Abstract

The experiment by the Advanced Research Projects Agency in 1960s led to the foundation of Internet. Internet has now become an integral part of our daily life. From then technologies have progressed from 2G, 3G, 4G, 5G and now even Visible Light. This paper focuses on LI-FI and Developing a new economical optical network communication system for space and water. Light Fidelity is known as LI-FI. LI-FI was first introduced to the world by German Psychist Harald Hass a professor at Edinburg University. [1]LI-Fi is Wireless Optical networking technology that uses Light Emitting Diode (LED) for Data-Communication. Li-Fi is claimed to be 100 times faster than WI-FI. LI-FI provides better bandwidth, efficiency and security than Wi-Fi. In Order for sound to travel there has to be something with molecules for it to travel through, sound needs molecules to vibrate for it to travel. On earth sound travels by vibrating air molecules. In space there are large empty space between planets and stars so there is nothing for molecules to vibrate as a result there is no sound in space. Sound can travel in water but at a speed of 4.3 times faster than in air and also the words and directions are deformed. Li-Fi uses Visible light spectrum and can be developed by blinking LED’s at very high speed. Visible Light can travel in
both space and water. Visible light can be used to develop an economical and convenient communication system for space and water.

References


Index Terms

Computer Science

Communications

Keywords

Li-Fi (Light Fidelity), Wi-Fi (Wireless Fidelity), Vacuum, Sound, Underwater, LED, Photo-Diode, Astronauts, Divers, Communications