

NATHAN CORP#, and OSMAN GUZIDE, Department of Computer Science, Mathematics and Engineering, Shepherd University, Shepherdstown, WV, 25443. **Li-Fi: Using led lights for internet connectivity.**

The term Li-Fi stands for light fidelity, which was coined by Harald Haas, the inventor and main researcher for Li-Fi. This technology uses LED (Light Emitting diodes) lights that can transmit data faster than what the human eye can pick up, allowing the user to use lights to be able to connect to the internet without using Wi-Fi. This research explores the possibilities of Li-Fi, compares and contrasts Li-Fi to traditional Wi-Fi, as well as explores the advantages and disadvantages of this new technology. Li-Fi allows places such as hospitals, where there can be no radio wave interference to have connectivity in places such as x-ray rooms, as well on airplanes, where it would allow people to have their own personal internet connection from the small light that is above their heads. Harald Haas believes that this will be in major cities in public areas where it will allow people to connect to internet no matter where they are at. This technology has already been tested and has proven that connecting through Li-Fi is faster than Wi-

Fi.

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