## Summary

In this article, my main research object is AI programming assistant. The purpose of the research is the impact of AI assistant on the work of our industry. I first listed three authoritative academic articles discussing the benefits of AI programming assistants, and refuted two of them.

In 1.1, I introduced some mainstream AI assistants such as GitHub Copilot, which can quickly generate some simple code snippets.

In 1.2, I introduced examples of AI assistants assisting developers. For example, AI can generate practical message logs and can also automatically generate test cases.

In 1.3, I listed some career fields that may be affected by AI, such as QA and FE. At the same time, I also cited other cases to refute this statement, that is, some human characteristics, such as communication ability

Then, I listed three academic articles(2.1-2.3) to discuss several key points of program quality, including accuracy, performance and maintaince. Strengthening my point: that the existence of manual programming is still meaningful. Finally, I made a summary and proposed the concept of pair programming between AI and humans in the future.

That is my summary.

**Citation**

Within limited iterations, the solution generated by difficult code is not ideal(Brandon 2023)

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| Brandon and his team studied the correctness of AI-generated code. They found that the code generated by AI was flawed in terms of correctness. These models did not have deep reasoning. |

AI relies on existing data and lacks the communication skills of program

practitioners(Myers et al. 2023)

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| It was found that the code generated by AI relies on existing data. If there is a lack of data basis, the quality of the code generated is not high. Furthermore, AI’s lack of communication skills also makes it unable to shake the status of programming jobs. |

* Think about some of the sources you have used. How *reliable* do you think they are? Why do you think this?