



The Dark Side of Artificial Intelligence in Software Development

Artificial intelligence is helping make software development easier and quicker but there are also hidden dangers to software development that many developers are starting to see.

By **Hamza Ali** | BS Software Engineering | **Published:** October, 2026
Hamzariasat03@gmail.com | Position: Student

Introduction

Artificial intelligence has become part of software development. Tools like ChatGPT and GitHub Copilot can write code, correct mistakes and even better when they provide better solution. For many developers, this is like taking a great leap for all.

But, this rapid development also does bring some serious questions. Are developers falling too much on AI? Are we losing important problem solving ability? These are the issues of concern that are becoming increasingly prevalent, especially to students and new developers.

In Pakistan students where most of the students are learning programming to make their career, this issue has more importance. If learning is relying too heavily on the use of AI tools, the foundation of good software engineering will wither.

"Over reliance on AI can reduce developers' problem solving skills and understanding of code."

Technology Overview

AI tools in software development are supposed to make coding easier. A developer can now type in an instruction, here let's say a really simple one and the tool will generate a piece of code. This saves time and effort particularly when dealing with repetitive tasks.

For example, a student who is working on creating a mobile app can use AI to generate login systems, database connection or even generate UI components. This helps the projects to be done quickly which is beneficial in tight deadlines.

However, these tools do not really understand the project like a human. They are used to predict code based on the existing data. This means that the code is possible, but it will not always be the best/safest. In some cases



the code is used by the developers without understanding what they are doing which will lead to problems in the future.

In the tech environment of Pakistan which is emerging, many newbies have made use of these tools extensively. While this helps them to have a faster movement, this can slow down their long-term learning.

Key Findings & Impact

One of the biggest impacts of AI in the software development process is speed. Tasks that used to take in hours can now be in the form of minutes. This helps to increase the productivity at some extent, especially in the startups and small teams.

But there are some obvious downsides. Developers can abandon the practice of problem solving due to the immediate answers that AI gives. This in turn can make their logical thinking weaker with time.

Another huge concern is security. AI created code may have hidden vulnerabilities. If the developers are not careful enough to go through the code, it will cause serious problems in real applications.

For the tech industry in Pakistan this is opportunity as well the risk. On one side, as a result of faster development, startups can grow fast. On the other side, bad understanding of code can effect on quality and reliability of software. Companies might face problems if AI is being used in development and no proper knowledge.

What's Next?

Artificial intelligence is going to continue to grow in the software development. It is not going away and it is not something that should be ignored. The real problem is finding the perfect equilibrium between utilizing AI and acquiring good skills.

Students and developers need to use AI as an aid and not a replacement. Learning the basics of programming, understanding logic and practicing problem solving are still very important.

In future, the best developers will not be the ones who know how to use AI to the maximum, but the ones who know how and when to use it properly.

About the Author

Hamza Ali is a BS Software Engineering student with a strong interest in modern software development trends and emerging technologies. He focuses on understanding how new tools impact learning and real world development. He can be reached at hamzariasat03@gmail.com.

Keywords: Artificial Intelligence; Cybersecurity; Software Engineering; Pakistan Tech.