ABSTRACT

The development of technology in the current era of globalization is mainly the technology of wireless networks, where this technology is a mainstay and the needs of the world community. This is due to the very rapid development of WIFI technology which requires the public to continue to optimize the development of wireless technology so that the creation of wireless network technology named LIFI (Light Fidelity). By using Arduino as a microcontroller, led and photodioda as a transmitter and receiver to send data through light. From the results of the tests that have been done, the application can send and play a sound files from the transmitter computer to the receiver computer with maximum file size 563 KB with a delivery time of more than 10 minutes.

Keywords: Wireless network, Arduino, LED lights, VLC (Visible Light Communication).