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Li-Fi Based V2V Communication Technology

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Abstract: *This paper presents the latest technology called as LI-FI which has been developing a lot in few years. Using the concept of LI-FI two vehicle are communicated with the help of LEDs bulbs with the help of transmitter and receiver circuit. With the help of this technology the road accident can be controlled and much human life can be saved. A very chip device called as ultrasonic sensor which is used to measure the distance is used here just to communicate the two vehicles when they come in the contact in some range which is preferred for the ultrasonic sensor. Using this LI-FI the data are transmitted from one vehicle to another the data that is transmitted through LIFI can be any data like audio, video or text. This concept can be implemented at very low cost and with higher efficiency. The data that is transmitted through LIFI can be any data like audio, video or text. This technology was introduced few years back, which needs more systematic enquiry on its sustain ability for traffic control purpose. This concept can be implemented at very low cost and with higher efficiency.*

Keywords: LI-FI, Transmitter, Receiver, Efficiency, Sustainability

REFERENCES

[1]. Ms. Sakshi Pawar, Ms. Shalini Jadhav, Ms. Aditi Kale, Ms. KshitijaMalode "Vehicle toVehicleCommunicationandTrafficSignalControllingforEmergencyVehiclesusingLi-Fi",International Research Journal of Engineering and Technology (IRJE T), Volume: 07, Issue:12December2020.

[2]. GokulaChandar ,Leeban MosesM; T. Perarasi M; Rajkumar; "Joint Energy and QoS-Aware Cross-layer Uplink resource allocation for M2M data aggregation over LTE-A Networks", IEEE explore, doi:10.1109/ICAIS53314.2022.9742763.

[3]. S.Kannadhasan and R.Nagarajan, Design and Development of Environmentally W-Shaped Structure Antenna for Wireless Applications, International Web Conference on Smart Engineering Technologies(IWCSET 2020), 26-27 June 2020, Ramco Institute of Technology, Rajapalayam, ISBN:978-93-5407-648-0, Published in Journal of Green Engineering, Volume 10, Issue 9, September 2020.

[4]. GokulaChandar A, Vijayabhasker R., and Palaniswami S, "MAMRN – MIMO antenna magnetic field", Journal of Electrical Engineering, vol.19, 2019.

[5]. Rukkumani V , Moorthy V, Karthik M , Gokulachandar A, Saravanakumar M, Ananthi P, "Depiction of Structural Properties of Chromium Doped SnO2 Nano Particles for sram Cell Applications", Journal ofMaterials Today: Proceedings, vol.45, pp.3483-3487, 2021. https://doi.org/10.1016/j.matpr.2020.12.944.

[6]. Y.Yorozu,M.Hirano,K.OkaandY.Tagawa,"Electronspectroscopystudiesonmagneto-optical media and plastic substrate interface", IEEE Transl. J. Magn. Japan, vol. 2, pp. 740-741,August1987.

[7]. W. Jia-yuan, Z. Nian-yu, W. Dong, I. Kentaro, I. Zensei and N. Yoshinori, "Experimentalstudy on visible light communication based on LED", The Journal of China Universities ofPostsandTelecommunications,vol.19,no.2,pp.197-200,October2012.

[8]. G.Ramya, R.Nagarajan and S.Kannadhasan, Energy Efficient Cluster Based Algorithm technique for Wireless Sensor Networks, AICTE Sponsored International E-Conference on Computing and Communication Systems for a Fourth Industrial Revolution (AICERA 2020), Amal Jyothi College of Engineering, Kerala, 14-16 December 2020, Published for IOP Conference Series: Materials Science and Engineering, Vol No: 1085, 2021, doi:10.1088/1757-899X/1085/1/012034

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[9]. A.Babukaruppiah and S.Kannadhasan, A Novel Approach to Detect the Shortest Path for Secure Data Aggregation Using Fuzzy Logic in Wireless Sensor Networks. International Journal of Engineering and Computer Science, Volume 2 Issue 3 February 2013, Page No.330-334, ISSN: 2319-7242.

[10]. S.Kannadhasan and Dr.R.Nagarajan, Performance Analysis of Patch Antenna for Wireless Communication, The International Conference on Decision Aid Sciences and Applications, MAE FAH LUANG UNIVERSITY, Chiang Rai, THAILAND, 23-25 March 2022, DOI: 10.1109/DASA54658.2022.9765110

[11]. Jay H. Bhut, Dharmrajsinh N. Parmar and Khushbu V. Mehta-LI-FI, "Technology - AVisibleLightCommunication",InternationalJournalOfEngineeringDevelopmentAndResearch.

[12]. Niharika Mishra, Monika Rai, RiyaMandal, HarjeetKaur."Navigation System using LightFidelity"20182ndInternationalConferenceonTrendsinElectronicsandInformatics(ICOEI)

[13]. S.Kannadhasan, M.Shanmuganantham, R.Nagarajan, and S.Deepa, Future Progress in Artifical Intelligence: Process and its Applications, Virtual International Conference on Metamorphosis of Modern Management and Research, 13 August 2020, Bannari Amman Institute of Technology, Sathyamangalam, Published for International Journal of Innovative Research in Computer and Communication Engineering, e-ISSN: 2320-9801, p-ISSN: 2320-9798, Volume 8, Issue 12, December 2020, DOI: 10.15680/IJIRCCE.2020.0812007, Impact Factor: 7.488

[14]. G.Srividhya, R.Nagarajan and S.Kannadhasan, Enhancement of Clustering Techniques Efficiency for WSN Using LEACH Algorithm, International Conference on Advances in Smart Sensor, Signal Processing, and Communication Technology (ICASSCT 2021), Goa University, Goa, 19-20 March 2021, Published for IOP Journal of Physics: Conference Series, Vol No: 1921, 2021, doi:10.1088/1742-6596/1921/1/012013

[15]. S.Kannadhasan, M.Shanmuganantham and R.Nagarajan, System Model of VANET Using Optimization-Based Efficient Routing Algorithm, International Conference on Advances in Material Science, Communication and Microelectronics (ICAMCM-2021), Jaipur Engineering College and Research Centre, Jaipur, 19-20 February 2021. Published for IOP Conference Series: Materials Science and Engineering, Vol No: 1119, 2021, doi:10.1088/1757-899X/1119/1/012021

[16]. Kannadhasan S & R. Nagarajan (2022): Performance improvement of antenna array element for mobile communication, Waves in Random and Complex Media, DOI: 10.1080/17455030.2022.2036867,