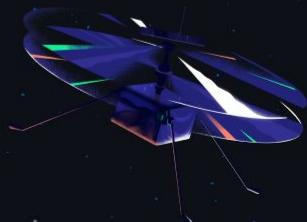




AI Dev Tools Don't Understand Us

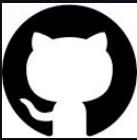
Richard Goforth - @Dedac



@Dedac

Richard Goforth

Special Investigator for poor AI
usage, misunderstandings, and
other unfortunate practices
(SIPAUMOUP)





Confirmation Bias

:(
:(

Your PC ran into a problem and needs to restart. We're just collecting some error info, and then we'll restart for you.

20% complete



For more information about this issue and possible fixes, visit <https://www.windows.com/stopcode>

If you call a support person, give them this info:
Stop code: CRITICAL_PROCESS_DIED





Developer productivity with Copilot

87%

less
on repetitive tasks

74%

focus on more
work

73%

say they are more
productive



Developer productivity with Copilot means developers focus on what matters most.



Designing

Brainstorming

Collaborating

Iterating

Planning



Less time on

Writing Tests, Repetitive Code, & Boilerplate

Debugging

Searching Documentation

Finding Vulnerabilities

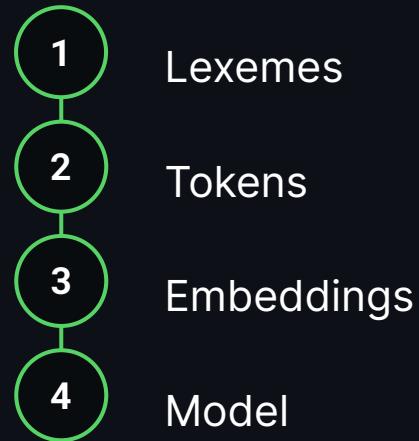
Deciphering Existing Code

Correcting Syntax

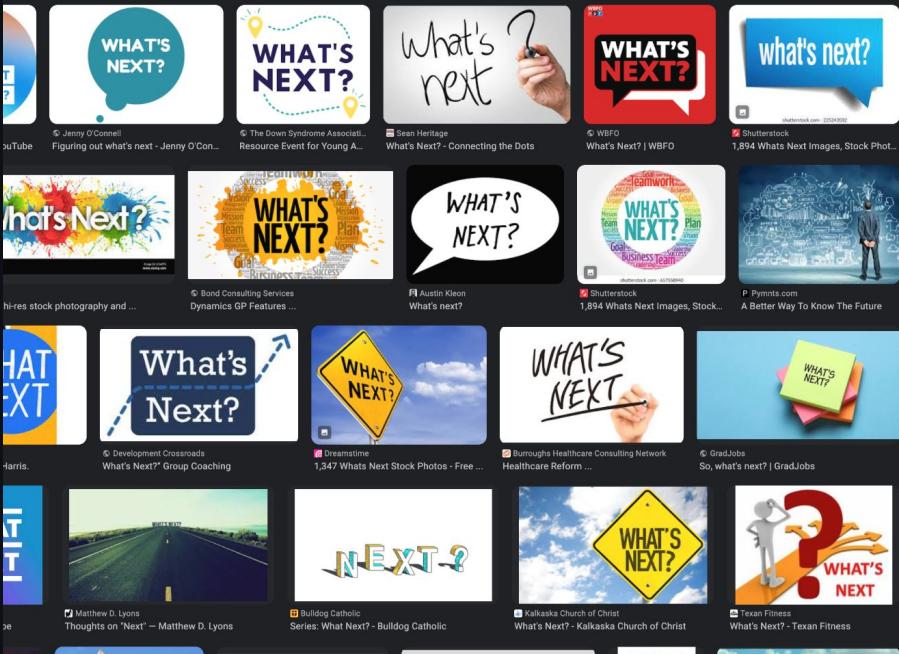
Summarizing Changes and Comments

Learning Git Commands

Talk to the Model



What Probably Comes Next



Context is Key



Building AI vs Using AI





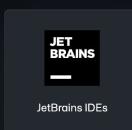
Visual Studio



Neovim



VS Code



JetBrains IDEs

A screenshot of a code editor interface. At the top, there are tabs for "runtime.go", "course.rb", "time.js", and "IsPrimeTest.java". The main area displays the following Go code:

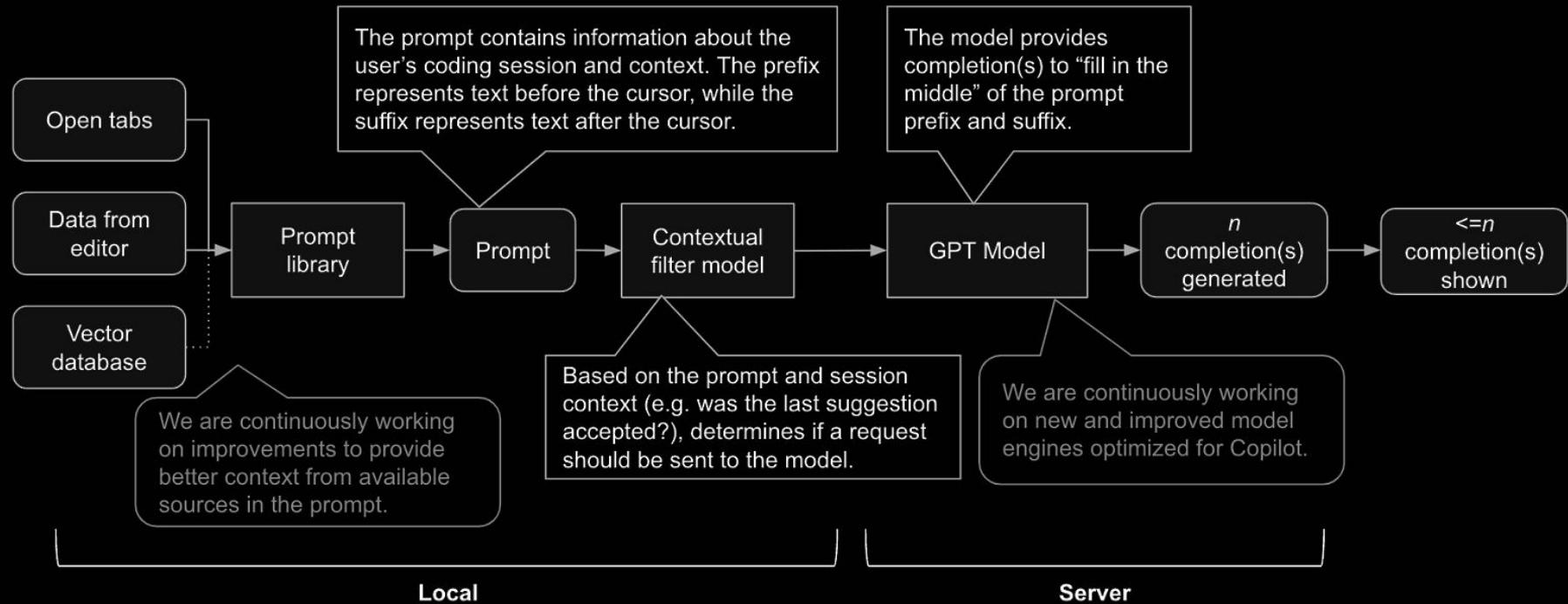
```
1 package main
2
3 type Run struct {
4     Time int // in milliseconds
5     Results string
6     Failed bool
7 }
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
```

Copilot Builds Prompts

A series of algorithms first select relevant code snippets or comments from your current file and other sources

These snippets and comments are then prioritized, filtered, and assembled into the final prompt.

Life of a Completion

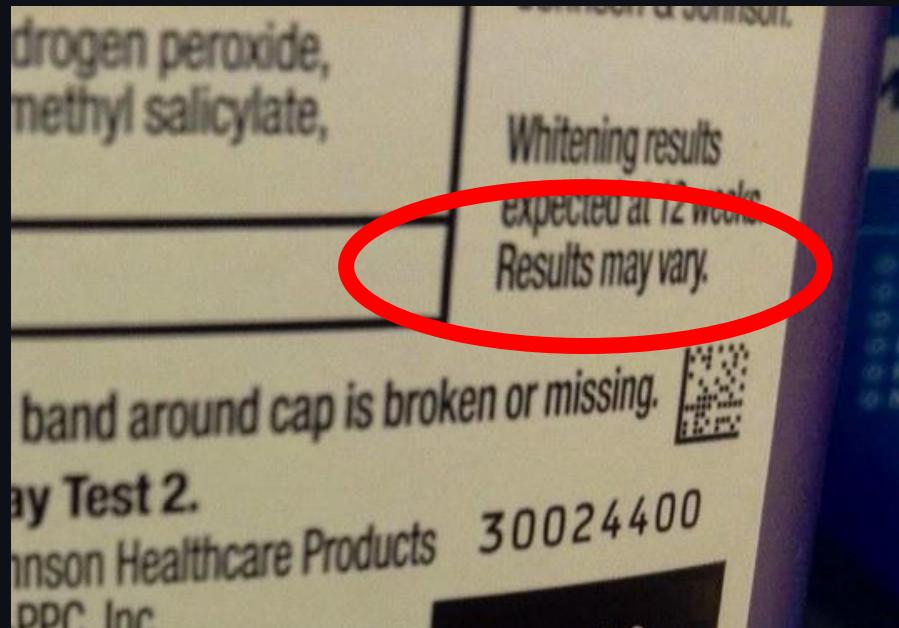


Simplified system diagram focused on model quality efforts. Made by Alice Li, machine learning researcher at GitHub.

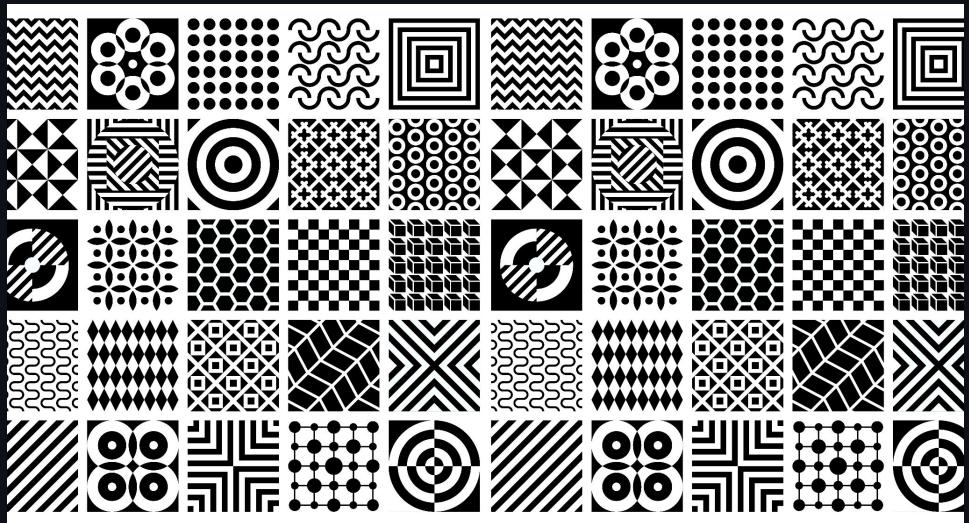
Just Start Typing



Non-Deterministic



Pattern Matching



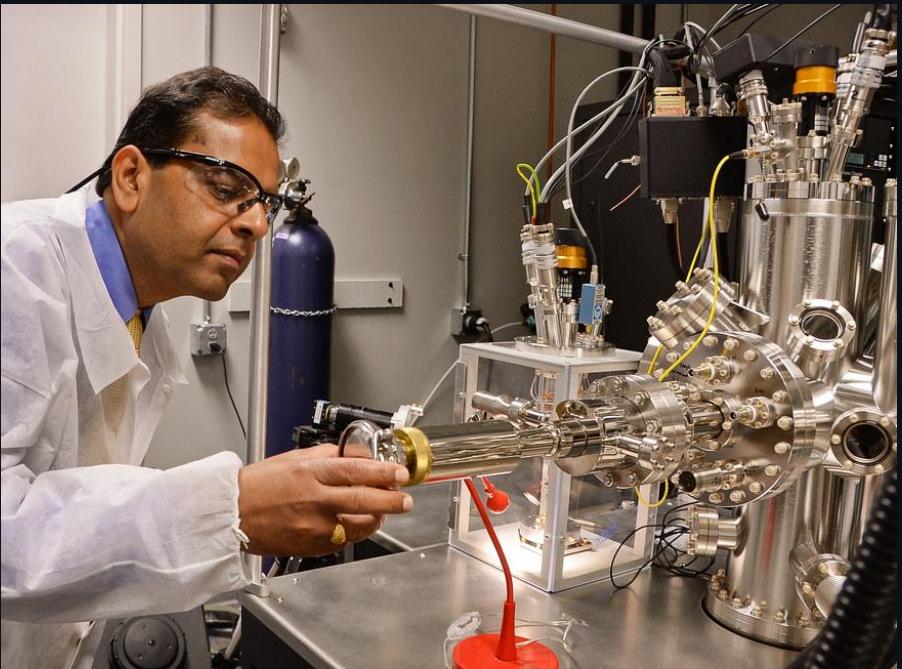
Keep asking questions



Context is Key (again)



Testing & Data Science



Resources

- [Copilot Context Building](#)
- [Prompt Crafting and LLMs](#)
- [LLM Application Architecture](#)