

# Exploring the Dual Impact of Artificial Intelligence on Science and Technology

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**Abstract:** *Artificial Intelligence (AI) has significantly transformed various sectors, including science and technology. Its applications span from enhancing research capabilities to optimizing industrial processes. We have analyzed both the positive and negative impacts of AI on science and technology, along with potential solutions to counteract the negative aspects. By addressing concerns related to bias, job displacement, and ethical considerations, and by leveraging AI as a tool for collaboration and creativity, society can harness its potential for positive transformation in these fields. Responsible AI development, education, and interdisciplinary collaboration will be pivotal in maximizing the benefits while mitigating the negative impacts of AI on science and technology.*

**Keywords:** Artificial Intelligence (AI), Science, Technology, Responsible AI development, scientific research, technology, bias, collaboration, ethics