

## **How generative AI affected Software Engineering**

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### **Abstract**

Generative Artificial Intelligence influenced the field of software engineering in recent years. This abstract provides an overview of the ways in which generative AI has affected software engineering, highlighting key advancements, challenges, and potential future directions.

Generative AI assists developers with code generation, code quality, real-time suggestions. It also aids in software testing by generating test cases, identifying edge cases, and automating bug detection and fixes. Thus, usage of Generative AI enables more robust software development. However, the adoption of generative AI in software engineering is not without challenges. The ethical issues, bias in generated code, security and correctness of AI-generated code are some of the many areas of concern. Looking ahead, the ongoing development of generative AI will likely lead to more efficient and collaborative software engineering practices.

In conclusion, generative AI has a profound impact on software engineering. It helps with the software development lifecycle in many ways. While challenges remain, the future promises further innovation and closer integration of generative AI into the software development lifecycle.

**Keywords:** Generative Artificial Intelligence, software engineering, potential future directions