INFRARED WIRELESS TRACKING DEVICE FOR HUMAN MOTION SENSING

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ABSTRACT

With the advance of video game industry, many video game developers have been competing with each other to deliver the best experience in playing games for the consumers. Technology advances in Nintendo Entertainment System (NES) has taken over the market of gaming industry with the introduction of Wii. By using the game remote control, also known as Wiimote, application program coding, such as white board presenter, can be written in the Microsoft Visual Studio C#. Thus, taking the idea of exploitation of the Wiimote capability of tracking infrared (IR) signals, research of IR wireless tracking for human motion sensing had been done. The research done is to determine the viability of this device in real life situation; hence it had been implemented on flight simulation program. The finding shows that the Wiimote is capable of being a great device for tracking and translating the signal into human motion and the research is composed of two devices which could track the IR signal, one is the Wiimote and another one is the webcam. The accuracy of the IR-motion via Wiimote and webcam is then compared to determine the efficiency for real-life human motion sensing used in most aviation academies. Finally, the result of performance is compared to verify the requirement of human motion sensing in maintaining and improving safety in human lives.

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