THE FUTURE OF VIBE CODING

A method where you describe what you want to build in plain language, called a "prompt", and a Large Language Model (LLM) generates the actual working code for you. No programming experience is required

"Build a booking page for me with payments"

COINED IN 2025
by Andrej Karpathy

STRENGTHS

- Enables non-technical staff to build functional workflows quickly
- 5–7× faster development cycle
- Programmers with Copilot completed tasks 55 % faster on average
- These changes help organizations become more agile and responsive to emerging challenges and opportunities

* Lovable, the vibe coding start-up, became the fastest growing software company in history

LIMITATIONS

- False sense of confidence due to reduced engagement with the codebase of the prototype
- AI bias and hallucinations: reference nonexistent libraries or inconsistently rename configuration flags
- Messy, unreliable code and architectures that are difficult to scale safely
- Reliability concerns, large-scale security analysis of over 100 language models revealed that only 55 % of AI-generated code was secure, with security

* Mc-Donald's AI Chatbot exposed 64 million personal data

REALITY

20%
Employment for software developers aged 22-25 fell nearly 20% from its late-2022 peak

> 25%
Over a quarter of Google's code is AI-generated, reviewed by a senior engineer before deployment

95%
25% of startups in Silicon Valley in their Winter 2025 cohort had codebases that were 95% AI-generated

VIBE-CODING VS AI-ASSISTED CODING

prompt → AI → code	prompt → AI → human-review
Minimal human understanding	Developers remain central
Used in start-ups/prototyping	Used in large companies
Higher risk of bugs and security issues	Strong focus on testing and maintainability

Most large organisations adopt AI-assisted coding rather than full vibe coding due to the need for reliability, security, and scalability

CONCLUSION

While vibe coding increases speed and accessibility, industry evidence shows that AI-assisted coding, not full automation, is becoming the standard, reinforcing the continued importance of skilled programmers

NEW ROLES EMERGING

Demand for AI oversight, security auditing, prompt engineering and system architecture is increasing, but these require deep Computer Science knowledge, not less of it

FUTURE PROGRAMMERS WILL REQUIRE NOT ONLY CODING SKILLS, BUT ALSO THE ABILITY TO EFFECTIVELY WORK WITH, EVALUATE, AND MANAGE AI-GENERATED SYSTEMS

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