

Impact of Artificial Intelligence on Mechanical Engineering

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Abstract: *Traditional methods in mechanical engineering are being revolutionized by artificial intelligence (AI). The substantial effects of AI on design, production, and maintenance procedures are examined in this research. Engineers can produce optimal designs more quickly and effectively with AI-powered design tools, which enhances product performance and speeds up development cycles. AI improves accuracy, lowers waste, and streamlines production processes in manufacturing. Additionally, early fault identification made possible by predictive AI systems in maintenance lowers maintenance expenses and equipment downtime. These developments propel the development of mechanical engineering in a quickly changing technology environment by improving operational efficiency and opening the door for creative solutions. This AI integration demonstrates how it may raise productivity and change industry norms*

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