

BugSage: AI-Powered Bug Diagnosis for Developers

What is BugSage?

BugSage is an AI tool that helps developers find the root causes of bugs in complex software projects. Unlike traditional debugging tools, BugSage uses AI to understand code context, trace execution paths, and suggest likely causes and fixes automatically.

How It Works:

1. Bug Input:

- Developers provide a bug report, error message, stack trace, or failing test.
- Optional: upload code files or link a Git repository.

2. Code Analysis:

- BugSage reads the stack trace and checks recent code changes.
- It uses static and dynamic analysis to track down where the issue starts.

3. AI Diagnosis:

- A specialized AI model trained on code and bug patterns looks at the code.
- It scores possible root causes and picks the most likely ones.

4. Results & Fixes:

- You get a ranked list of root causes, with code snippets and fix suggestions.
- It also suggests unit tests or docs to prevent the issue again.

Why Use BugSage?

- Saves Time: Automates bug tracing so developers can fix faster.
- Better Code: Highlights weak spots and recurring bugs.
- Onboarding Help: Makes it easier for new team members to learn the codebase.
- Always Learning: Improves its suggestions over time based on resolved bugs.

BugSage makes debugging smarter, faster, and more efficient for modern development teams.