Does ‘vibe coding’ make everyone a programmer?

AFP-Can a complete tech novice create a website using everyday language on ChatGPT?

That’s the promise, misleading for some, of “vibe coding,” the latest Silicon Valley catchphrase for an advance in generative AI that some say makes computer programming as simple as chatting online.

“You fully give in to the vibes, embrace exponentials, and forget that the code even exists,” OpenAI co-founder and former Tesla employee Andrej Karpathy described in early February, in a message posted on X (formerly Twitter), using the term for the first time.

“I’m building a project or web app, but it’s not really coding – I just see stuff, say stuff, run stuff, and copy paste stuff, and it mostly works,” he said.

The developer and entrepreneur was referring to the new generative AI models that produce lines of code on demand in everyday language, through writing or speech.

The concept of “vibe coding” remained confined to the AI community until New York Times columnist Kevin Roose claimed to have created websites and apps without any knowledge of programming.

“Just having an idea, and a little patience, is usually enough,” he wrote.

The ChatGPT and Claude interfaces can write an entire program line by line on demand, as can Gemini, which launched its dedicated version, Gemini Canvas, on Tuesday.

Other generative AI platforms specifically dedicated to coding

have also made their mark in recent months, from Cursor to Loveable, or Bolt, Replit and Windsurf.

“Maybe, just maybe, we’re looking at a fundamental shift in how software is created and who creates it,” said online marketing specialist Mattheo Cellini on Substack.

“It’s unlikely to make coding irrelevant, but it may change the way developers work,” suggested Yangfeng Ji, professor of computer science at the University of Virginia.

“This could lead to some job displacement, particularly for those focused solely on basic coding tasks.”

Even before “vibe coding,” a downturn was being seen by some in IT employment as the first effects of generative AI began to be felt.

The sector shed nearly 10,000 jobs in the US in February, according to the Department of Labor, and its headcount is at a three-year low.

— Expertise needed? —

Among code novices, many find it hard to catch the vibe.

“People who do not have programming expertise often struggle to use these kinds of models because they don’t have the right kinds of tools or knowledge to actually evaluate the output,” said Nikola Banovic, professor of computer science at the University of Michigan.

On social media, the few newbies who report on their “vibe coding” quickly complain that it’s not as easy as some want to believe.

Without mastering computing complexities like digital directories, runtime environments or application programming interfaces (APIs), it’s hard to create an app that works.

Despite his coding knowhow, Claude Rubinson, a professor of sociology at the University of Houston-Downtown, wanted to create an application for his students two years ago without tinkering with the code generated by ChatGPT.

After a lot of trial and error, the app finally worked, but “I’m convinced it wouldn’t have worked if I hadn’t understood the code,” which allowed him to guide the interface using the appropriate language.

This brought home the importance of the “prompt”: mastering the request submitted to obtain the desired result.

“Programmers have certain levels of AI literacy that allows them to get what they want out of the models,” said Banovic.

Everyday users “will not know how to prompt,” he warned.

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