

SMART TECHNOLOGIES IN SCIENCE AND ART

Sofiia Humeniuk

The Faculty of Electrical Engineering and Automation,

National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”

Technological Innovations in Present-day Wireless Earbuds:

A Case of Apple AirPods

In the past few years, wireless earbuds have become a daily necessity, with AirPods being “a new way of experiencing sound and connection” (Apple Inc., 2025). These small but mighty gadgets pack advanced tech like artificial intelligence, noise cancelling, and real-time translation. They are indicative of how smart technology fills and transforms and not only the way we communicate, but also art itself (particularly music and media consumption) we use to communicate.

The original AirPods debuted in 2016 and were focused on comfort and convenience and included wireless capabilities. Instead, popular models such as the AirPods Pro 2/3 now come with multiple microphones and employ AI-based algorithms to analyze the outside noise and adapt the sound to your environment (SoundGuys, 2024). For example, you fly on a plane, and it is very noisy there, a new feature of adaptive sound comes to your aid, you can hear what’s going on around you and also get clear sound. Another novelty is *the real-time translation* introduced together with iOS 26. Users can listen to foreign speeches and understand them in real time. This could revolutionize communication between different civilizations, particularly in education and travel (TechCrunch, 2025). More AirPods even have sensors that can tell if the user is wearing them, how they are moving, even monitoring head position for spatial sound. These factors converge to bring the listening experience more in line with that of a live concert or 3D cinema.

All things considered, with AirPods, wireless earbuds have upgraded from accessories to smart gadgets, with AI, sound engineering and design integrated. The progression of AirPods illustrates how quickly technology is evolving in terms of personalization and interactivity. In the future, these may be able to monitor your

health, recognize your mood, or auto-adjust to your preferences (TechCrunch, 2025).

References:

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