

The signal processing techniques are also described in this article. The article also outlines the types signal processing methods that we used when collecting parameters which are essential for error detection. The signal technique we used to monitor the wellness of the motor is the FFT (Fast fourier transform). The generated data set can be used to train other machine learning models. It also shows how IOT can be possibly be merged with AI so that responsible personnel can also get information about faulty machinery in remote places to give awareness and time that a faulty will probably occur. This can be used to enhance the efficiency of the system. This study contributes accuracy and reliability to maintenance engineering using AI.

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ARTIFICIAL INTELLIGENCE AND THE SIXTH INFORMATION REVOLUTION

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In the development of human civilization, the way of information dissemination and processing has always been the key force to promote social progress. From the emergence of language to the invention of writing, from the rise of printing to the wide application of modern communication technologies, each information revolution has greatly changed human life style, production mode and social structure.

The advent of Artificial Intelligence (AI) is widely regarded as a critical catalyst for the sixth information revolution. AI is widely used to change people's lives, for example, in medicine, education, physical fitness, modes of transportation and living efficiency. This paper is devoted to discussion of the Sixth Information Revolution and its connection to AI. We also regard the application of AI in sports and education and AI prospects for the future.

In the era of AI, although conventional sports training methods have a certain degree of scientificity, AI can help to make sports training decisions from the multidisciplinary perspectives of human sports science, sports competition and formulate scientific sports training plans [1]. This will be the advantage of AI, artificial intelligence can not only make a reasonable training plan according to the athletes' daily sports status, but also more accurately and clearly present the plan and the video analysis of training implementation. These are difficult for the coach or one or two people in the team to complete. Using AI will greatly improve the efficiency of the work and the cost of the staff, because the calculation of the human brain may miss some important information.

Furthermore, AI has become a transformative force in education, revolutionizing the way students learn and educators teach. One of the most significant applications of AI in education is personalized learning. Platforms like «Duolingo» use AI to adapt language lessons based on individual performance and learning styles, resulting in a 30 % increase in learner retention [2]. At the same time, AI also has an impact on the education process in terms of personalized learning experience, intelligent assistance and feedback, enhanced classroom interaction, virtual teachers and chatbots, which will greatly increase students' interest and efficiency in learning. The sixth information revolution is profoundly changing our world, bringing us unprecedented opportunities and challenges.

The sixth information revolution is profoundly changing our world, bringing us unprecedented opportunities and challenges. The sixth information revolution is profoundly changing our world, bringing us unprecedented opportunities and challenges. In the future development, we need to give full play to the advantages of technology to promote comprehensive economic, social and cultural progress. At the same time, we also need to proactively address challenges and ensure that technology develops in line with human interests and values. Only in this way we can achieve sustainable development in the 'smart age' and create a better future.

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