



Audio And Data Transmission Using LI-FI Technology

(GOAL NO -9: Industry, Innovation and Infrastructure)

Division-BE(D)

Group Number- D21

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Problem Statement - As the demand for high-speed data in wireless communications increases day by day with the significant increase of the number of users, Radio Frequency (RF) spectrum become one of the scantest resources in the world. RF technologies have limitations of the regulated spectrum, spectrum congestion. expensive licensing, low bandwidth and low bandwidth and low-speed broadband connection. So the new wireless technology known as light fidelity (Li-Fi) has become a new source for communication of data. expensive licensing, low bandwidth and low bandwidth and low-speed broadband connection. So the new wireless technology known as light fidelity (Li-Fi) has become a new source for communication of data.

Project Domain: Industry, Innovation and Infrastructure.

Objectives - 1. To Transfer Audio Using Visible Light Communication (VLC), Light Fidelity (Li-Fi) Technology Has Been Designed. This Project Aims To Develop a System For Faster And More Secure Transmission of Data.

2. To Transfer Data Using Visible Light Communication (VLC), Light Fidelity (Li-Fi) Technology Has Designed. This Project Aims To Develop a System For Faster And More Secure Transmission of Data.

Abstract –

As the demand for high-speed data in wireless communications increases day by day with the significant increase of the number of users, Radio Frequency (RF) spectrum become one of the scantest resources in the world. RF technologies have limitations of the regulated spectrum, spectrum congestion, expensive licensing, low bandwidth and low-speed broadband connection. The available huge visible light communication (VLC) spectrum band ranges from 428 THz to 750 THz. So the new wireless technology known as light fidelity (Li-Fi) has become a new source for communication of data and it has been identified as a powerful and promising complementary and/or alternative to the existing radio frequency (RF) wireless communication technology which uses visible light as a

Project photo including Group members and guide during Presentation (Geo Tag Photo).





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medium to deliver high-speed data communication. Li-fi is an optical wireless communication technology which utilizes light emitted from Light-emitting diode bulb for simultaneous transmission of text and audio signals which is discussed in this paper. Continuous improvements in wireless communication systems. e. g. 3G, 4G, etc., require higher bandwidth and due to the lack of sufficient Radio Frequency spectrum, we should adopt a wireless system which will support wide bandwidth. So the new technology of Li-Fi came into the aid. Light fidelity (Li-Fi).

Project Mapping with Program Outcomes (1 – Slight, 2- Moderate, 3- Substantial)

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	

Participation in Competition: Give the Competition Details
1. Participation Hackathon Event.

Awards: Hackathon Event Certification.