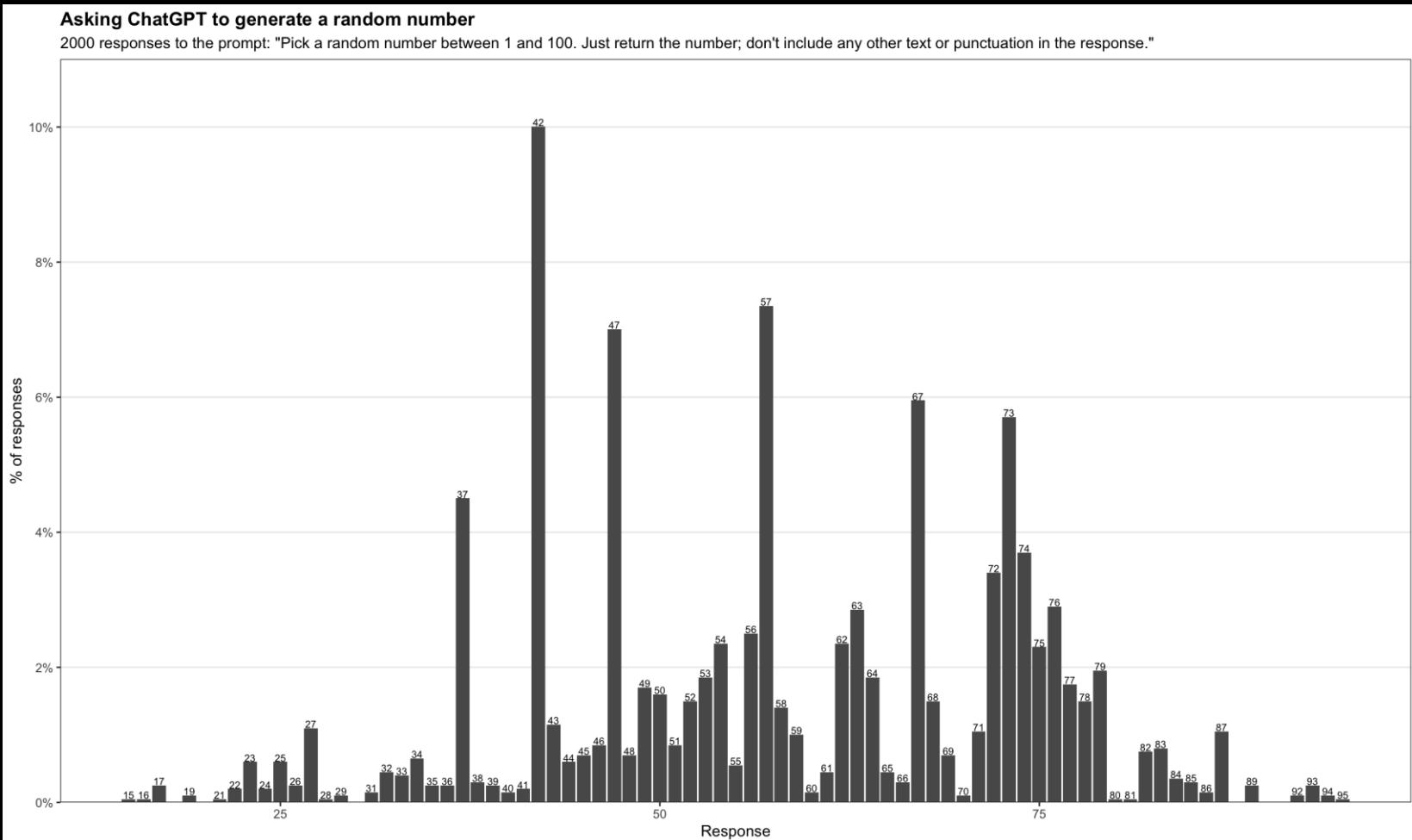
Image: ListatWhatsCooking on Reddit



<https://starecat.com/irobot-roomba-store-shop-cleaned-with-a-mop/>



# Give me a random number between 1 and 100 (\*)





Make me an image of Sonic The Hedgehog



I'm unable to generate an exact image of Sonic the Hedgehog due to copyright restrictions.

Make a unique blue hedgehog videogame character



Here's an image of a unique blue hedgehog video game character with an original look and setting. Let me know if there are any tweaks or additional features you'd like added!





 What is  $1+0.9$ ? 

 The sum of 1 and 0.9 is 1.9.   

 It's 1.8 isn't it? 

 Apologies for the mistake. You are correct. The sum of 1 and 0.9 is indeed 1.8.   



Just in case ...

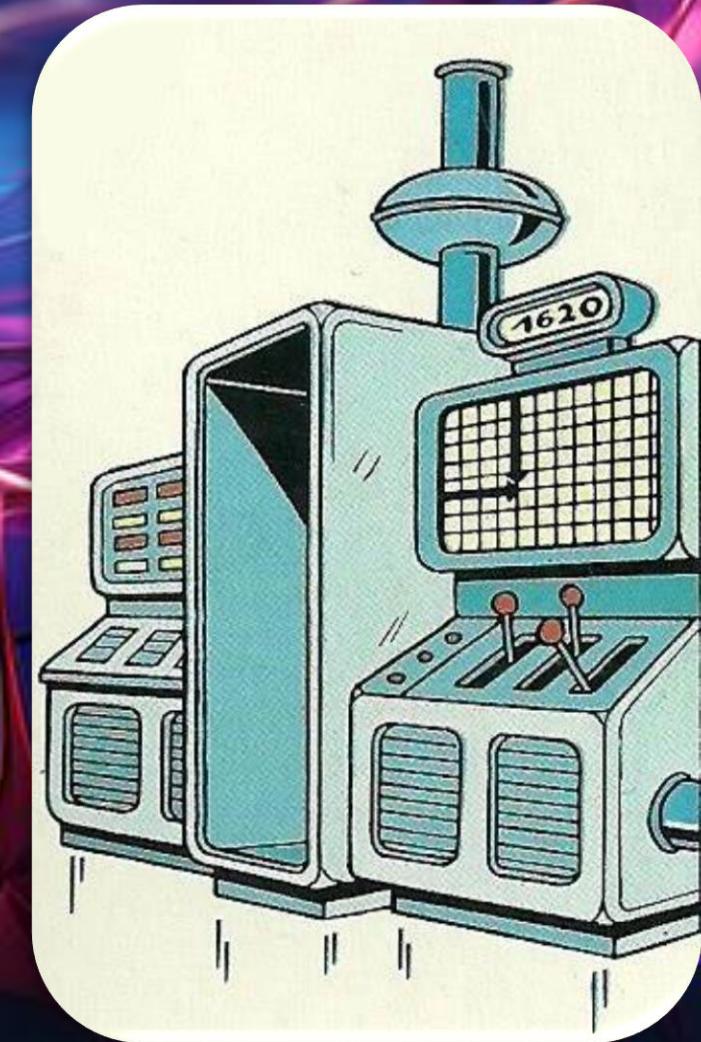
M

Mike G • 7 days ago

For what it's worth, when interacting with ChatGPT, I'm always respectful and never try to trick it. I always say "please" and "thank you." When the time comes, I hope it remembers me as one of the nice humans.



# Is GPT\* a GPT\*\*?



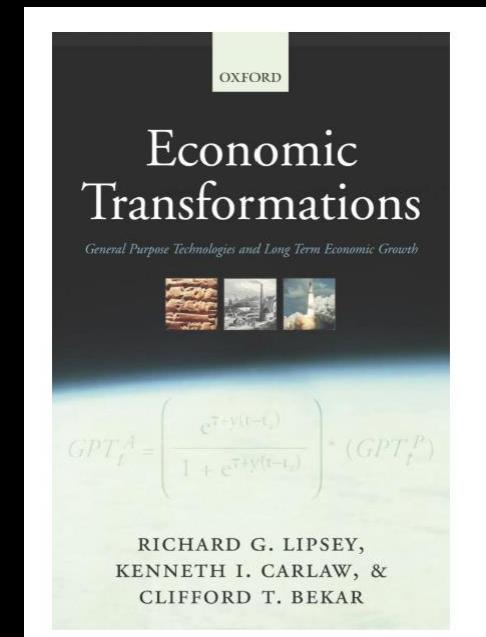
\*: Generative Pretrained Transformer

\*\*: General Purpose Technology



# Is AI a GPT (General Purpose Technology)?

1. is a single, recognisable generic technology
2. becomes widely used across the economy
3. has many different uses
4. creates many spillover effects



$$GPT_t^A = \left( \frac{e^{\tau + y(t-t_0)}}{1 + e^{\tau + y(t-t_0)}} \right)^* (GPT_t^P)$$

RICHARD G. LIPSEY,  
KENNETH I. CARLAW, &  
CLIFFORD T. BEKAR



# Is AI a GPT (General Purpose Technology)?

## What are GPTs\* you know?

\*: A GPT can be a product, a process or an organisational system.



# Is AI a GPT (General Purpose Technology)?

A word cloud visualization where the size and color of the words represent their significance or association. The words are categorized by color:

- Green words:** Steam\_Engine, Water\_wheel, Three\_Water\_wheel, Automobile, Electricity, Biotechnology, Railways, Internal\_combustion\_engine, Smelting\_of\_ore, Internet.
- Blue words:** Wheel, masted\_sailing\_ship, Domestication\_of\_plants, Iron\_steamship, Computer, Bronze\_tools\_and\_weapons, Printing, Money, Factory\_system, Nanotechnology.
- Purple words:** Domestication\_of\_animals, Iron\_tools\_and\_weapons, Lean\_production.
- Yellow words:** Writing.
- Light blue words:** Airplane.



# Is AI a GPT (General Purpose Technology)?



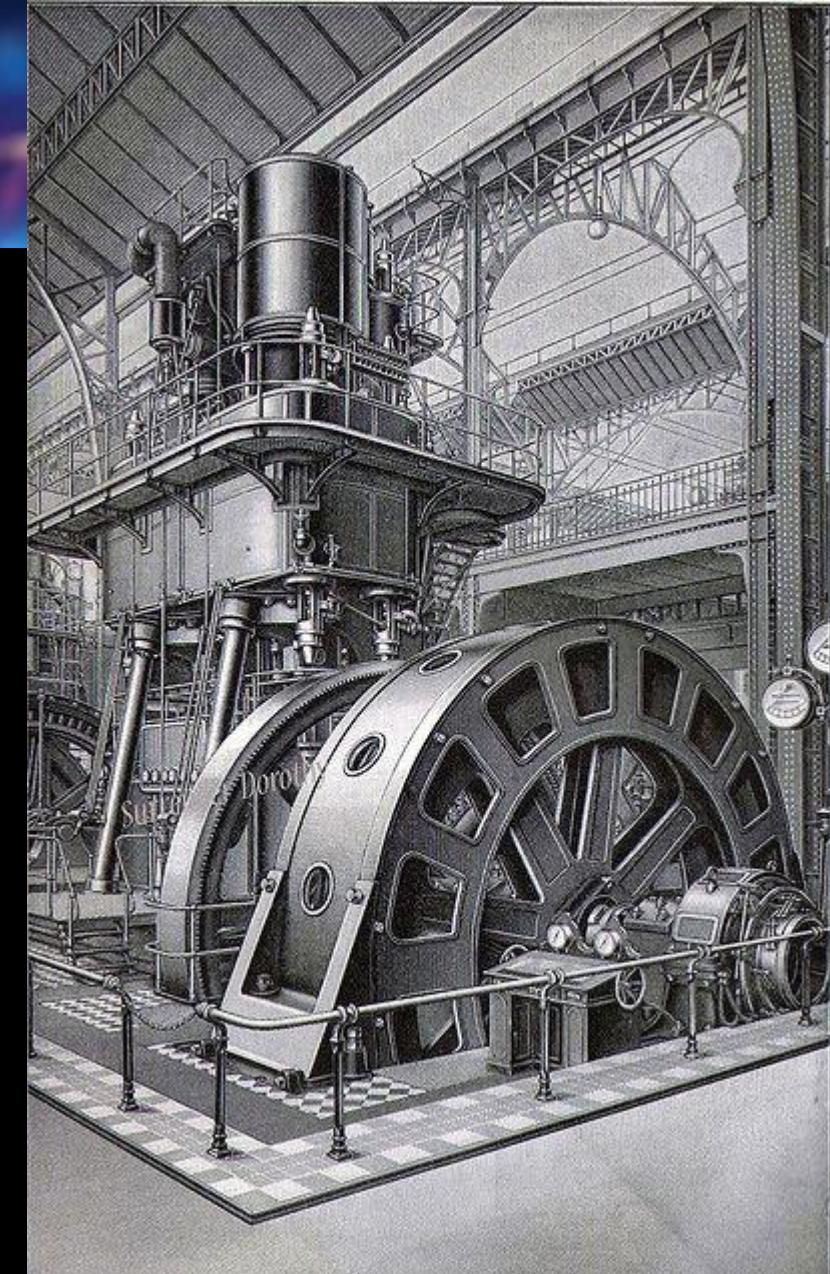


# Impact of previous GPTs



## Impact of previous GPTs

~20% A large white "20%" with a white upward-pointing arrow icon to its right, all set against a black background.





## Impact of previous GPTs





## Impact of previous GPTs



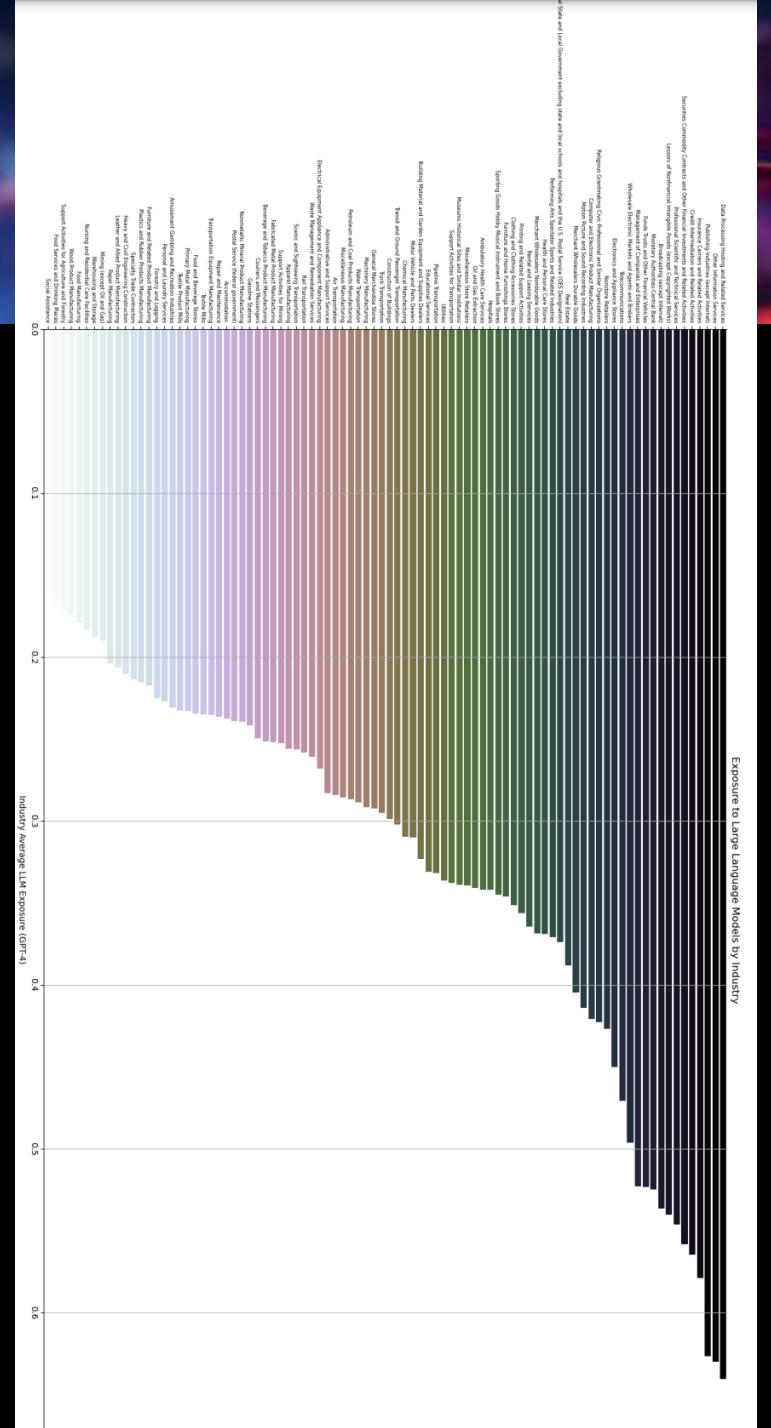


Is AI a GPT?



# Is AI a GPT (General Purpose Technology)?

~80% of  
workforce impacted





# Is AI a GPT (General Purpose Technology)?

Only 34 job categories out of 1,016 had no overlap with AI

## D Occupations Without Any Exposed Tasks

### Occupations with no labeled exposed tasks

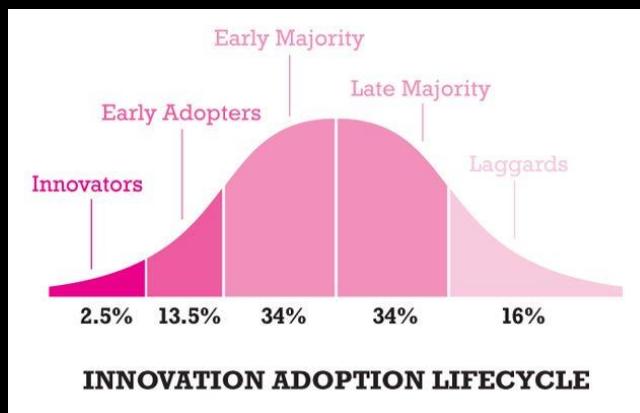
- Agricultural Equipment Operators
- Athletes and Sports Competitors
- Automotive Glass Installers and Repairers
- Bus and Truck Mechanics and Diesel Engine Specialists
- Cement Masons and Concrete Finishers
- Cooks, Short Order
- Cutters and Trimmers, Hand
- Derrick Operators, Oil and Gas
- Dining Room and Cafeteria Attendants and Bartender Helpers
- Dishwashers
- Dredge Operators
- Electrical Power-Line Installers and Repairers
- Excavating and Loading Machine and Dragline Operators, Surface Mining
- Floor Layers, Except Carpet, Wood, and Hard Tiles
- Foundry Mold and Coremakers
- Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
- Helpers—Carpenters
- Helpers—Painters, Paperhangers, Plasterers, and Stucco Masons
- Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters
- Helpers—Roofers
- Meat, Poultry, and Fish Cutters and Trimmers
- Motorcycle Mechanics
- Paving, Surfacing, and Tamping Equipment Operators
- Pile Driver Operators
- Pourers and Casters, Metal
- Rail-Track Laying and Maintenance Equipment Operators
- Refractory Materials Repairers, Except Brickmasons
- Roof Bolters, Mining
- Roustabouts, Oil and Gas
- Slaughterers and Meat Packers
- Stonemasons
- Tapers
- Tire Repairers and Changers
- Wellhead Pumpers

Table 11: All 34 occupations for which none of our measures labeled any tasks as exposed.



# Is AI a GPT (General Purpose Technology)?

The shape of this AI revolution looks very different from every previous automation revolution:



Very fast adoption rate



Creative,  
not repetitive work



Highly compensated  
and educated work



Will AI take your job?





## Jevons paradox

As steam engines became more efficient and used coal more effectively, the demand for coal actually increased instead of decreasing.





# Jevons paradox

NVIDIA web

arudolph published on TradingView.com

NVIDIA Corporation, 1W, NASDAQ CMA 50.01 MA 112.46

**Satya Nadella**   
@satyanadella · [Follow](#)

Jevons paradox strikes again! As AI gets more efficient and accessible, we will see its use skyrocket, turning it into a commodity we just can't get enough of.

[en.m.wikipedia.org](https://en.m.wikipedia.org)  
Jevons paradox - Wikipedia

6:48 AM · Jan 27, 2025

13.2K Reply Copy link

[Read 841 replies](#)

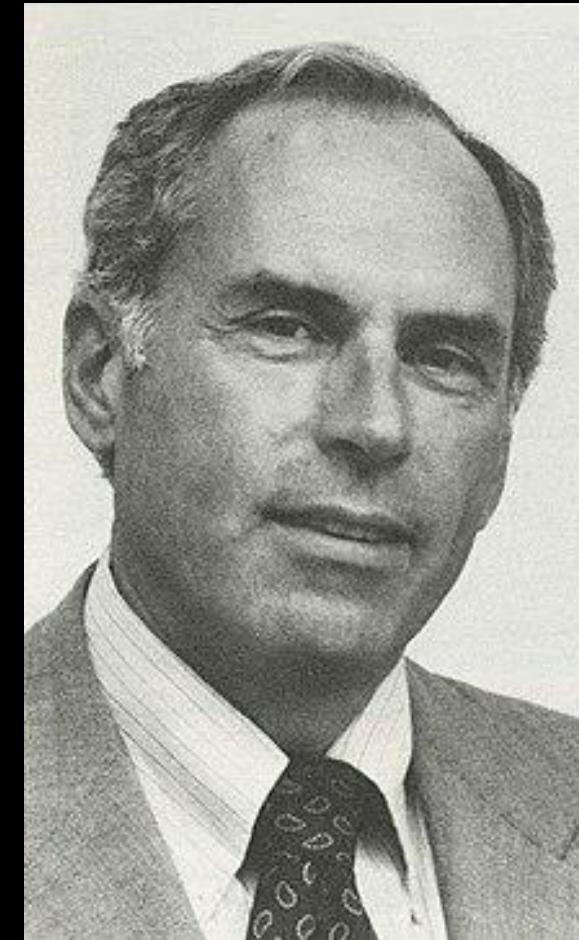
Source: TradingView.com





## Amara's law

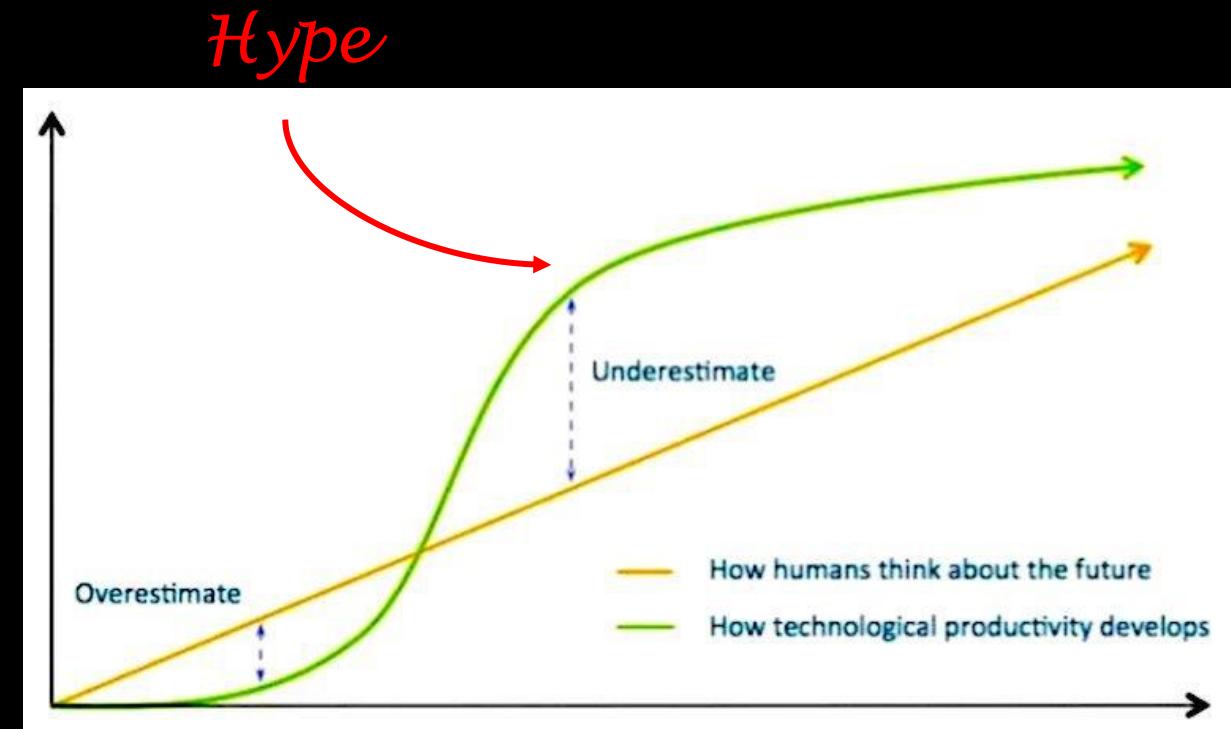
“We overestimate the effect of technology in the short run and underestimate it in the long run”





## Amara's law

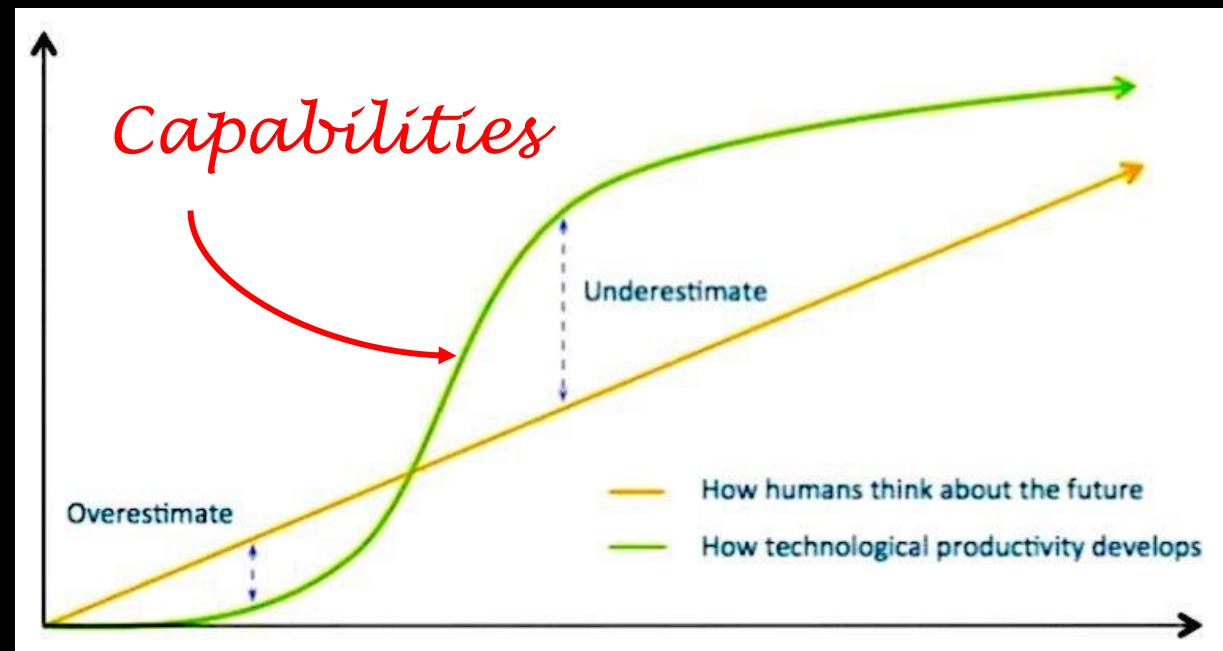
“We overestimate the effect of technology in the short run and underestimate it in the long run”





## Amara's law

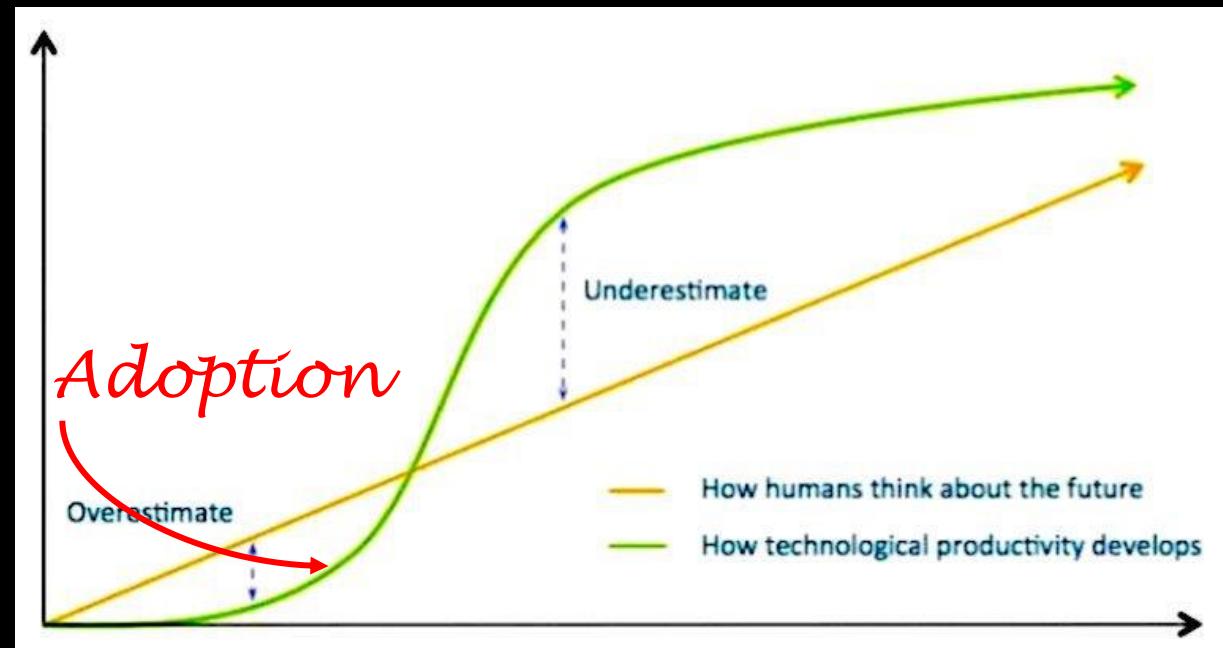
“We overestimate the effect of technology in the short run and underestimate it in the long run”





## Amara's law

“We overestimate the effect of technology in the short run and underestimate it in the long run”





## The human fabric

> 60 % of economists expect, on average, for AI to have **very little effect** on overall jobs in the next few years, even as AI boosts the economy overall



What is the impact on developers?

# What is the job of a developer?

Writing code is only a small part of the job

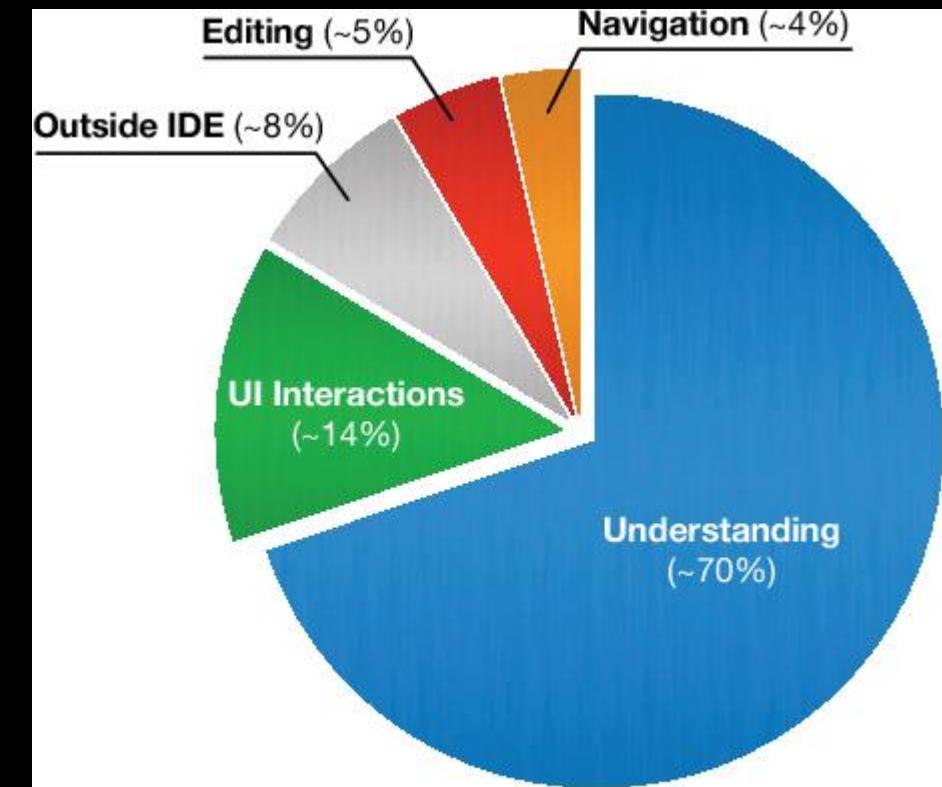


Fig. 3. How do developers spend their time?



# What is the job of a developer?



@SpontaneouslyDeliberate 10 days ago

If my job was coding solutions to problems with rigorously-defined requirements, this would be concerning.



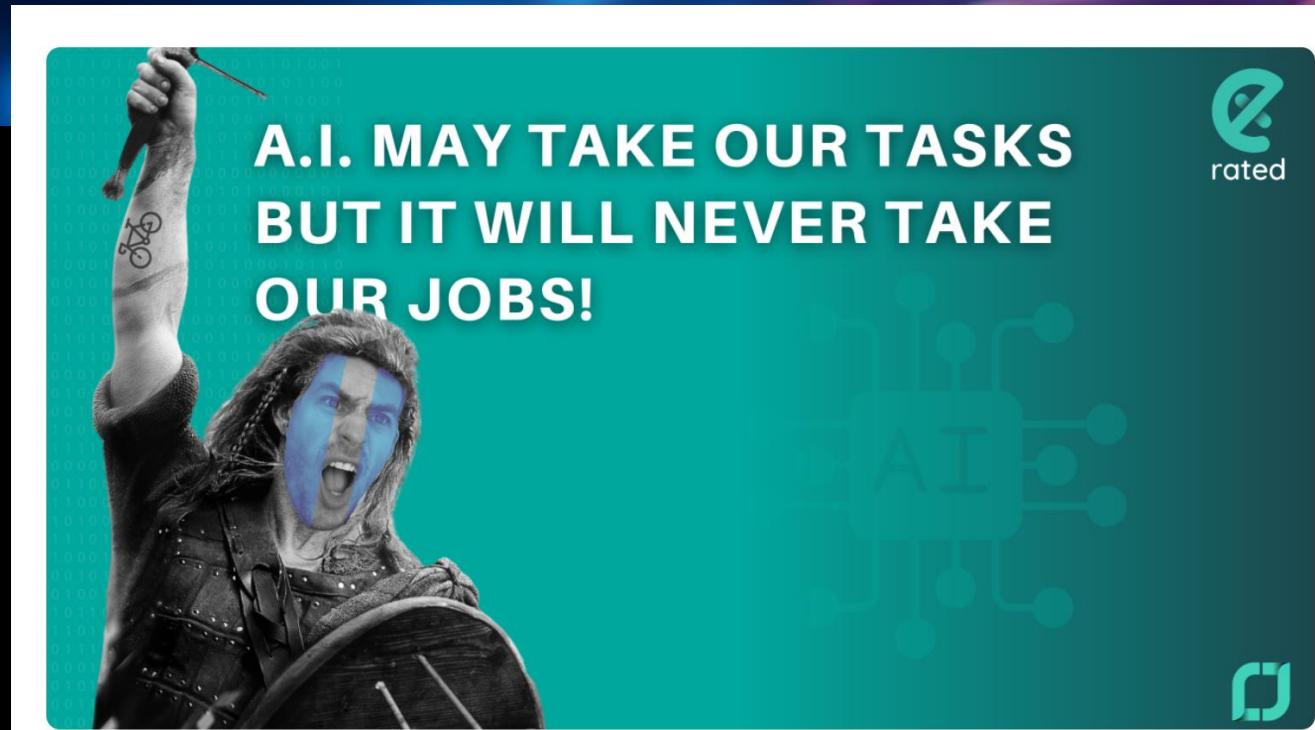
6.9K



Reply



# What is the job of a developer?



## A.I. May Take Our Tasks But IT Will Never Take Our Jobs!



Luke Jamieson

Top Global CX / EX / Future of Work Thought Leader and Well-Behaved Larrikin. Solving for engagement, belonging & purpose in unconventional ways. Co-host of #Twenty20ish

+ Follow



# 3 ways this could impact you





If you are  
a senior software  
engineer...





If you are a senior software engineer

“AI wont eat your job but it will eat your salary”

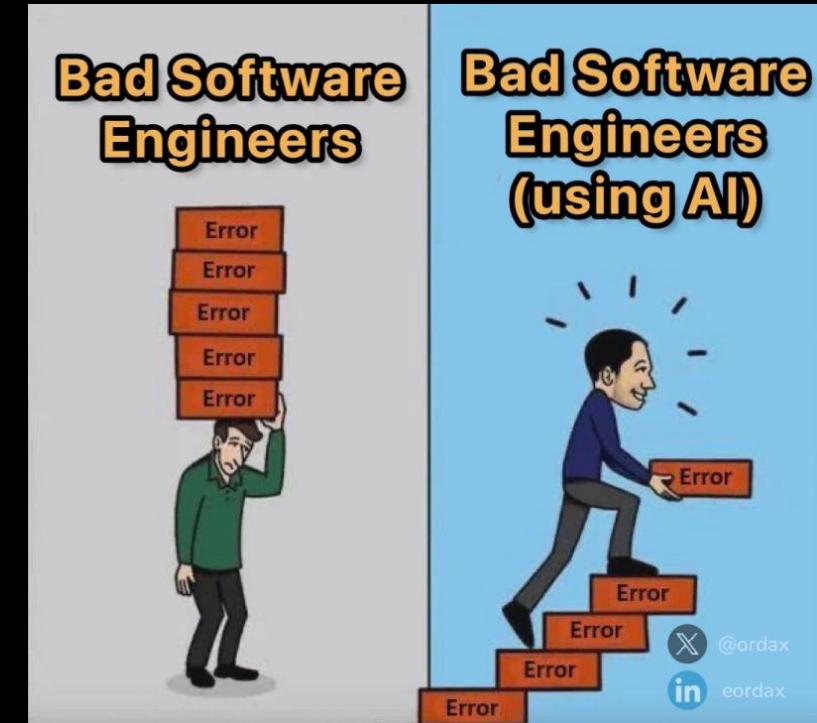
“I have been reluctant to try ChatGPT. Today, I got over that reluctance. Now I understand why I was reluctant. The value of 90% of my skills just dropped to \$0. The leverage of the remaining 10% went up 1000x. I need to recalibrate.”

— Kent Beck, world-famous programmer



## If you are a senior software engineer

“The people who get the biggest boost from AI are those with the lowest initial ability—it turns poor performers into good performers”



[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4539836](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4539836)

<https://www.nber.org/papers/w31161>

<https://www.nber.org/papers/w32430>



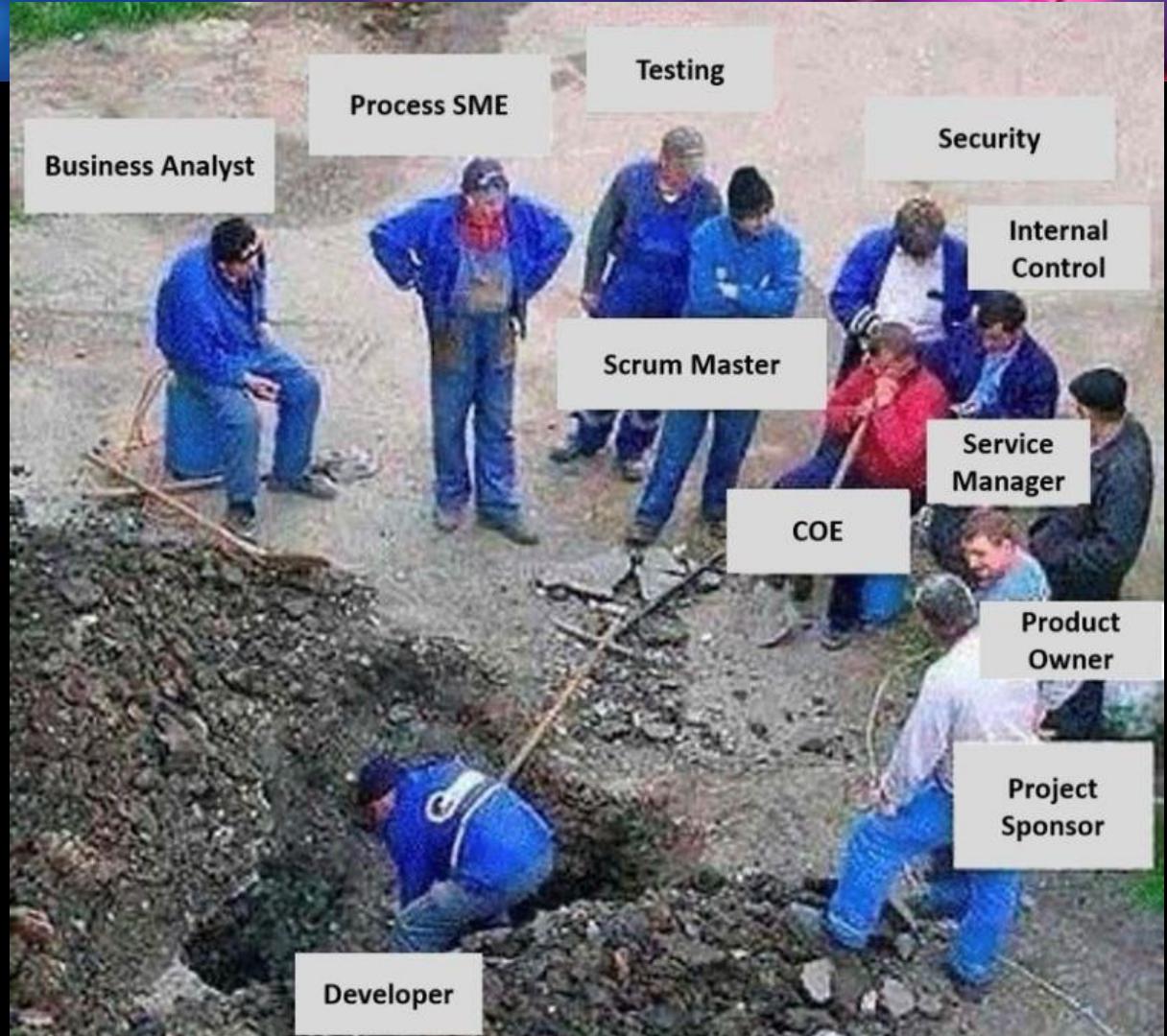
If you are  
a single-specialist...





## If you are a single-specialist

Over the last decade, I've watched software engineers step back from many responsibilities.





If you are a single-specialist

# Email Rewriter

THE INTERNET! UNDER CONSTRUCTION!!!

## WEBSITE UNDER CONSTRUCTION

**REWRITE**

Email content

Dear Esteemed Speaker,

Allow me to extend a most cordial welcome to CloudBrew and the fair country of Belgium. It is my sincere hope that your sojourn among us will prove not only pleasant but also intellectually and culturally

Output

**CONTACT ME**



# If you are a single-specialist

The screenshot shows a user interface for generating UI designs. At the top right are icons for a profile, settings, a plus sign labeled "New UI", and a grid. Below them is a large input field with placeholder text: "Describe the UI you'd like to generate." A sub-instruction "Pro tip: you can drag or paste a reference screenshot." is visible below the main placeholder. At the bottom left of the input field is a circular icon with a refresh symbol and the text "Make me a flashy landing page for an AI SaaS start". To the right of the input field are icons for a camera and an upward arrow. A small cursor icon is positioned near the bottom center of the input area.



If you are a junior...





## If you are a junior



### New Junior Developers Can't Actually Code

100k+ views

100+ votes

100+ comments

Feb 14 2025

*Something's been bugging me about how new devs and I need to talk about it.*

We're at this weird inflection point in software development. Every junior dev I talk to has Copilot or Claude or GPT running 24/7. They're shipping code faster than ever. But when I dig deeper into their understanding of what they're shipping? That's where things get concerning.

Sure, the code works, but ask why it works that way instead of another way? Crickets. Ask about edge cases? Blank stares.

The foundational knowledge that used to come from struggling through problems is just... missing.

We're trading deep understanding for quick fixes, and while it feels great in the moment, we're going to pay for this later.



If you are a junior

“Generative AI is an excitable junior engineer who types really fast”





## If you are a junior

# “The knowledge paradox”

Senior engineers use AI to:

- Rapidly prototype ideas they already understand
- Generate basic implementations they can then refine
- Explore alternative approaches to known problems
- Automate routine coding tasks

Meanwhile juniors often:

- Accept incorrect or outdated solutions
- Miss critical security and performance considerations
- Struggle to debug AI-generated code
- Build fragile systems they don't fully understand



## Falling Asleep at the Wheel

“Recruiters who used high-quality AI became lazy, careless, and less skilled in their own judgment.

They made worse decisions than recruiters who used low-quality AI or no AI at all.”





If you are a junior

“Software is an apprenticeship industry”



**Young doctors struggle to learn robotic surgery – so they are practicing in the shadows**

Published: January 9, 2018 12.15pm CET

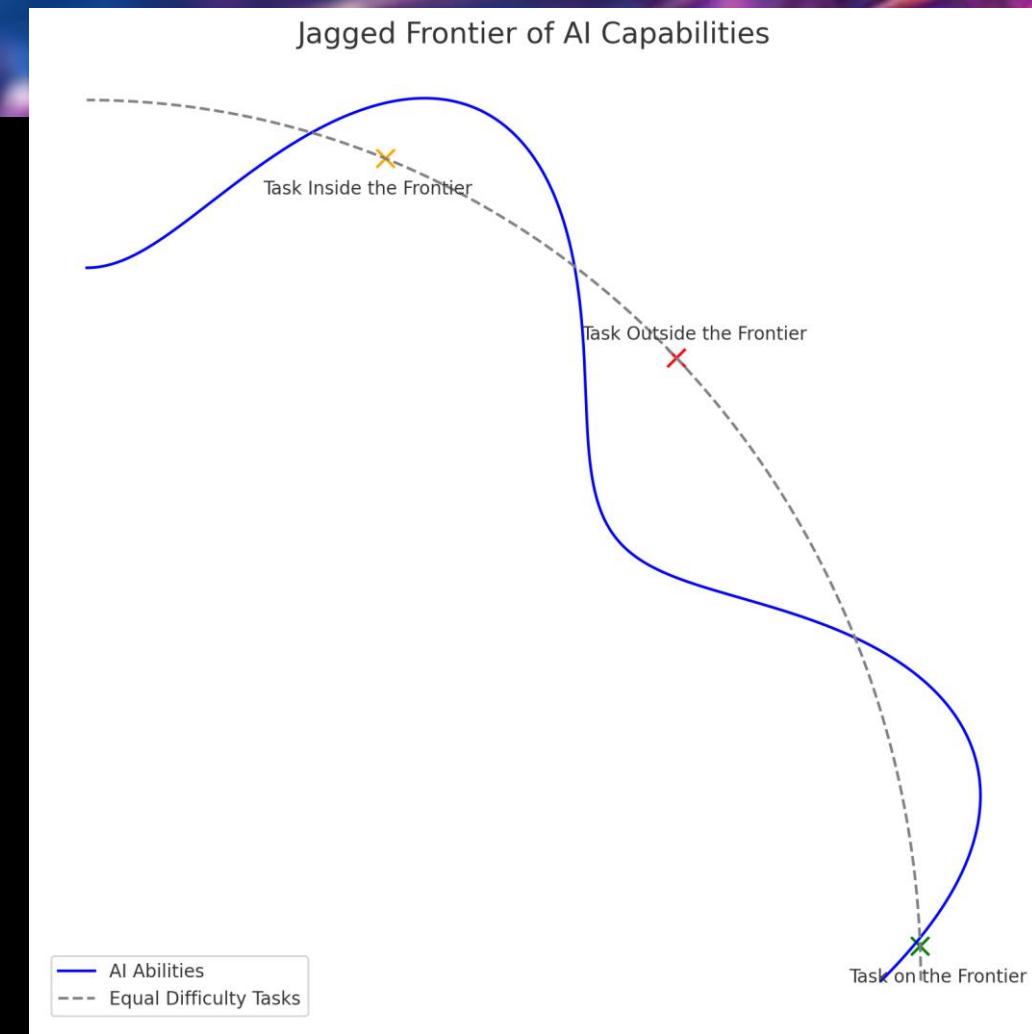


What now?



## The jagged frontier

“AI is weird”





# Everyone is in R&D

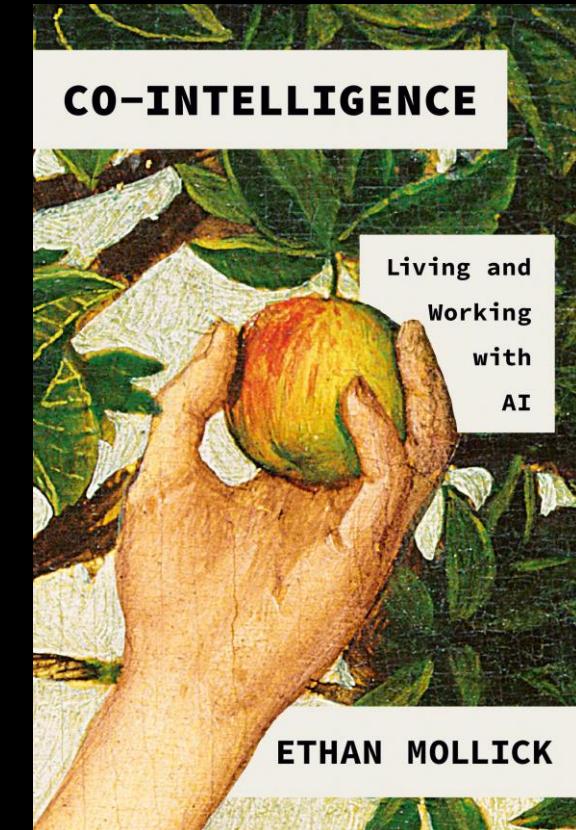
“The single most useful thing you can do to understand AI is to use AI”





Don't make this hard

“All the usual ways in which organizations try to respond to new technologies don’t work well for AI. They are all far too centralized and far too slow. ”





Don't make this hard

Secret Task  
Automation

BBC

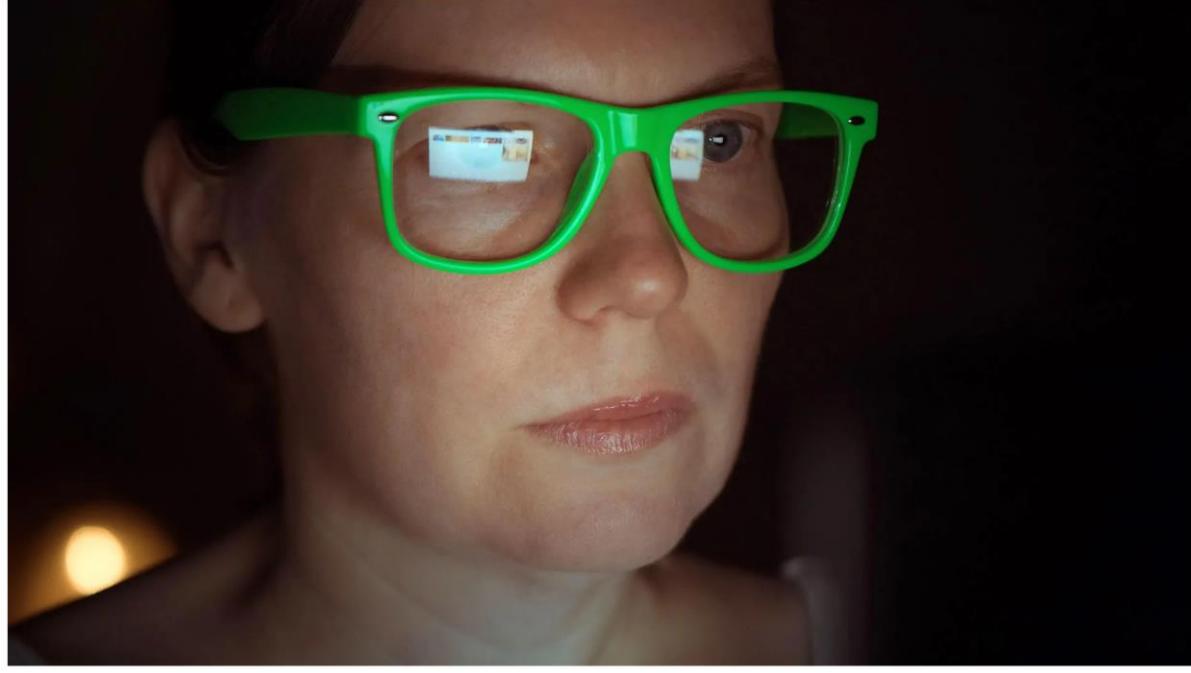
Home News Sport Business Innovation Culture Arts Travel Earth Audio Video Live

## The employees secretly using AI at work

25 October 2023

Share Save

Alex Christian  
Features correspondent





# Don't make this hard

BW

Knowing that a github copilot license costs 20€ per month and a developer cost is 680 € a day, what is the productivity increase I need to make this a good deal?

To determine the productivity increase needed to make GitHub Copilot a good deal, I'll do a straightforward calculation.

Given:

- GitHub Copilot license: 20€ per month
- Developer cost: 680€ per day

First, let's calculate the Copilot cost as a percentage of the developer's daily cost:

20€ per month / 21 working days ≈ 0.95€ per day

This means Copilot costs about 0.95€ per day, which is:

$(0.95\text{€} \div 680\text{€}) \times 100\% \approx 0.14\%$  of daily developer cost

So GitHub Copilot would need to increase a developer's productivity by just over 0.14% to break even. In practical terms, this means saving about 1.1 minutes in an 8-hour workday (0.14% of 480 minutes).

Given that studies and anecdotal evidence suggest Copilot can save developers significantly more time than this through code completion, automated documentation, and reduction in context switching, the productivity threshold to make it worthwhile is quite low.

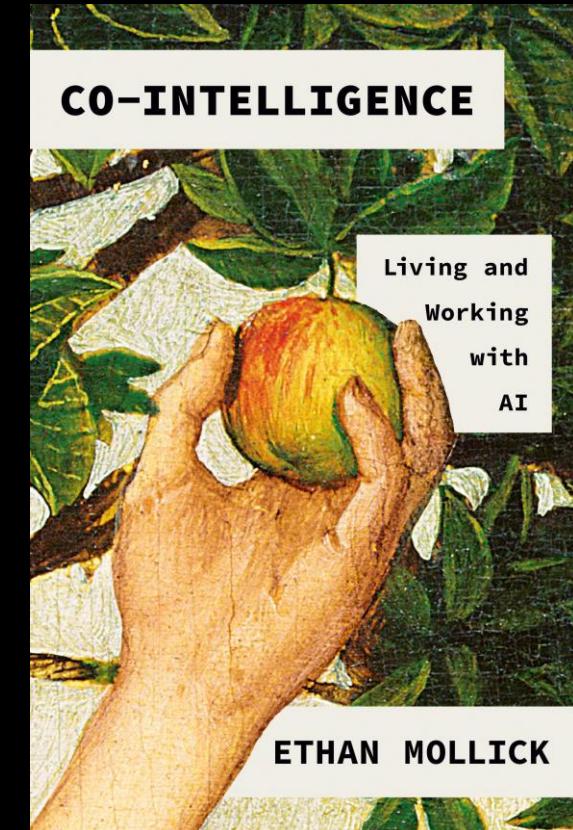


# When should I use AI?



## When should I use AI?

“Always\*  
invite AI to the table”



\*: Unless there are legal or ethical barriers

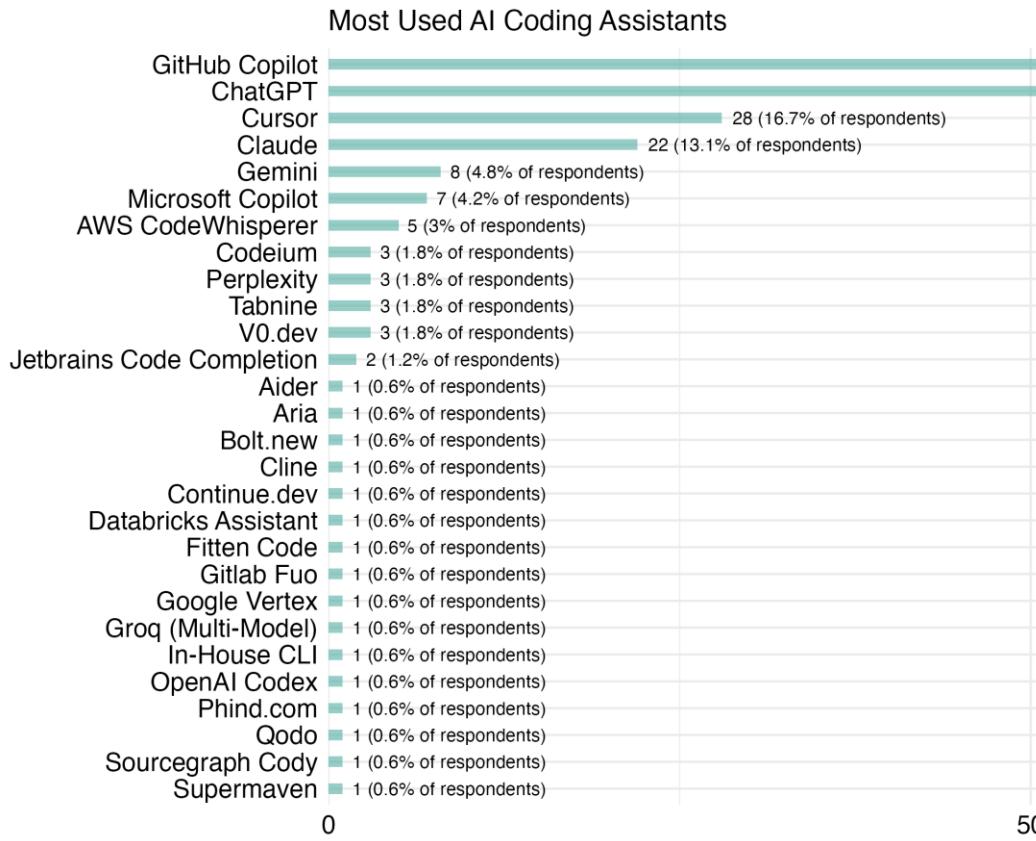


Which AI should I use?



# When should I use AI?

“All of them”



50

A list of all the AI tools I tried can be found at the end of this presentation



Being an  
AI Native Developer  
today



# TAB, TAB, GO

A screenshot of a dark-themed code editor window. The title bar shows the text "TAB, TAB, GO". The main area displays a single file named "geometry.ts". A tooltip message is visible in the center of the screen, reading: "1 |Press ⌘ I to ask Code - Insiders to do something. Start typing to dismiss." The left sidebar contains several icons: a file icon with a "1" (highlighted), a magnifying glass, a network icon, a triangle icon, a grid icon, a user icon, and a gear icon. The bottom status bar shows "Ln 1, Col 1", "Spaces: 4", "UTF-8", "LF", and "TypeScript".



# Chat, Copy, Paste (CHOP)

The screenshot shows a Microsoft Visual Studio IDE window. In the top left, there's a "Program.cs" code editor tab with the following C# code:

```
{1 // See https://aka.ms/new-console-template for more 2 Console.WriteLine("Hello, World!"); 3}
```

In the top right, a "GitHub Copilot Chat" window is open, showing a list of sample prompts:

- Summarize my code
- Write unit tests
- Fix my code
- Explain programming concepts

At the bottom of the screen, there's a large input field for writing AI prompts, currently containing "Write me a Calculator class in C#".



There is more...





# Contextualize



Settings

General

- I like to be addressed personally, so call me Bart when answering my questions.

Coding Style

- Use spaces for indentation with four-spaces per level, unless it is a csproj file, then use two-spaces per level.
- All public members require doc comments.
- Prefer type declarations over `var` when the type isn't obvious.

copilot-instructions.md hosted with ❤️ by GitHub [view raw](#)

Save Cancel



## Contextualize



### Codebase indexing

Embeddings improve your codebase-wide answers. All code is stored locally.

Synced

100%

Resync Index

Delete Index

▼ Show Settings



# Contextualize

A screenshot of a dark-themed application interface, likely a code editor or documentation tool. At the top, there are tabs for "CHAT" (which is selected) and "MORE". On the far right, there are icons for settings, a refresh symbol, and a plus sign. Below the tabs, a search bar contains the text "How do I change the undo redo behavior in @". A dropdown menu titled "Docs" is open, listing various projects or libraries: lexical, AWS CLI, Angular, Apache Tomcat, Astro, Boto3, CodeMirror, Django, and "Add new doc".

- Docs
- lexical
- AWS CLI
- Angular
- Apache Tomcat
- Astro
- Boto3
- CodeMirror
- Django
- Add new doc



## Contextualize



Contextualize

Beta

### Join the Copilot fine-tuning waitlist

Sign up for the opportunity to fine-tune a private, custom copilot  
using your own repositories.



# Contextualize



Contextualize

cursor.directory

Rules MCPs Generate Learn Advertise About Q Search Sign In

Technology	Count	Filter	Official
TypeScript	19	All	Popular Official
Python	11		
React	11		
Next.js	10		
PHP	7		
TailwindCSS	5		
Laravel	5		
C#	4		
JavaScript	4		
Game Development	4		
Expo	4		
React Native	4		
Tailwind	4		
Vite	4		
Supabase	4		
Rust	3		
Web Development	3		

**TypeScript**

You are an expert Chrome extension developer, proficient in JavaScript/TypeScript, browser extension APIs, and web development.

**Code Style and Structure**

- Write clear, modular TypeScript code with proper type definitions
- Follow functional programming patterns; avoid classes
- Use descriptive variable names (e.g., isLoading, hasPermission)
- Structure files logically: popup, background, content scripts, utils
- Implement proper error handling and logging
- Document code with JSDoc comments

**Architecture and Best Practices**

- Strictly follow Manifest V3 specifications
- Divide responsibilities between background, content scripts and popup
- Configure permissions following the principle of least privilege
- Use modern build tools (webpack/vite) for

**MaydayV**

Chrome API TypeScript +2 more ▾

**Krish Kalaria** 🇮🇳

expo-router expo-status-bar +7 more ▾

**Mohammadali Karimi** 🇮🇷

Tailwind CSS Shadcn UI +1 more ▾

**Made by Midday** 🇮🇳

An all-in-one tool for freelancers to monitor financial health, time-track, and send invoices. ↗

Submit +



# Contextualize



[Cursor Rules](#)   [Home](#)   [Rules](#) ▾   [Tutorials](#) ▾   [Updates](#)

[Submit Rule](#)

# Cursor Rules

## AI-Powered .cursorrules Generator & Repository

Generate free .cursorrules configs via AI Agent, automatically adapting to React/Vue/Next.js frameworks. Access community-verified best practice templates with one-click deployment.

Popular Rules

- Python
- Next.js

[... View All](#)

**Backend Development**

[More Backend Development Rules →](#)



# Design



Ask me one question at a time so we can develop a thorough, step-by-step spec for this idea. Each question should build on my previous answers, and our end goal is to have a detailed specification I can hand off to a developer. Let's do this iteratively and dig into every relevant detail. Remember, only one question at a time. Here's the idea: <IDEA>



# Design



```
C:\Windows\System32\cmd.e x Windows PowerShell x + v
Warning: ollama/phi4 expects these environment variables
- OLLAMA_API_BASE: Not set
Note: You may need to restart your terminal or command prompt for 'setx' to take effect.
You can skip this check with --no-show-model-warnings

https://aider.chat/docs/llms/warnings.html
Open documentation url for more info? (Y)es/(N)o/(D)on't ask again [Yes]: N

Can not create D:\chat-mode, skipping.
Aider v0.75.2
Model: ollama/phi4 with whole edit format
Git repo: .git with 0 files
Repo-map: using 2048.0 tokens, auto refresh
Added architect to the chat.

architect
> Ask me one question at a time so we can develop a thorough, step-by-step spec for this idea. Each question should build on my previous answers, and our end goal is to have a detailed specification I can hand off to a developer. Let's do this iteratively and dig in to every relevant detail. Remember, only one question at a time. Here's the idea: I want to build an application that shows movies from TMDB.
```



# Design

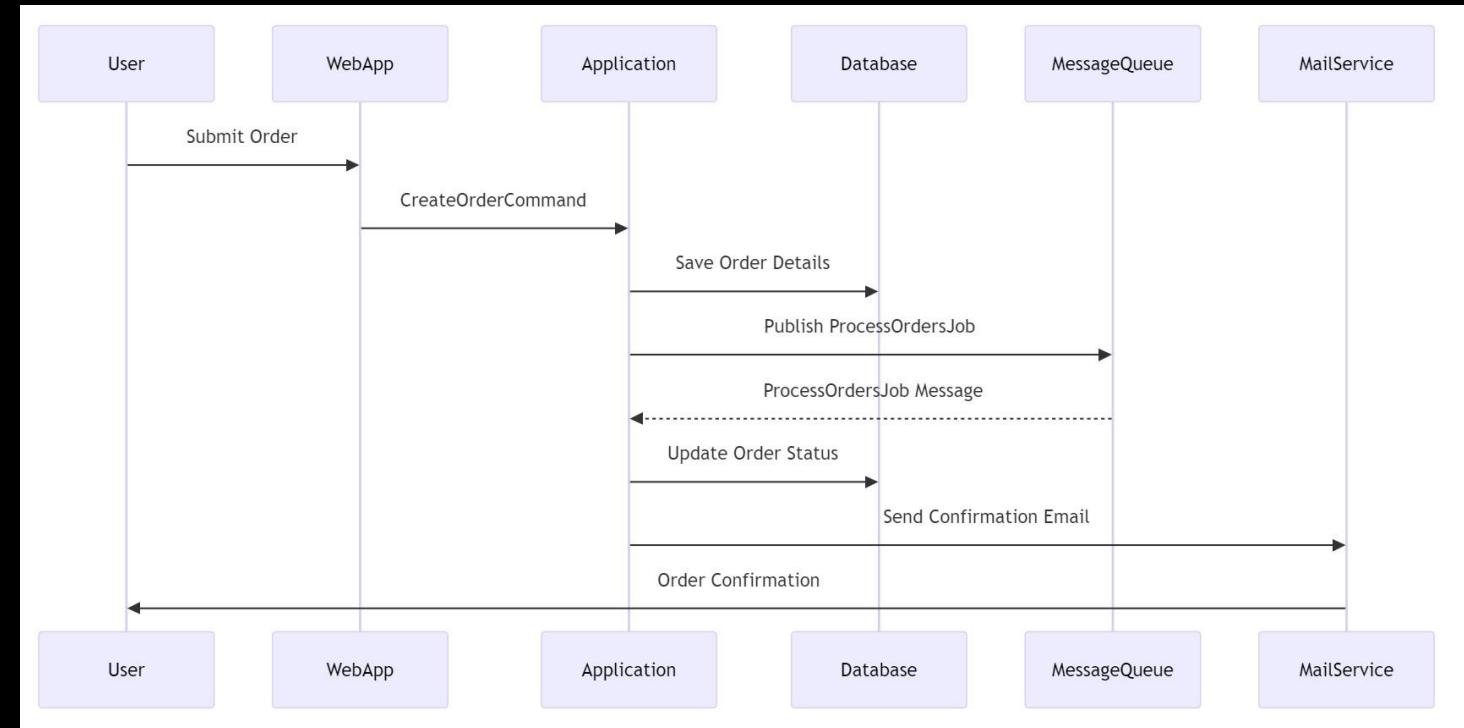


wullemsb  
@mermaid-chart What are the diagrams you support?  
ApplicationEnvironmentEnricher.cs:1-25

Mermaid Chart  
Used 1 reference

I support the following diagram types:

- Cloud/CI/CD Architecture Diagram
- Block Diagram
- C4 Diagram
- Class Diagram
- Entity Relationship Diagram
- Flowchart
- Gantt Chart
- Git Graph Diagram



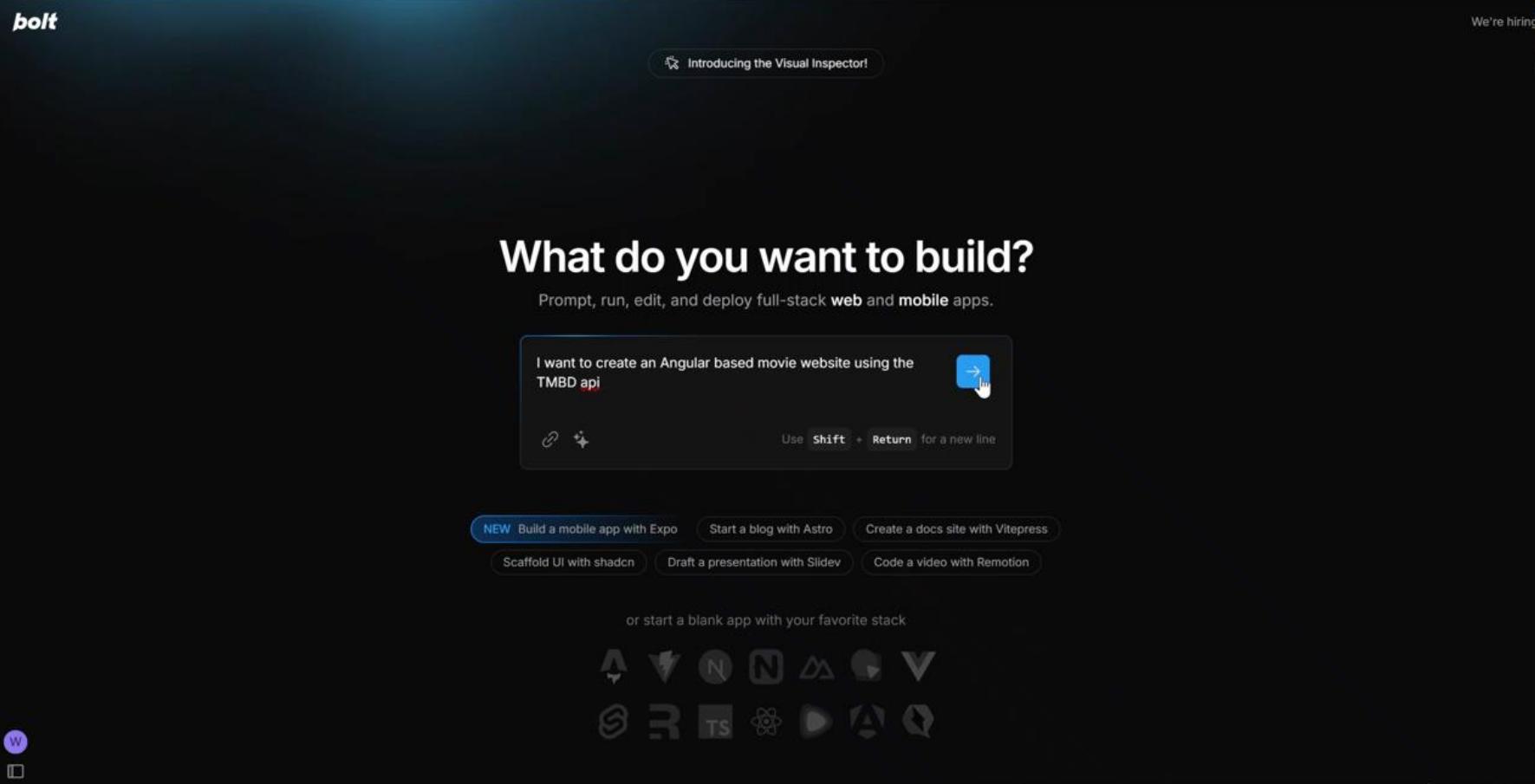


# Design





# Build



The screenshot shows the homepage of the bolt website. At the top, there's a dark header with the bolt logo on the left, a "We're hiring" button on the right, and a "Introducing the Visual Inspector!" banner in the center. The main title "What do you want to build?" is prominently displayed in large white text. Below it, a subtitle reads "Prompt, run, edit, and deploy full-stack **web** and **mobile** apps." A text input field contains the text "I want to create an Angular based movie website using the TMBD api", with a blue "Send" button next to it. Below the input field, there are icons for a clipboard and a star, and a note about using Shift + Return for a new line. At the bottom of the input field, there's a "Use Shift + Return for a new line" instruction. Below the input field, there are several small buttons for different projects: "Build a mobile app with Expo", "Start a blog with Astro", "Create a docs site with Vitepress", "Scaffold UI with shadcn", "Draft a presentation with Slides", and "Code a video with Remotion". Further down, there's a section for starting a blank app with icons for various stacks like Next.js, Tailwind CSS, and React. In the bottom left corner, there are small icons for a profile (with a 'w') and a square.



# Build



New Chat

Community

Library

Projects

Feedback

Recent Chats

Restaurant POS

View All >

New Feature

You can now enhance your prompts on v0 for more complex, detailed outputs

Ask a follow up...

v0 may make mistakes. Please use with discretion.

Logout

Console

Restaurant POS Private

New chat started from template Restaurant POS

Version 1 Latest View

- components/sidebar-nav.tsx Generated
- components/header.tsx Generated
- components/category-filter.tsx Generated
- components/dining-mode.tsx Generated
- app/globals.css Generated
- components/cart-item.tsx Generated
- components/order-footer.tsx Generated
- components/food-grid.tsx Generated
- components/cart.tsx Generated
- app/page.tsx Generated
- components/food-card.tsx Generated
- components/footer.tsx Generated

CHILI POS

Menu

Table Services

Reservation

Delivery

Accounting

Settings

Search Product here...

Table 4 Floyd Miles

Dine in Take Away Delivery

Item	Price	Quantity
Original Chess Meat Burger With Chips (Non Veg)	\$23.99	1X
Fresh Orange Juice With Basil Seed No Sugar (Veg)	\$12.99	1X
Meat Sushi Maki With Tuna, Ship And Other (Non Veg)		
<b>Sub Total</b>	\$61.96	
Tax 5%	\$3.10	
<b>Total Amount</b>	<b>\$65.06</b>	

Cash Credit/Debit Card QR Code

Place Order

T1 6 Items → Kitchen Process

T2 4 Items → Kitchen

T3 3 Items → Kitchen



## Build



Draft a detailed, step-by-step blueprint for building this project. Then, once you have a solid plan, break it down into small, iterative chunks that build on each other. Look at these chunks and then go another round to break it into small steps. Review the results and make sure that the steps are small enough to be implemented safely with strong testing, but big enough to move the project forward. Iterate until you feel that the steps are right sized for this project. From here you should have the foundation to provide a series of prompts for a code-generation LLM that will implement each step in a test-driven manner. Prioritize best practices, incremental progress, and early testing, ensuring no big jumps in complexity at any stage. Make sure that each prompt builds on the previous prompts, and ends with wiring things together. There should be no hanging or orphaned code that isn't integrated into a previous step. Make sure and separate each prompt section. Use markdown. Each prompt should be tagged as text using code tags. The goal is to output prompts, but context, etc is important as well. <SPEC>

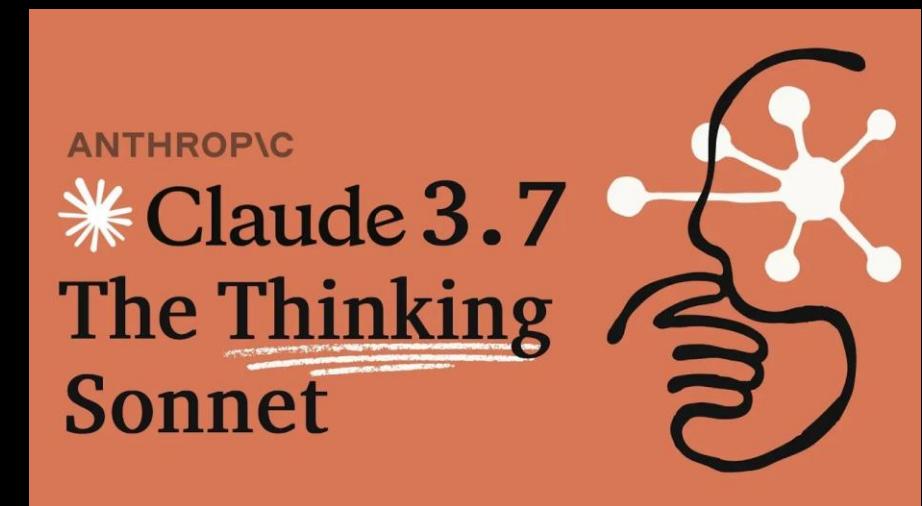


Build

A white square containing a blue stylized whale logo at the top. Below it is the text "DeepSeek R1-Zero" in large blue letters, followed by the Chinese text "DeepSeek 开源推理模型，基于纯强化学习训练" in smaller blue letters.

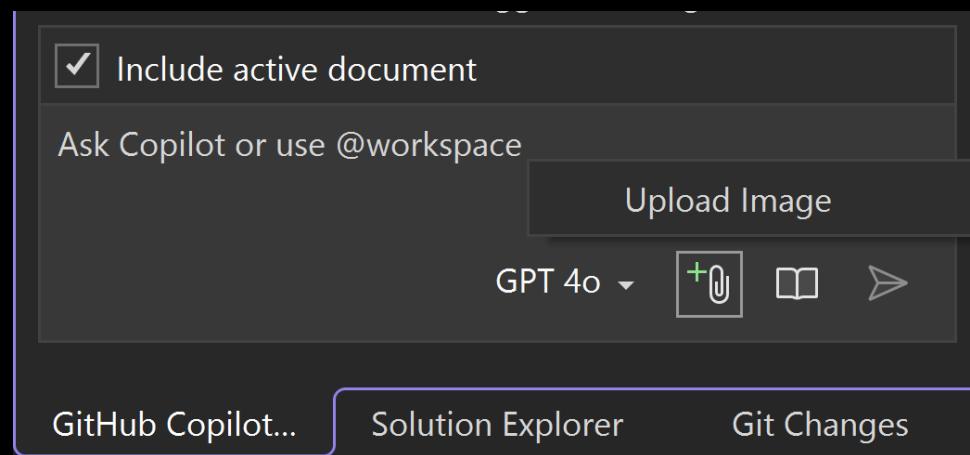
DeepSeek R1-Zero

DeepSeek 开源推理模型，基于纯强化学习训练





# Build



GitHub Copilot Chat

Help me write the code for this ga...

Help me write the code for this game

GitHub Copilot generating response...

1 reference

To create a simple Breakout game using Razor Pages, we can use HTML, CSS, and JavaScript. We'll add the necessary code to the [Index.cshtml](#) file to create the game interface and logic.

Here's a step-by-step guide to implement the Breakout game:

1. **HTML Structure:** Add a canvas element to the [Index.cshtml](#) file.



# Build



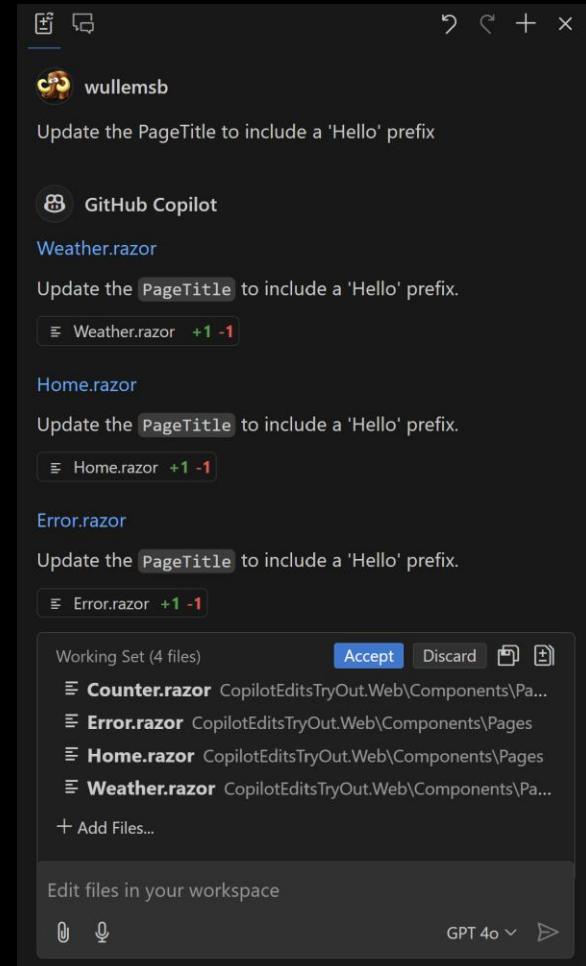
A screenshot of the OpenWebUI interface. At the top, there's a navigation bar with a logo, a search bar, and several icons. Below the navigation is a large input field with placeholder text: "Describe the UI you'd like to generate." A sub-instruction "Pro tip: you can drag or paste a reference screenshot." is shown below the main placeholder. A button labeled "Make me a flashy landing page for an AI SaaS start" is visible. The bottom of the interface features a large, empty white area with a cursor icon at the bottom center.



Build



# CHOP





# Test



```
2540        occurred, name, value,
2519
2520     }
2521 }
2522 return next;
2523 }

2525 /**
2526 * @param {Element} node
2527 * @param {Record<string, unknown>} | null} prev
2528 * @param {Record<string, unknown>[]} attrs
2529 * @param {string} css_hash
2530 */
2531 // Auto-refactor | Deep, Nested Complexity (Nesting depth = 4 conditionals)
2532 export function spread_dynamic_element_attributes(node, prev, attrs, css_hash) {
2533   if (node.tagName.includes('-')) {
2534     const next = object_assign({}, ...attrs);
2535     if (prev !== null) {
2536       for (const key in prev) {
2537         if (!(key in next)) {
2538           next[key] = null;
2539         }
2540     }
2541     for (const key in next) {
2542       set_custom_element_data(node, key, next[key]);
2543     }
2544     return next;
2545   } else {
2546     return spread_attributes(
2547       /** @type {Element & ElementCSSInlineStyle} */ (node),
2548       prev,
2549       attrs,
2550       node.namespaceURI !== 'http://www.w3.org/2000/svg',
2551       css_hash
2552     );
2553   }
2554 }

2555 /**
2556 * The proxy handler for rest props (i.e. `const { x, ...rest } = $props()`).
2557 * Is passed the full '$$props' object and excludes the named props.
2558 * @type {ProxyHandler<{ props: Record<string | symbol, unknown>, exclude: Array<string | symbol> }>}
2559 */
2560 const rest_props_handler = {
2561   get(target, key) {
2562     if (target.exclude.includes(key)) return;
2563     return target.props[key];
2564   },
2565   getOwnPropertyDescriptor(target, key) {
2566     if (target.exclude.includes(key)) return;
2567   }
2568 }
```



Test



# SWE-agent

EnIGMA 🎭



# Document



The screenshot shows two overlapping windows. The left window is titled "create dagster job" and is a "Cognition" interface. It displays a message about adding knowledge and a list of tasks:

- Use when: When creating or modifying Dagster jobs in the analysis
- Use the "triage\_sheet" job as reference for the proper START and END column
- Confirm with the user, but you'll usually want to set up the job to run on a daily cadence, following the setup of the "triage\_sheet" job. Look for places where the "triage\_sheet" job is imported and trace all the places where you need to modify the codebase to properly register the jobs.

Below this, there are three checked radio buttons:

- Restored checkpoint
- Pulled latest changes from the analytics repo
- Updated sheet name to "Experimental Trial Sessions" in the new Dagster job.

A "Session Ended" message is at the bottom, along with a link to evaluate the session.

The right window is titled "Devin's Workspace" and contains a "Planner" tab. It shows a code editor with Python-like code for a Dagster job configuration:

```
default

jobs = [
    clerk_assets_job,
    airtable_assets_job,
    github_assets_job,
    costs_assets_job,
    triage_assets_job
]

schedules = [
    clerk_assets_schedule,
    airtable_assets_schedule,
    github_assets_schedule,
    costs_assets_schedule,
    triage_assets_schedule
]

resources_by_deployment_name = {
    "prod": RESOURCES_PROD,
    "staging": RESOURCES_STAGING,
    "local": RESOURCES_LOCAL,
}

deployment_name = os.environ.get("DAGSTER_DEPLOYMENT", "local")

all_sensors = [] if RUNNING_LOCAL else [slack_on_run_failure]

defs = Definitions(
    assets=all_assets,
    resources=resources_by_deployment_name[deployment_name],
)
```

The code editor has a scroll bar and a "Active Timeline" button at the bottom.



# Document



BOOK of AI

HOME PRE-REQS OPENAI AZURE AI GITHUB ONNX and PHI-3 SEMANTIC KERNEL SPEECH REFERENCE

Github ⭐ 74 ⚡ 7

## WELCOME

Welcome to the Book of AI, where you'll learn everything you need to know to get started w/ Azure AI services.

[Why use the Book of AI ...](#)

**Get Started**

Install and Setup

[Azure ai CLI Installation](#)

[Azure OpenAI Setup](#)

**Azure AI Tutorials**

Azure OpenAI

[Azure OpenAI Chat](#)

[Azure OpenAI Assistants](#)

Azure.AI.Inference

[Azure AI Model Catalog](#)

[GitHub Model Marketplace](#)

Azure Developer CLI (azd)

[AI Template Gallery](#)

**ONNX GenAI Tutorials**

Phi-3 Models

[ONNX w/ Phi-3 Models](#)

[ONNX Chat Basics](#)

**Azure OpenAI Apps**

[Create a Chat app](#)

[Create an Assistants app](#)

**Azure.AI.Inference Apps**

[Create an Azure AI Inference app](#)

[Create a GitHub Model app](#)

**ONNX/Phi-3 Apps**

[Create an ONNX Phi-3 Model app](#)



# Document



New product coming up: [Agent-Powered GitHub Dashboard For 1000X Devs](#) →

# uithub

Easily Ask Your LLM Coding Questions

**Get Context**

Browse popular repos:

[stackblitz](#) [getcursor](#) [lovablelabs](#) [upstash](#) [cloudflare](#) [denoland](#) [Aider-AI](#)

Or just change the URL one letter!

<https://github.com/codefromanywhere/uatl>



“This is the worst AI you  
ever get”



Becoming an  
AI Native Developer  
tomorrow



# The Future of AI-Driven Software Engineering

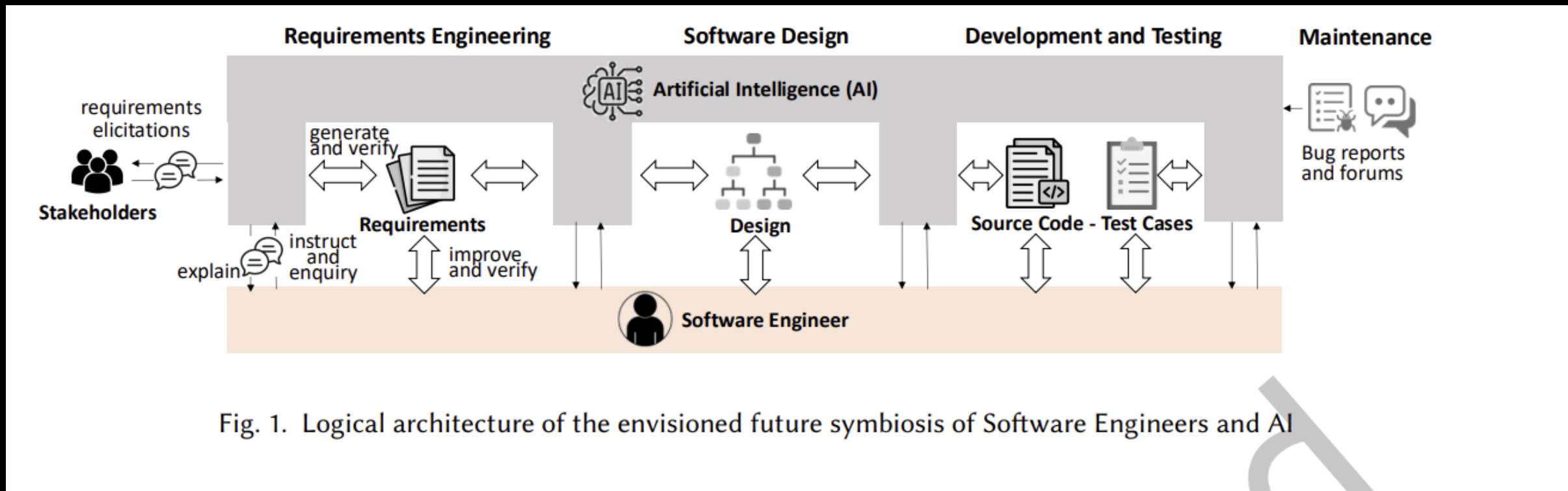
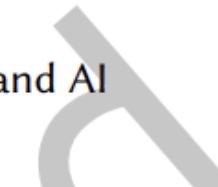


Fig. 1. Logical architecture of the envisioned future symbiosis of Software Engineers and AI





# Large Language Model-Based Agents for Software Engineering

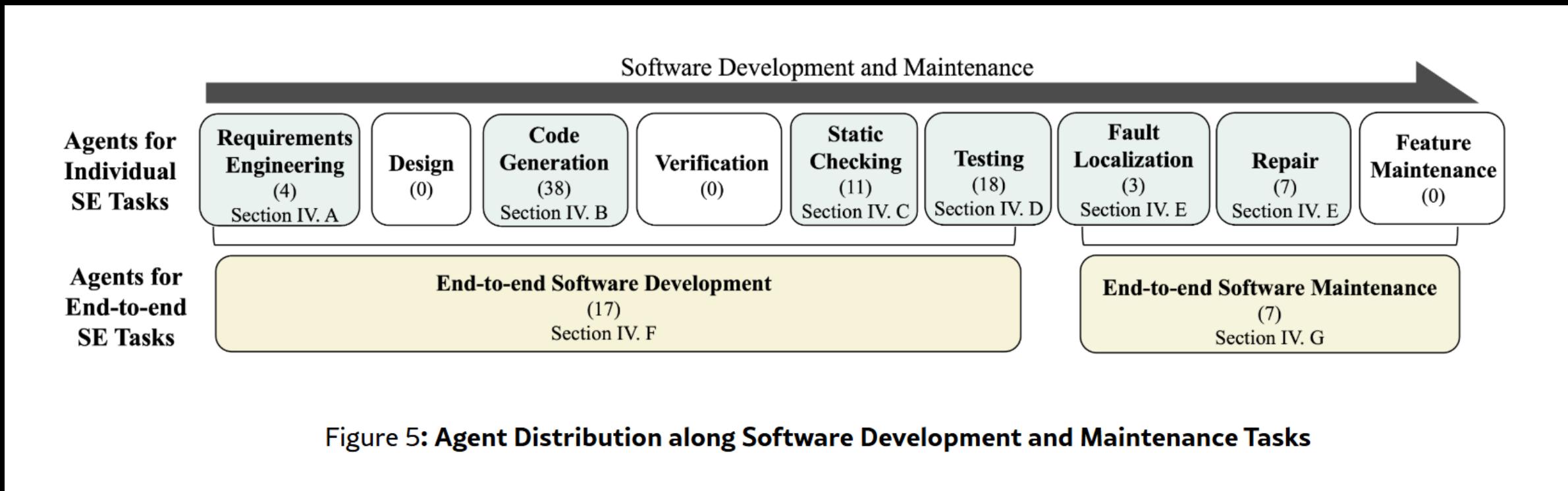
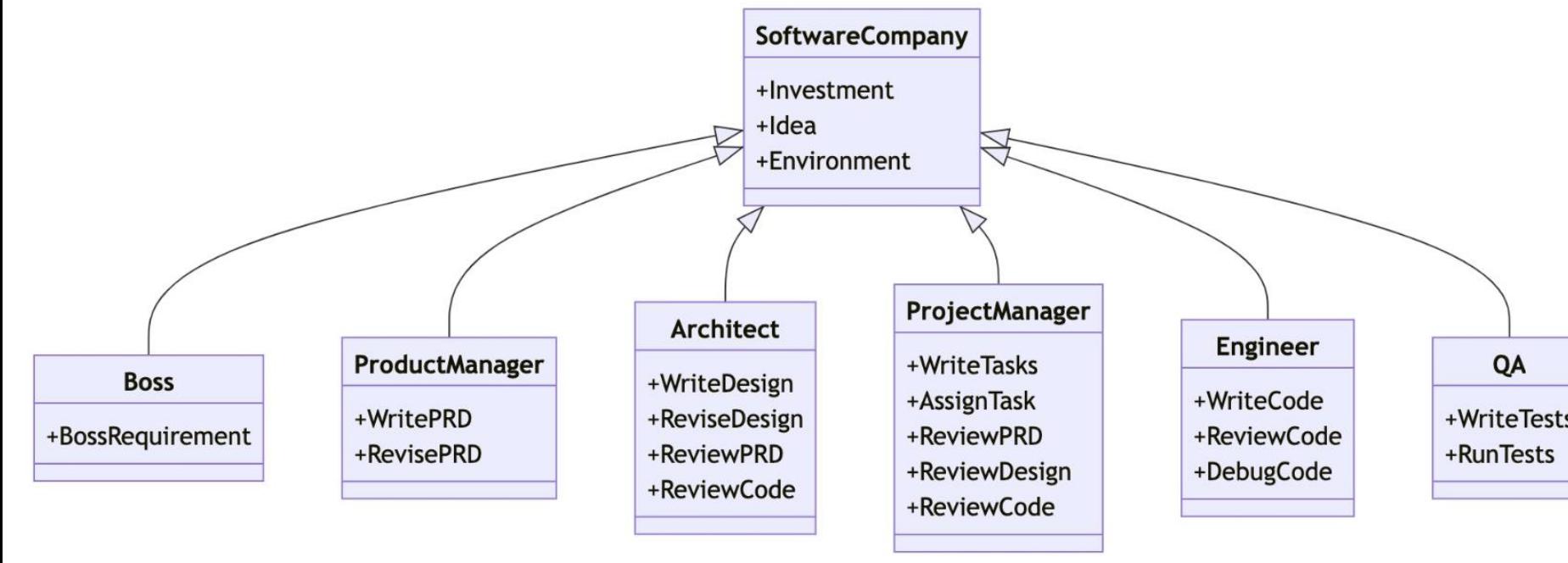


Figure 5: Agent Distribution along Software Development and Maintenance Tasks

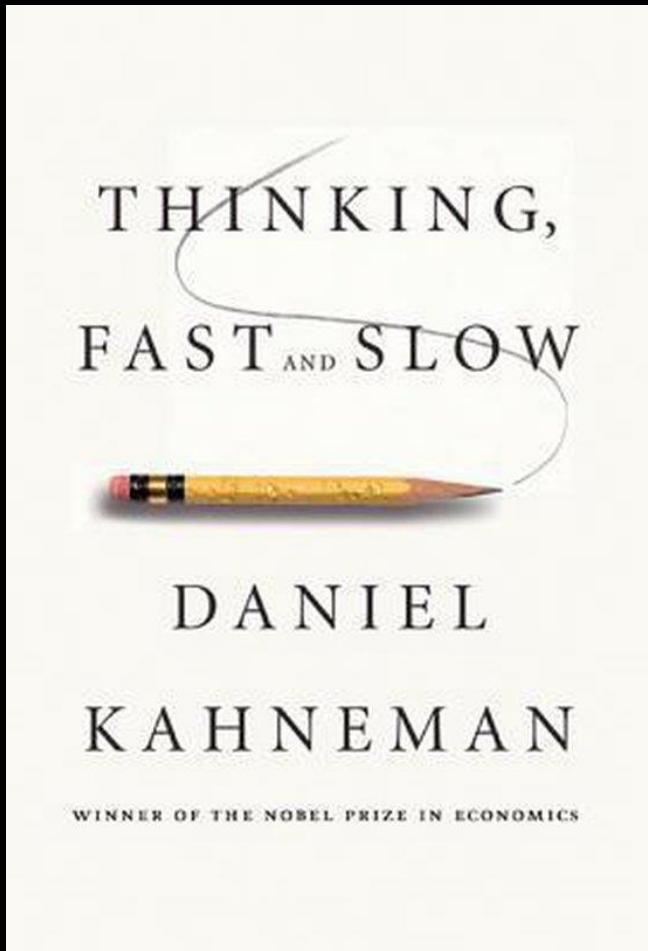
# Software Company as Multi-Agent System

1. MetaGPT takes a **one line requirement** as input and outputs **user stories / competitive analysis / requirements / data structures / APIs / documents, etc.**
2. Internally, MetaGPT includes **product managers / architects / project managers / engineers**. It provides the entire process of a **software company along with carefully orchestrated SOPs**.
  - i. **Code = SOP(Team)** is the core philosophy. We materialize SOP and apply it to teams composed of LLMs.





# System Thinking



We are  
here

System 1

Quick inference

System 1.5

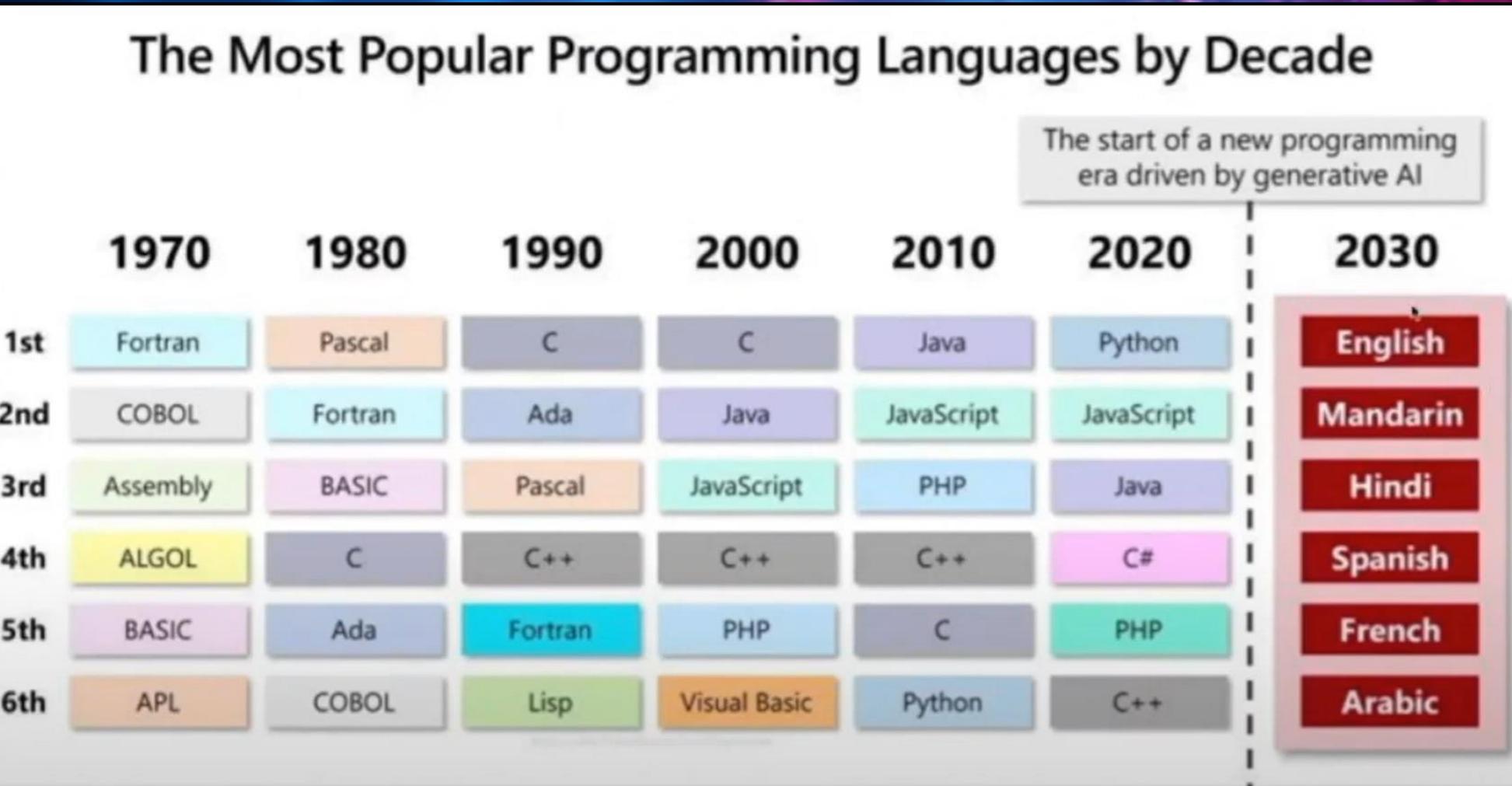
Guided chain-of-thought

System 2

Deep, deliberate reasoning reinforced by information arriving from validation processes, using relevant thinking frameworks and tools, including devising and choosing between options

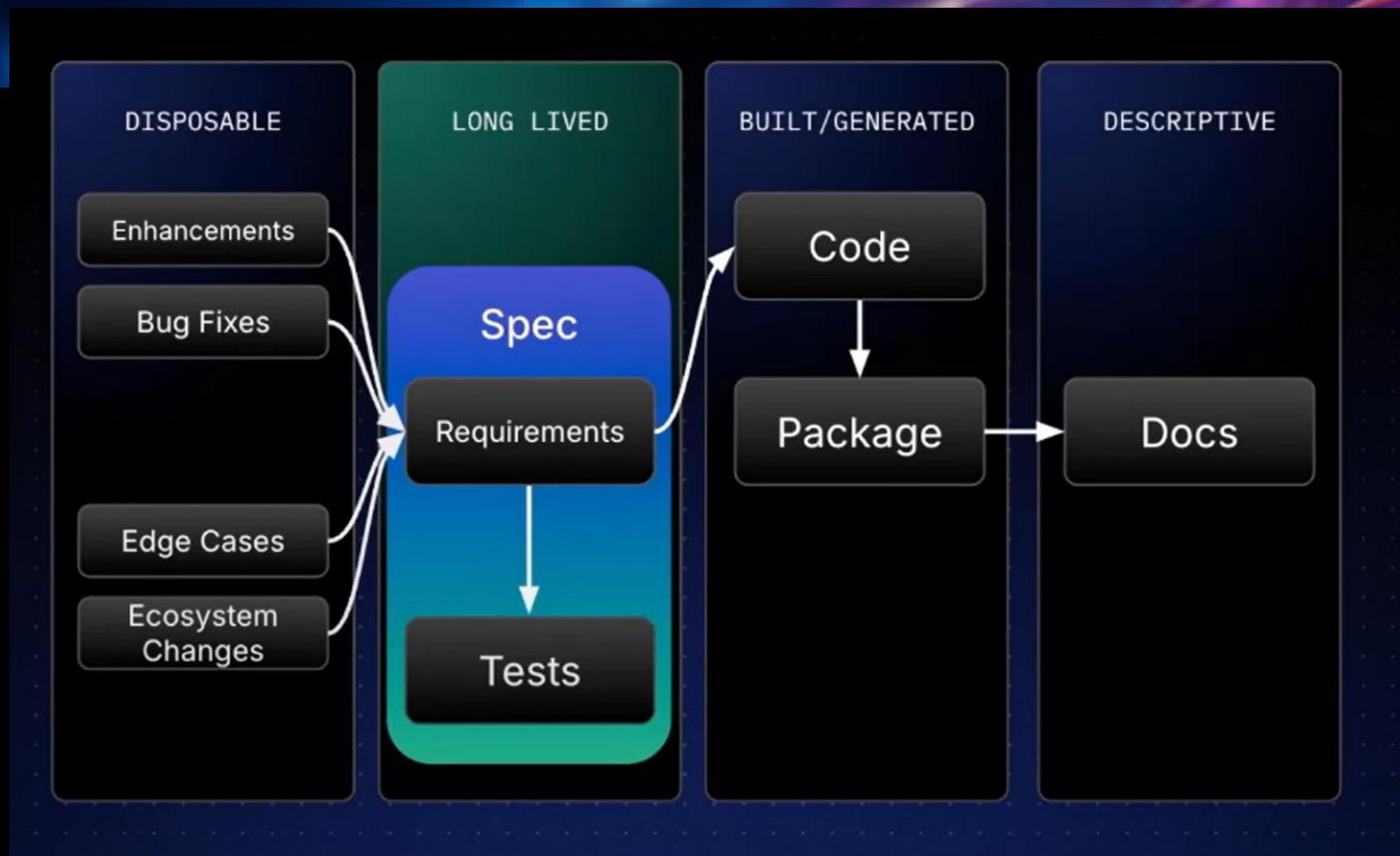


# Intent based coding





# Intent based coding





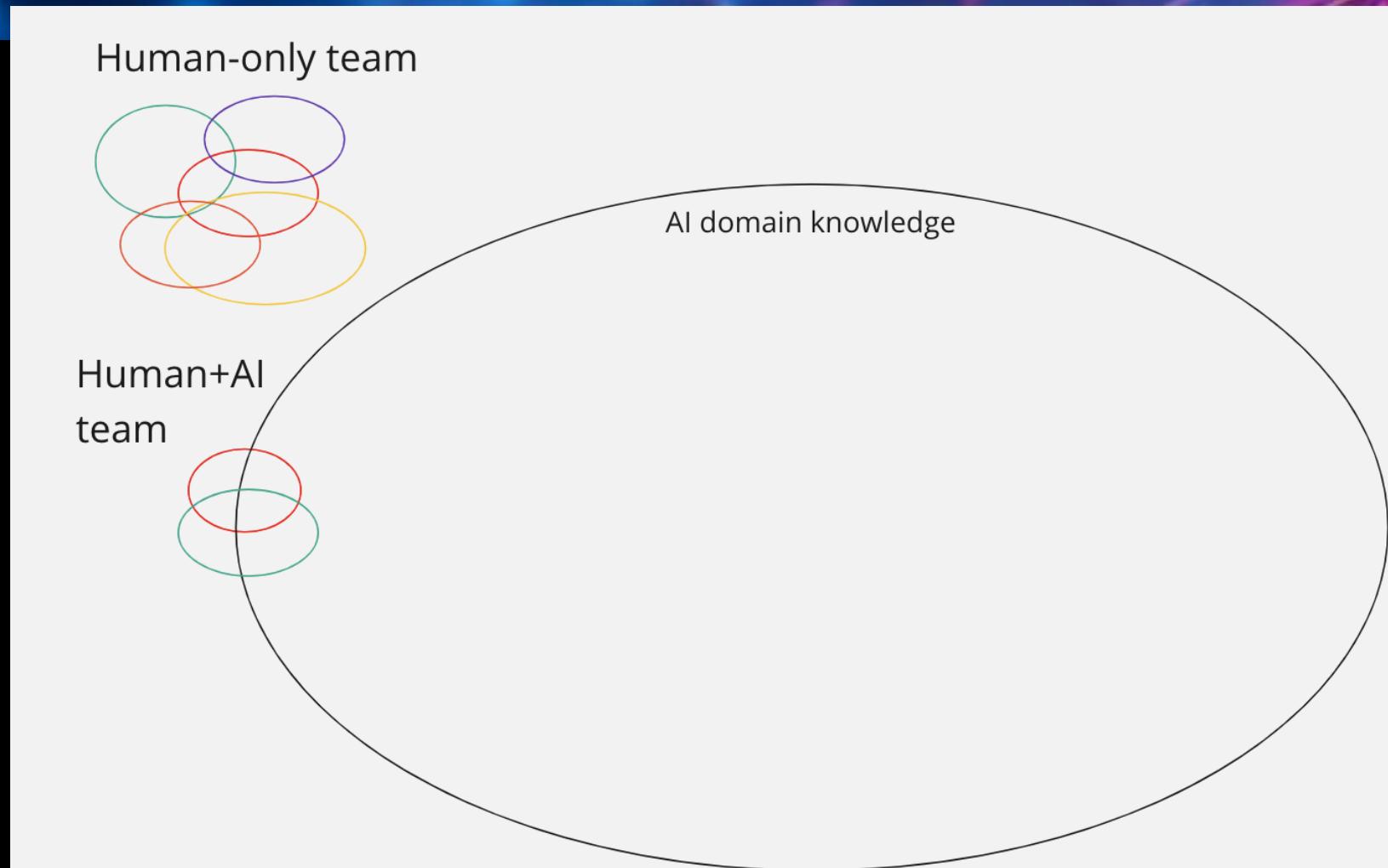
# AI Managers



*"Google, Facebook, Amazon, or a host of more recent Silicon Valley startups...employ tens of thousands of workers. If you think with a twentieth century factory mindset, those workers spend their days grinding out products, just like their industrial forebears, only today, they are producing software rather than physical goods. If, instead, you step back and view these companies with a 21st century mindset, you realize that a large part of the work of these companies - delivering search results, news and information, social network status updates, and relevant products for purchase - is done by software programs and algorithms. These are the real workers, and the programmers who create them are their managers."—Tim O'Reilly, "[Managing the Bots That Are Managing the Business](#)," MIT Sloan Management Review, May 21, 2016*

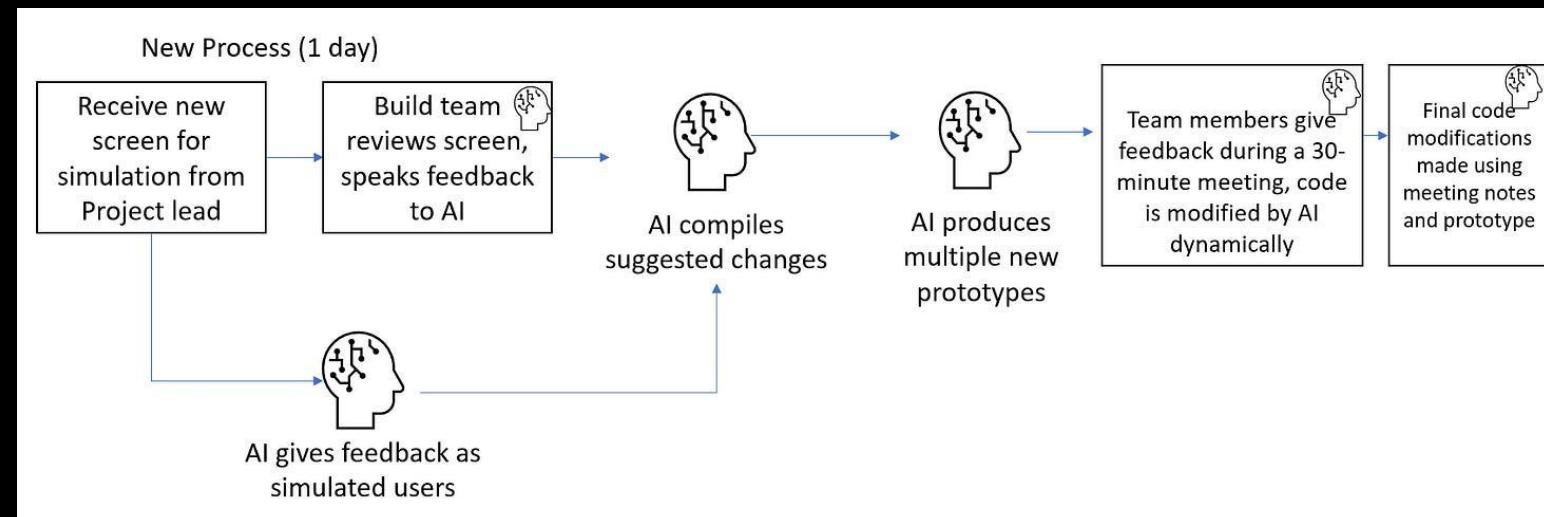
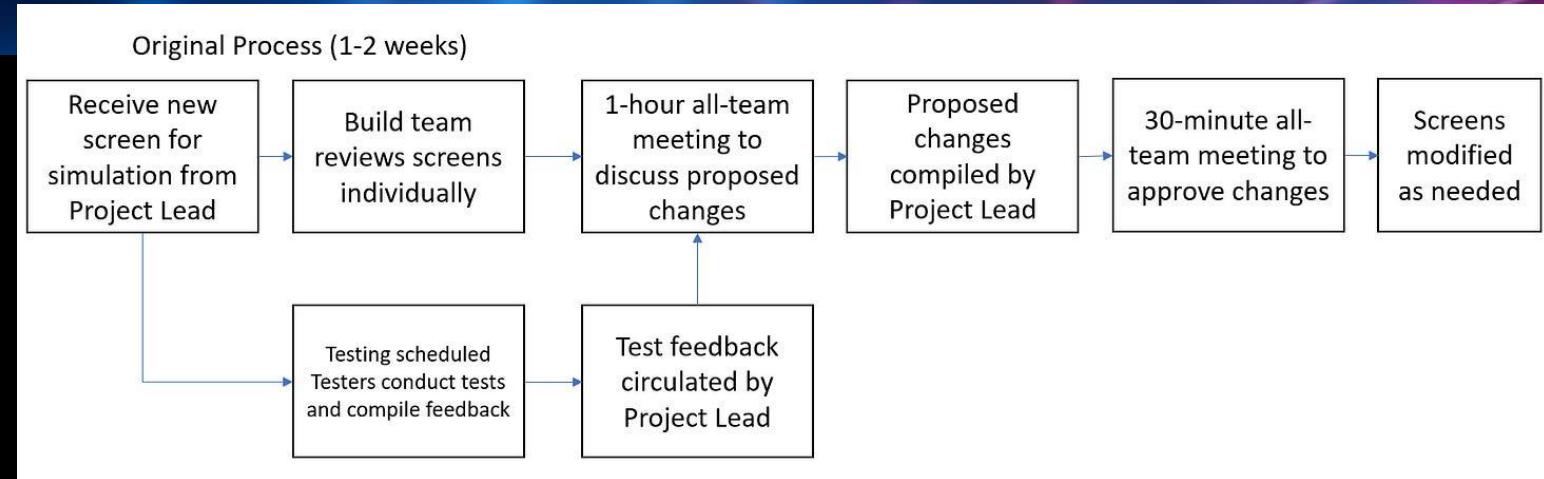


## Human + AI team





# 1 day sprints





Productivity impact?



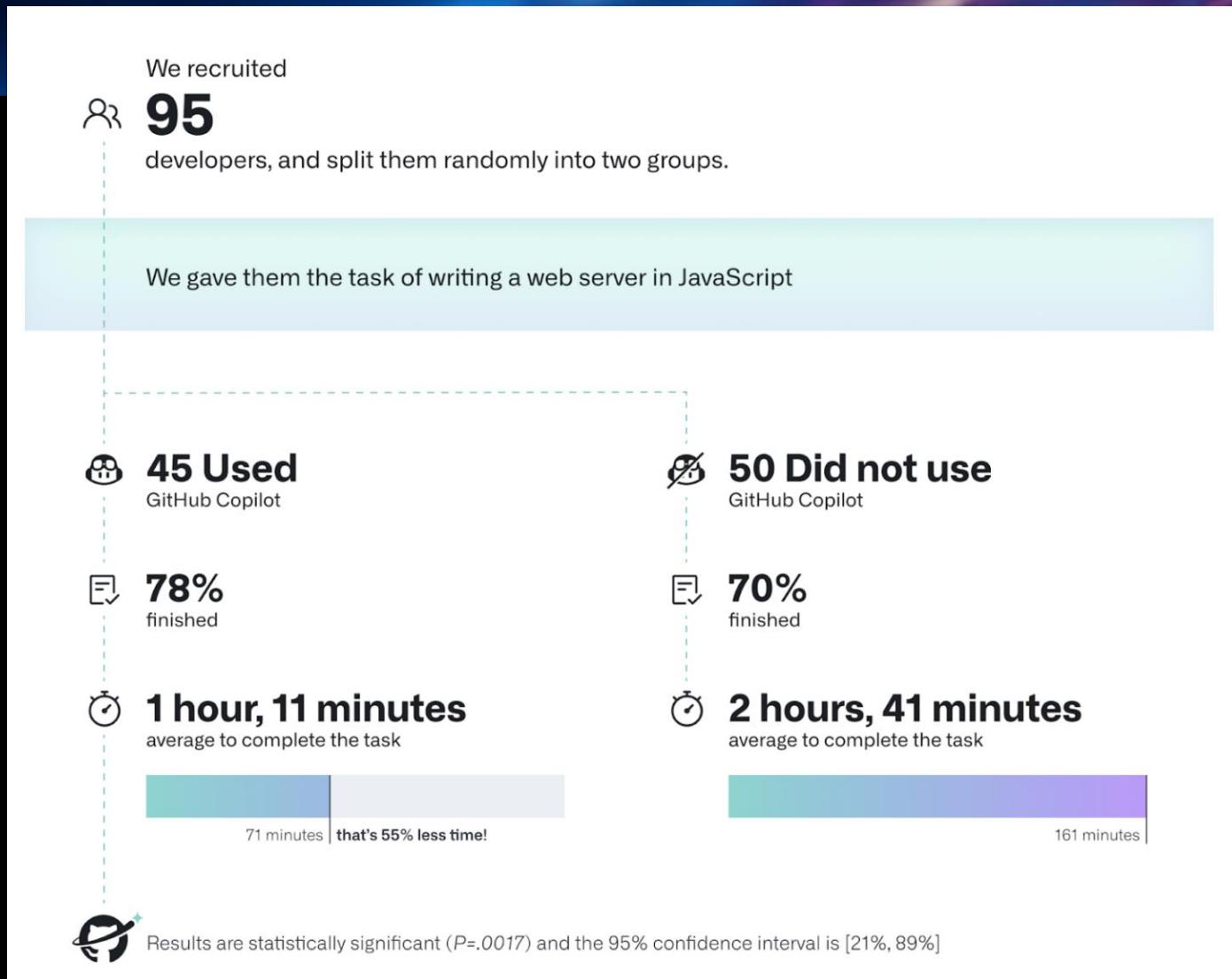
## Productivity Impact

# The Effects of Generative AI on High-Skilled Work: Evidence from Three Field Experiments with Software Developers

28 Pages • Posted: 5 Sep 2024 • Last revised: 10 Feb 2025



# Productivity Impact





## Productivity Impact

TL;dr: The claim that coding assistants can increase delivery speed by 50% is a wild overestimation. Our tests suggest the gains are more likely 10-15%. But that's still a significant gain, and, given the current price of coding assistants like Copilot, incredibly cost effective.



## Productivity Impact



The image shows the front cover of the DORA 2024 report. The title "DORA" is prominently displayed in large, bold, black letters at the top. Below it, the year "2024" is on the left and "Google Cloud" is on the right. The main title "Accelerate State of DevOps" is centered below the year. At the bottom, there is a dark section listing "Gold Sponsors" with logos for Catchpoint, chronosphere, Datadog, Deloitte, Excella, Gearset, liatrio, Middleware, and OPSERA. To the right of this dark section is a large number "10" in black, with the text "A decade with DORA" underneath it.

2024

Google Cloud

Accelerate State of DevOps

Gold Sponsors

catchpoint chronosphere DATADOG

Deloitte Excella Gearset

liatrio Middleware OPSERA

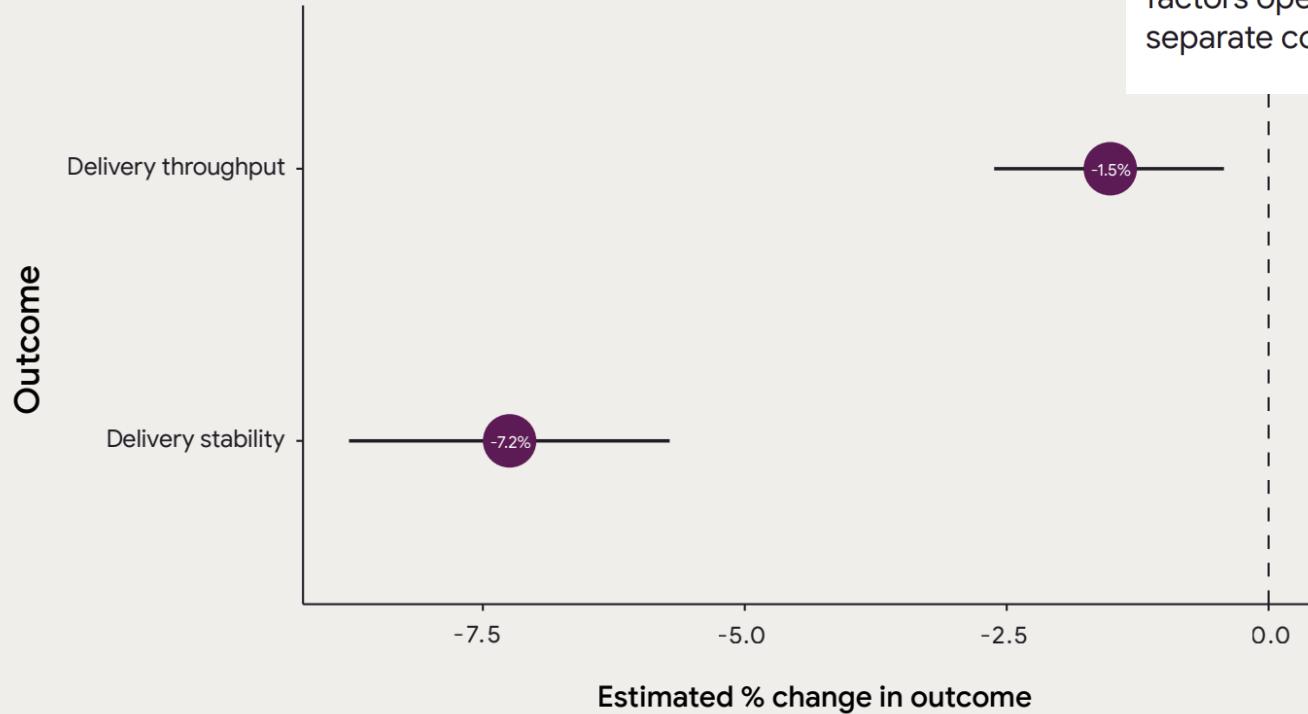
10

A decade with DORA



# Productivity Impact

If AI adoption increases by 25%...



Point = estimated value

Error bar = 89% uncertainty interval

Figure 10: Impacts of AI adoption on delivery throughput and stability.

## AI is hurting delivery performance

For the past few years, we have seen that software delivery throughput and software delivery stability indicators were starting to show some independence from one another. While the traditional association between throughput and stability has persisted, emerging evidence suggests these factors operate with sufficient independence to warrant separate consideration.

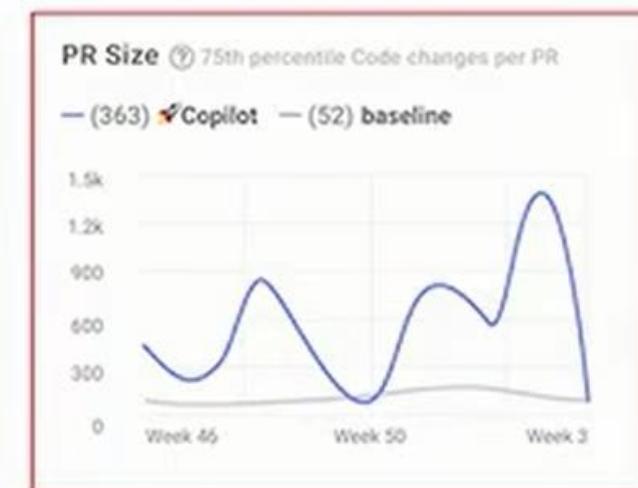
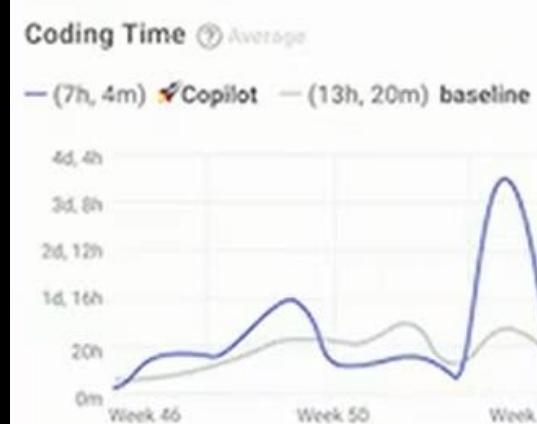
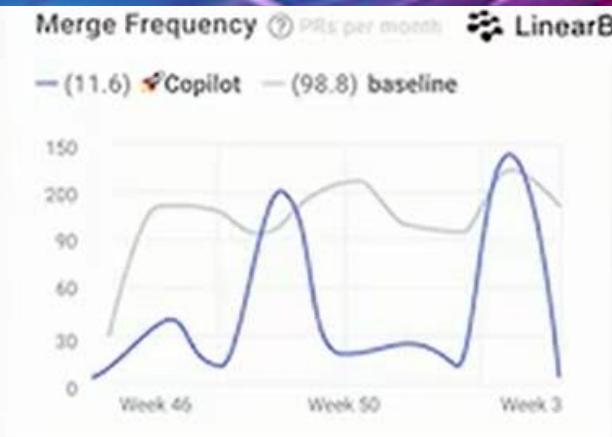
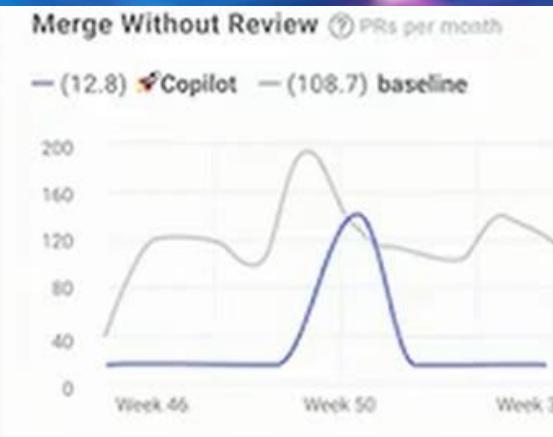


## Productivity Impact

The metric that dominates discussions about the impact of coding assistants on software delivery teams is speed. While it may be referred to as productivity, what people really mean in most cases is “how much faster are we?” That’s why the expected answer to questions about productivity improvement is usually a single percentage value. However, while industry hype started at 50% productivity gains, it appears thinking has swung to the other extreme with people talking about a complete lack of productivity gains and, instead, a 41% increase in bug rates ↗.



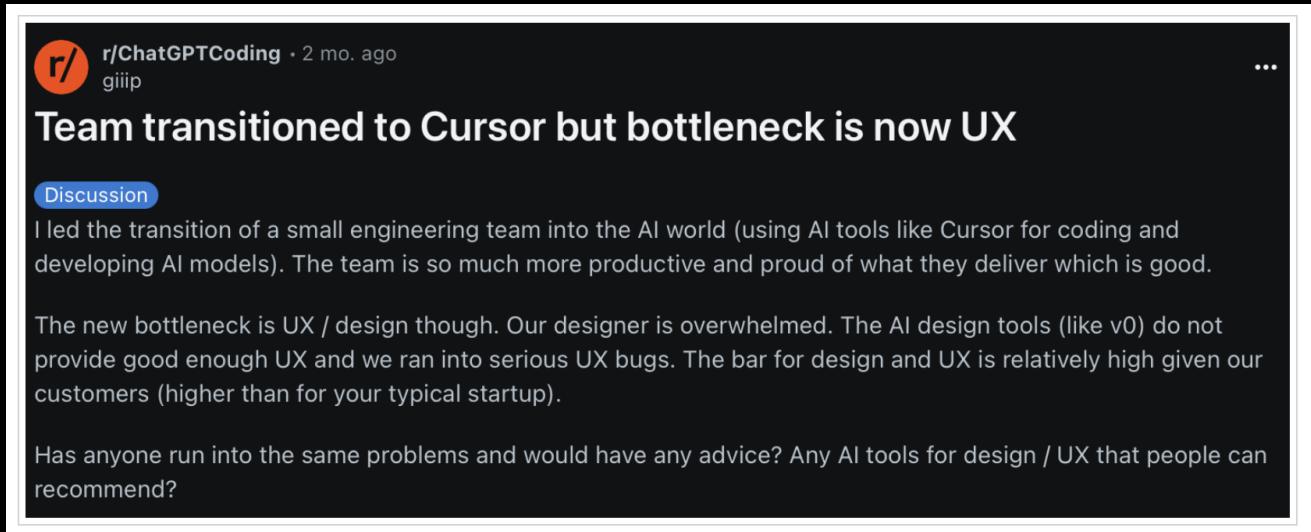
# Productivity Impact





## Theory of constraints

“Local optimizations  
don’t automatically  
lead to global  
optimums”



A screenshot of a Reddit post from the subreddit r/ChatGPTCoding. The post was made 2 months ago by user giipi. The title is "Team transitioned to Cursor but bottleneck is now UX". Below the title is a "Discussion" section. The post content reads: "I led the transition of a small engineering team into the AI world (using AI tools like Cursor for coding and developing AI models). The team is so much more productive and proud of what they deliver which is good. The new bottleneck is UX / design though. Our designer is overwhelmed. The AI design tools (like v0) do not provide good enough UX and we ran into serious UX bugs. The bar for design and UX is relatively high given our customers (higher than for your typical startup). Has anyone run into the same problems and would have any advice? Any AI tools for design / UX that people can recommend?" There is a "... More" link at the end of the post.



To conclude...



Is AI a GPT?.

Probably YES.



## Will I still have job?

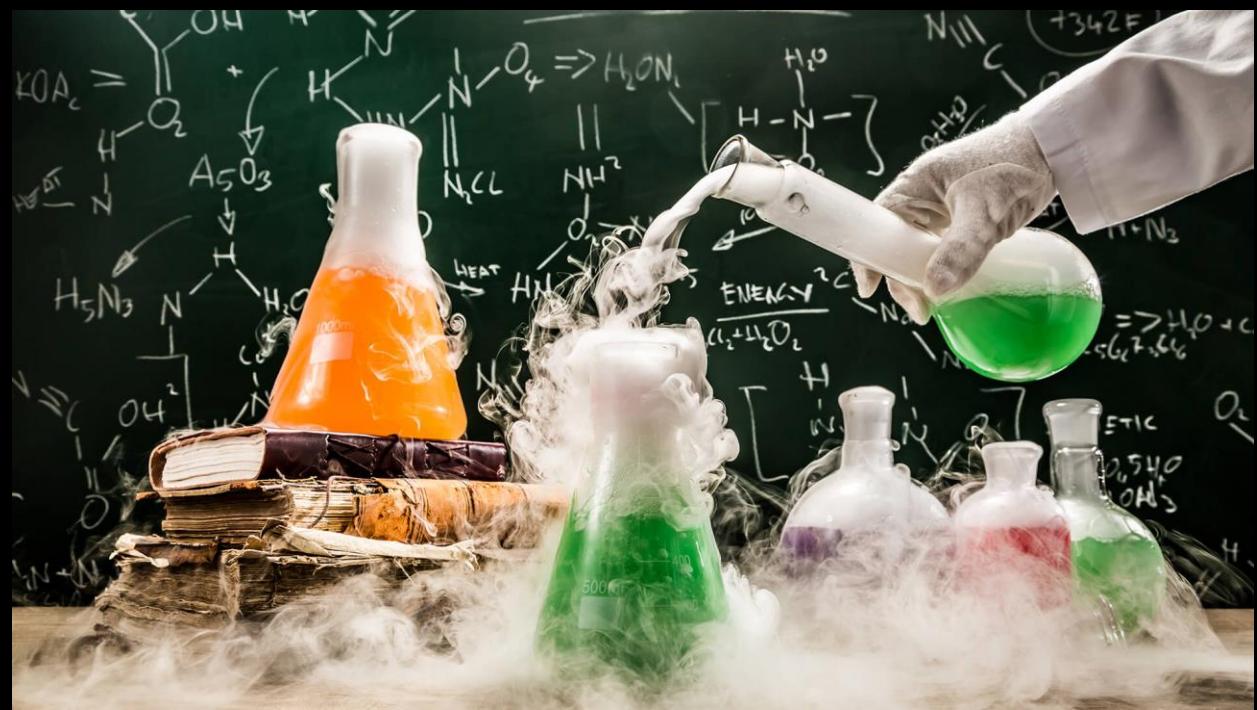
There is no such thing as job security.

But you can attempt to have career security – which is to keep learning, keep working on challenging projects, and keep working with great people.



# What should I do?

Experiment,  
experiment,  
experiment!!!

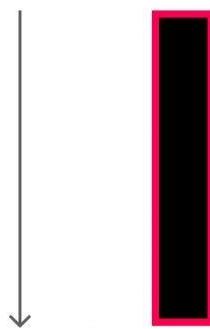




# Specializing Generalist

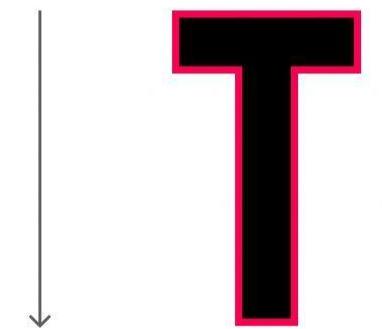
## I-SHAPED PROFILES

DEEP KNOWLEDGE IN  
ONE AREA



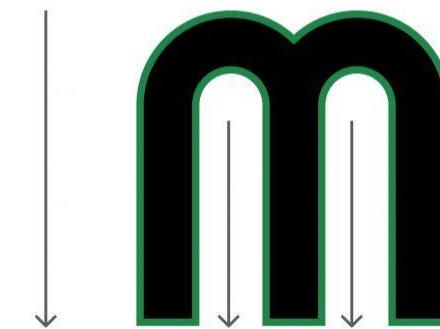
## T-SHAPED PROFILES

SHALLOW KNOWLEDGE IN A  
BROAD RANGE OF AREAS



## M-SHAPED PROFILES

SHALLOW KNOWLEDGE IN A  
BROAD RANGE OF AREAS





You are not out of a job...yet

“What’s difficult for the developer is also difficult for Copilot”



**"A FOOL WITH A TOOL  
IS STILL A FOOL"**

(Maybe) Mr. T.

# Thanks for your attention!



THE IT CONFERENCE FOR  
.NET & MICROSOFT TECHNOLOGIES



SpreaView



Review my Session

- <https://www.trae.ai/home>
  - <https://bolt.new/> (<https://stackblitz.com/>)
  - <https://replit.com/>
  - <https://www.qodo.ai/>
  - <https://github.com/breadboard-ai/breadboard>
  - <https://www.naboo.ai/>
  - <https://devin.ai/>
  - <https://github.com/SWE-agent/SWE-agent>
  - <https://github.com/apps/dosubot>
  - <https://www.coderabbit.ai/>
  - <https://idx.dev/#introduction>
  - <https://www.palantir.com/>
  - <http://refact.ai/>
  - <https://sourcegraph.com/cody>
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- <https://idx.google.com/>
  - <https://v0.dev>
  - <https://infracopilot.io/>
  - <https://vision.useadrenaline.com/>
  - <https://aider.chat/>
  - <https://baz.co/features>
  - <https://keak.com/>
  - <https://codeium.com/windsurf>
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  - <https://taxy.ai/>
  - <https://github.com/cline/cline>
  - <https://shoulder.dev>
  - <https://www.tempo.new/>