United States: Survey reveals engineering teams recognize more benefits of AI coding tools than previously reported

How do engineers use AI?

Our latest survey captured the attitudes and behaviors of 2,000 respondents in the United States, India, Brazil, and Germany who work at organizations with 1,000 or more employees. Five hundred of those respondents were located in the United States, and we highlight their responses to key questions below. To view the data collected from respondents across all four countries and a thorough analysis of the information we gathered, read the full report.

99% HAVE TRIED AI CODING TOOLS AT WORK. 73%

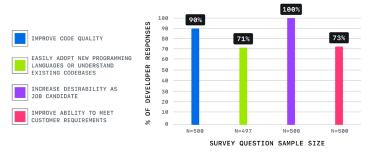
EXPECT AI CODING TOOLS WILL ENHANCE THEIR ABILITY TO MEET CUSTOMER REQUIREMENTS. 99%

EXPECT AI CODING TOOLS TO IMPROVE SECURITY.

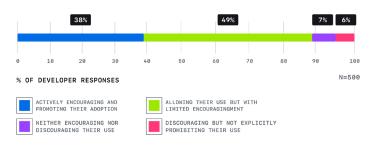
Respondents report benefits and company receptiveness to adopting Al

In the United States, 99% of respondents reported having used Al coding tools at work in 2024, up 8% from 2023.¹ U.S. respondents were optimistic about the benefits of using Al coding tools, including increasing their desirability as job candidates. They also showed the most optimism for Al's potential to improve code quality. The reported benefits and company approaches to Al coding use, as perceived by respondents, signal the need for organizations to study the benefits and implement strategies around the use of Al coding tools.

Benefits reported around the use of AI coding tools



Companies approach to Al coding usage, as percieved by respondents

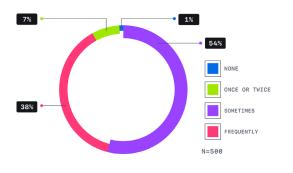




Al and automation: advancing code security

Ninety-two percent of respondents in the U.S. report using AI coding tools to generate test cases at least some of the time, showing that AI's benefits aren't theoretical–they're already tangible. Moreover, 100% of respondents report using AI to automate security reviews to some extent and 99% expect AI coding tools to improve security. At a time when security professionals are in short supply,² organizations need to augment security expertise with developer tools, training, and practices that leverage AI.

Reported use of AI coding tools to generate test cases



Automation of security reviews as part of workflow and CI processes

ASKED AMONG THOSE WHO HAVE A SECURITY REVIEW PROCESS IN PLACE



¹GitHub Staff, and Inbal Shani. "Survey Reveals AI's Impact on the Developer Experience." The GitHub Blog, June 13, 2024. https://github.blog/2023-06-13-survey-reveals-ais-impact-on-the-developer-experience/.

²"ISC2 Cybersecurity Workforce Study: Looking Deeper into the Workforce Gap." Cybersecurity Certifications and Continuing Education, 2023. https://www.isc2.org/Insights/2023/11/ISC2-Cybersecurity-Workforce-Study-Looking-Deeper-into-the-Workforce-Gap.

Meet GitHub

GitHub is an Al-powered developer platform that empowers organizations to build, secure, and ship software faster to unlock innovation at scale. Our comprehensive platform integrates enterprise-grade tools, such as CI/CD, automation, application security testing, cloud development environments, collaboration tools, and Al-powered coding tools.

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GitHub Copilot helps our developers stay in the flow zone. You don't have to spend quite as much time clawing through code libraries to look up exact conventions anymore. It saves us a lot of time from reading difficult or low-quality documentation. We can keep our momentum.

Jonathan Burket

