Programmers say Gen AI can write 50-60% of code

ADOPT CODING ASSISTANTS

❝ Imagine the best programmers in the world sitting around a table waiting to help you on your programming problem. All you need to do is to articulate the problem you are trying to solve and voila! They write out the code for you on your screen. That is Gen AI for you.

Rajesh TV | PRINCIPAL ENGINEER, CISCO INDIA

The biggest challenge with Gen AI initially was identifying the right prompts and questions. With time, and some online learning modules, we can understand what prompts yield what kind of results. The productivity gain enables product owners like me to innovate and discover better solutions rather than focusing on manual tasks. Gen AI will be an ally to what we do!

Priyanka Jain | LEAD ENGINEER, PLATFORM ENGINEERING, ASCENDION

These AI-powered coding assistants are here to stay. They will make life easy for developers. Programmers should get over the inertia, adopt these tools, and learn to use them successfully in their regular coding cycles.

Dattaraj Rao | CHIEF DATA SCIENTIST, PERSISTENT SYSTEMS

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Generative AI-powered coding assistants – the likes of Google's Studio Bot and Microsoft-owned GitHub Copilot – are rapidly changing the developer landscape. And while there might have been some angst in the beginning among the developer community about AI taking over their jobs, that initial fear is quickly turning to excitement.

Dattaraj Rao, chief data scientist at Persistent Systems, says that while he was initially sceptical about using coding assistants, when he finally used them, he found it to be a surprisingly enlightening experience. He says it's easy to learn how to use these assistants, and they easily integrate into existing integrated development environments (IDEs) like Visual Studio Code, JetBrains, and JupyterLab that developers frequently use.

"I predominantly use Python and recently asked an assistant to write code for a machine learning application to read a database table and apply algorithms like support vector machines (SVM) and gradient boosting trees to make some predictions. The assistant found the right Python libraries and function calls and gave me ready code to execute," he says.

This, Rao says, saved him countless hours of writing mundane and repeatable code for activities like importing data, cleansing, building training and test datasets, training the actual model, evaluating results, and even creating charts showing results. "I could focus on the business problem I was solving, and almost 50-60% of the code was written for me. Like Python, these coding assistants support Java, C#, JavaScript, and other languages. Real-time coding suggestions are extremely useful, and I also have the option to accept or reject suggestions and write my own code," he says.

Rajesh TV, principal engineer at Cisco India, says Gen AI is a boon to both new and experienced programmers. "For the novice, it's ever so easy to get started with a new language because you can readily get solutions to your programming problems and get going in no time. For experienced programmers who can break down any new problem into a set of sub problems whose solutions are already available, it's a great productivity booster," he says.

Gen AI can even help translate solutions from one language to another, says Rajesh, making it extremely easy to move to the language you need your solution to be in.

That said, these coding assistants have challenges too. The way GenAI works, Rajesh notes, is by drawing from similar solutions available in the open (open source code) that it's been trained on. "So, it's not guaranteed to work for you. Hence, it's important that you apply the same checks to code as you might if you received a solution from a colleague. Also, you need to learn how to get the best from Gen AI by asking the right questions (prompting) to get the best answers," he says.

IGNITE YOUR CAREER

Priyanka Jain, lead engineer of platform engineering at Ascendion, says as a product owner at Ascendion, she has to often leverage AI to create presentation flows, graphical representations for workflows, video product demos, and more. "Gen AI accelerates time to market, and we can get quicker approvals from clients and make real-time fixes based on inputs," she says. When a techie needs to ideate or develop a new product, Priyanka says, Gen AI can help write product notes and test cases in no time, simplifying the showcase process. "Gen AI helps develop test cases to check the functionalities with multiple scenarios and improvise the quality right from the early stages. With Gen AI, developers can envision the entire engineering lifecycle and get access to multiple perspectives such as QA and testing," she says.