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Abstracts

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Artificial intelligence: an addition for programmers or their complete replacement

Artificial intelligence (AI) has become an increasingly important addition for programmers in today's technological landscape. As AI technology advances, it provides programmers with new and innovative ways to develop software and applications.

One of the main benefits of integrating AI into programming is that it allows for the automation of tasks that were previously time-consuming and required human intervention. AI-powered tools can now analyze data, recognize patterns, and make decisions with high levels of accuracy and speed.

Moreover, AI can be used to enhance existing software applications, making them more efficient and effective. For example, chatbots powered by AI can provide customer support, while image recognition technology can automate the process of categorizing and organizing visual data.

In addition, AI is also being used to create entirely new software applications that were not possible before. For instance, machine learning algorithms are now used to develop self-driving cars, and natural language processing technology is being used to develop virtual assistants.

As AI technology continues to evolve, it is becoming an increasingly important tool for programmers to be in their arsenal. By integrating AI into their programming workflows, developers can create more powerful and sophisticated software applications that can automate tasks, enhance existing functionality, and even create entirely new products and services.

While AI is an incredibly powerful addition for programmers, it is important to note that it will never replace the need for human programmers. Despite its advanced capabilities, AI still requires human oversight and direction in order to function properly.

Programmers are responsible for designing, developing, and implementing AI algorithms and systems, and ensuring they are operating as intended. Additionally, human programmers are needed to constantly monitor and update AI systems, as well as to address any issues that may arise.

Furthermore, programming requires a wide range of skills that are beyond the capabilities of AI, such as creativity, critical thinking, and problem-solving. While AI can automate certain tasks, it cannot replace the creativity and ingenuity that human programmers bring to their work.

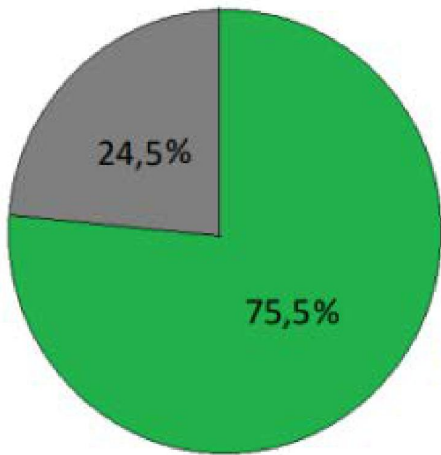


Fig.1 The percentage of questions ChatGPT answered

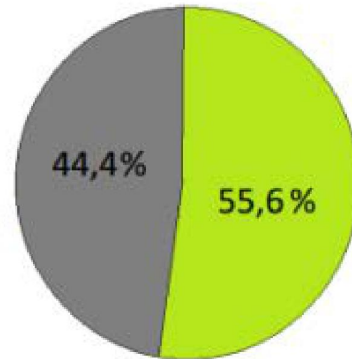


Fig. 2 Percentage of correct answers

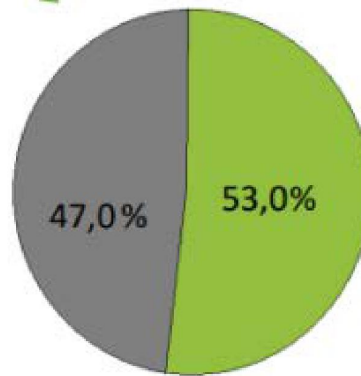


Fig. 3 Percentage of correct explanations to answers

- - The percentage of questions answered by the AI.
- - The percentage of questions that the AI answered correctly
- - The percentage of questions for which the AI gave the correct explanation
- - No answers provided or they are incorrect

It can be stated from the charts above that a system that gives correct answers to questions in no more than two-thirds of cases cannot become a full-fledged replacement for most professions, in particular, software developers.

To sum up, AI is a valuable addition for programmers that can enhance their work and create new possibilities for software development. However, it is

important to recognize that AI is not a replacement for human programmers, but rather a complementary tool that can be used to improve their productivity and effectiveness.

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