DOI: https://doi.org/10.46632/rne/1/1/8

Renewable and Nonrenewable Energy
Vol: 1(1), 2022
REST Publisher; ISBN: 10978-81-948459-2-8
Website: http://restpublisher.com/book-series/renewable-and-nonrenewable-energy/

A Survey on Wireless Mobile Communication System and Requirements

***Chinnasami Sivaji, M. Ramachandran, Sowmiya Soundharaj**
REST Labs, Kaveripattinam, Krishnagiri, Tamil Nadu, India.
*Corresponding author Email: chinnasami@restlabs.in

Abstract. Mobile phones are a snug manner of verbal exchange over an extended interval. Life by having cell phones is changing fast. Mobile phones in times of emergency Phones were a great help. Mobile phones are also referred to as lifesavers as helping human beings in emergencies. Mobile communication is both a sender and a receiver, which refers to the type of communication. Some other in the course of conversation. Wireless Verbal Transfer Networks Provide alerts, including voice, facts and includes multimedia, wires withoutuse; its cell communications is the main part. Over the past decade, industry, science and medicine (ISM) and unlicensed national information infrastructure Unlicensed bands such as (UNII) and Wi-Fi on Certified Bands on Networks Cell networks successfully deployed. Then, many wireless networks, utilities and Services are coming out. Also, wireless networks receive a carrier, in addition Scaling for extension, reduction in the cost of possession and offers many benefits along with many more. However, there are some risks and complications, including Security, information ratio, reliability, variety there are such. For ubiquitous communications call wireless and cellular networks improving. Wireless communication is the fastest growing sector in the field of communication.
Keywords: GSM, Millimeter Wave, Wireless Technology, Wireless Telecommunication, Face to Face Interactions.

1. Introduction

In 1973, Motorola's John F. Mitchell and the first using Martin Cooper Mobile phone confirmed used a cell phone weighing 2 kilograms. The first commercial computerized cellular community (1G).Mobile communication refers to a form of verbal communication that does not depend on physical contact between the sender and the recipient, and they can move from one body location to another through communication.

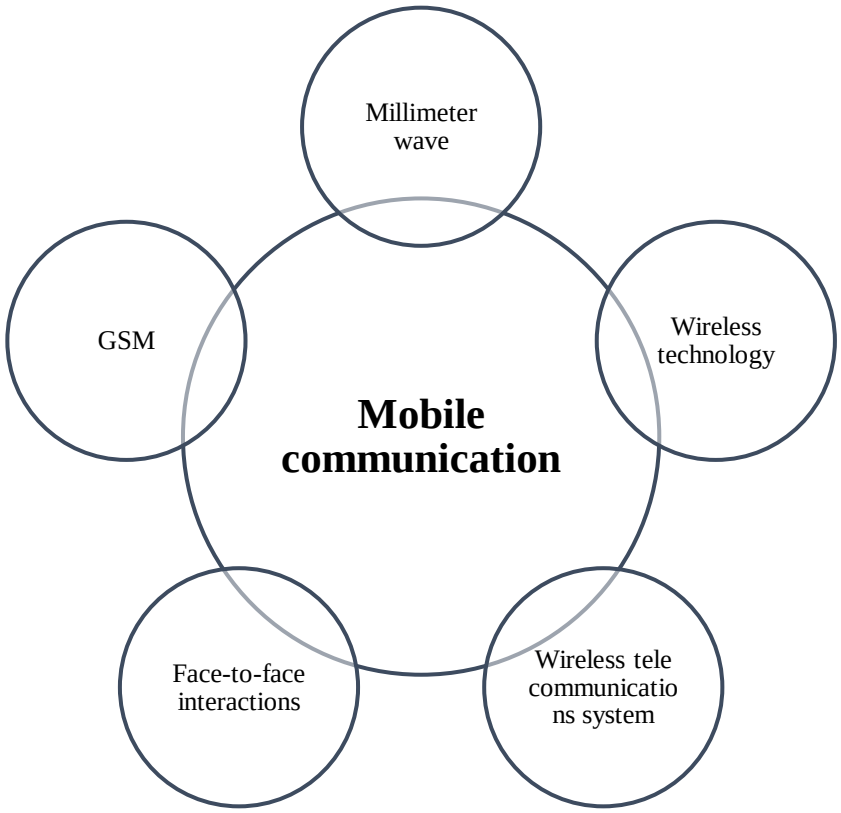

FIGURE 1. Application of Mobile communication

Cellular communication When the environment allows, it is a statistical exchange between factors that do not use the conductor as a means of conduction or more. The most unusual wireless technology uses radio waves with radio waves, up to a few meters faster than Bluetooth. GSM is a mobile era that is open and virtual and is used for cell conversation. Communication is the most important part of technology Is one of the areas, which is usually physically different. Statistics between events in places there is a focal point factor to exchange. After its discovery, telephones have replaced telegrams and letters. Similarly, the time period `cellular' has absolutely revolutionized the conversation by commencing up progressive applications which are limited to at least one's creativity. Today, mobile conversation has emerged as the spine of society. All the cell gadget technology has improved the way of dwelling. Its primary plus factor is that it has privileged a common mass of society.

2. GSM

[1] One of the drawbacks of analog systems is a severe loss of mobility. In order to inform at the highest level of Group Special Mobile (GSM) Boundary roaming to run and move, then Renamed. Global System for Mobile Telecommunications Is an attempt to combine private and public administration GSM was the first step towards a mutual European machine in 1982, as well European mail and telecommunications at the time (CEPT) Conference 900 and 1800 MHz for bandwidth mobile systems Decided Privacy and Functional Virtual General. Create Team Special Mobile, which Assigned to develop mobile phone standards. [2] The GSM device is a mature era, whilst the UMTS continues to be at the beginning of its learning curve. Therefore, by manufacturing and using gadgets UMTS related to costs and emissions Great growth potential for network mergers can be assumed to be correct. Check this out gives the vital records wherein such enhancements are best in environmental phrases. GSM, which was first delivered in 1991, is one of the leading virtual mobile structures. Radio equivalent to eight calls simultaneously May occupy the bandwidth. It is an integrated voice May Occupy the Ball. It is an integrated voice and offers the ability to deliver short messages. Originally a European preferred for virtual cellular telephony, GSM has turned out to be the arena's most extensively used cellular system in use in over 100 international locations. [3] Mobile and Wi-Fi networks have made brilliant improvements within the previous Two years. Many cellular Phones currently have an additional WLAN adapter. 3G, 2G, WLAN, Bluetooth and Many Morin addition to adapters, many cellular phones actually have a wax adapter one would possibly assume that there is probably. We use generational IP Networks other than WLAN, 2.5G or 3G public land mobile (PLMN)., regarding their integration Focused. As for 4G, its popularity is mobile, which includes GSM and 3G is towards proper integration of networks. Pocket records are as networks seem is towards Proper Integration OP Networks. Pocket packs are our network name Using BSC for control features and including GSM / UMTS adds BDSN in the case of SGSN and GGSN and CDMA.Internet or with the appropriate IP network in addition to merging, song and managing statistics durations. As fact viewers develop rapidly, this voice-centric structure has turned out to be complicated and tough to address for many community businesses. [4] School training series banned from GSM regular outbreak. It is approximately the truth that it isn't always going to be done for famous, international cell communications (GSM) we have determined at the famous device. The motive for deciding on GSM is the burst length of an unimportant 142 codes and 6 mixed channel cause responses extending to photograph areas, GSM channel rating factor Very demanding from the point of view. Therefore, we have GSM hardware occasion software for blind channel assessment. We preserve that in mind. Instead of thinking about a trendy, instead of being finalized, we pick a massive and famous trend.

Millimeter Wave

[5] The bandwidth scarcity experienced by using wireless conversation has influenced the usage Millimeter Wave spectrum is used under Destiny 5G broadband cellular verbal exchange networks. Successful deployment of mm Wave cellular communication structures calls for enough know-how of the mm Wave propagation channel. Millimeter-wave (mm Wave) mobile structures that perform inside the 30-300 GHz band looks like a good candidate for the 5G cell system in the next era, which is expected to help with multiple GB / s data charges. However, to use mm waves, you need to manage the localization properties and the channel. Disadvantages of high frequency bands. The main barriers to mm wave propagation are high directional loss due to high carrier frequency, low scattering, which reduces the available types and has a rapid impact resulting in weaker vision paths. In addition, the effect of noise strength is more stated due to using large bandwidths. The millimeter wave as a promising generation for the 5G mobile gadget is supplied. The major propagation challenges of the mm Wave were addressed and capacity solutions were provided. [6] An Intermediate-Frequency-Over-Fiber (IF of) - Completely Radio Success Interpretation Based We are registering Access Ground for 28 GHz Millimeter Wave (RAN) - Primarily 5G cellular communication. Mm Wave-based network of purely 5G networks Dispersed antenna system that uses IF technology to enhance insurance (DAS) recommended. An attractive answer is the spectrum within the millimeter wave (mm wave) category to be used. Massive logs site required by 5G WI-Fi verbal communication structures the mm band has received a lot of attention in solving the problem of the audience. [7] Millimeters Wave radio can provide the primary platform for the new era (5G). Meet the wishes of the new generation the millimeter waves to do is the unused spectrum (3GHz-300GHz).

3. Wireless Technology

[8]Advances in Wireless Generation and Cellular Devices a New Type of E-Commerce - Make mobile business. Wireless telecommunication networks and other compact e-mail Application of e-commerce technologies Mobile business

transactions are conducted through mobile gadgets. Mobile Business (also known as M-Commerce or Cellular e-Commerce) Wireless data transfer and Allows enterprise transactions. Mobile trading systems do different things to differentiate human beings. For customers, it represents convenience, while for merchants it is associated with a great earning potential; and supply companies see it as a major unexplored market. [9] However, the rising Wi-Fi era, consisting of cooperative more than one-input–more than one-output (MIMO) generation calls for cooperation among BSs. In cooperative MIMO systems, assuming full BS cooperation, the more than one BSs may be considered as an unmarried BS with multiple geographically dispersed antennas. The uplink or downlink among cellular users and BSs can be modeled as a digital MIMO channel. [10] While those four overall Performance factors help to estimate the normal carrier of a mobile machine from a consumer perspective, Predicted Wi-Fi technology is the function of many factors in the past. These elements sound and contain encoders used for video, cell phone design and more. The capability of a mobile communication system's appropriate level of spectral performance makes it easy to estimate and a minimum allows the standard to be established as a benchmark. Therefore, to the extent of spectral performance some important metrics used can provide Wi-Fi generation representation performance functions, the appropriate level of spectral performance makes it easy to assess and at least allows the standard to be established as a criterion. The result is variables that fit our prediction model. The Wi-Fi technology industry is hastily evolving with dramatic generational changes. As technology has advanced, improvement costs and occasions have elevated, resulting in a want for insight into what the guideline is. [11] We are searching on today's low value IEEE and its Application 3 Low Value Technical Knowledge-How Packages. Describes really low-cost Wi-Fi technology, which is designed verbal transfer inside Wi-Fi gadgets, the use of very low power (typically battery powered) and occasional fee requirements.802.15.Four Wi-Fi technology, like the WLAN wireless era, incorporates custom sensing techniques to detect the inactive or busy environment of a Wi-Fi resource. In the first set of experiments, a non-mandatory perception technique was used to detect only frames compliant. Due to the shocking boom in the mobile phone market, most of the strong impact of Wi-Fi development. However, the need for bandwidth for wireless, personal communications, mobile Includes phones, which will soon grow to a fraction of the full bandwidth available, perhaps many do not realize that by the end of the decade there will be only 3%. Wireless sensors are dangerous, dangerous, impossible sensors, including wireless or monitoring remote areas and locations Allow packages. Unlimited setup flexibility for sensors of this era and Provides increased social strength. Also, the Wi-Fi era reduces maintenance hassle and cost. [13]The 2nd form of mobile wireless network is the infrastructure of a very limited cell community, commonly referred to as a temporary network. Very few networks have standard routers; all nodes can be operated and rotated spontaneously. The nodes of those networks, the paths to the other nodes within the network Enable detection and protection routers. Example applications of temporary networks are emergency search and rescue operations, conferences or meetings human beings share facts fast Prefers, and facts acquisition activities inside the hospitality panorama.

4. Wireless Telecommunications System

[14] Hospitals to reach a team of staff contributors in emergencies Rely on pagers and everyday phones. General Pocket Radio service (GPRS), third-party cell phone system Universal Mobile Telecommunications System (UMTS) and wireless local area network new telecommunication technologies which include network (WLAN) Hospital pagers with scientific equipment they can be replaced if electromagnetically very suitable. Trend cell phones every day and the use of other Wi-Fi gadgets expanded rapidly. However, hospitals are wireless Restrictions on the use of telecommunications products within eighties after reviews Not uncommon. Various digital in the early nineteen nineties Science gadgets (MD) malfunctions were caused by electromagnetic interference from the system and mobile phones. Today, for cellular phones There are many unique telecommunications systems — world wide area networks. Basic II used for mobile phones Generation Virtual Telecommunications Gadget, this includes the United States, Europe, Asia and the GSM is used as the version of the Time Segment Multiple Access (TDMA). This WAN Global System for Mobile Communications (GSM). Widely used in countries. Suitable for telecommunications over massive community networks, such as factories, workplaces, and hospitals. [15] With the speedy growth of telecommunications, more concessions inside the concept of broadband communications together with video offerings and high speed net are supplied. International vital introduction of a backbone community based on optical fiber with nearly limitless communiqué characteristic Provides, the restricted overall performance of the subscriber cycle turns into one of the maximum extreme barriers. In telecommunications, optical fiber the network (through the manner) is much less pricey than the wireless spectrum (smaller paths), at the same time as the previous capacity is a good deal worse than the latter. [16] The Department of Telecommunications and the U.S. And Canadian Governments (in breach of contractual duties and related terms) definitely take delivery of obligation, Refuse to assist with research, or to adopt restructuring sports. A small survey of the global state of affairs carried out through Author, Global Tower Multiplication Show Night Migrant Mortality Estimates, but neither the president nor the industry enjoyment or motions No sign of. Proper tracking of deaths in towers is crucial. However, innovations in the telecommunications era brought in 1979 caused a fast rise within the diverse towers, particularly the mobile phone provider, although it now includes a new generation with 1000 feet. Towers are obligatory for the advent of digital TV. To evaluate cutting-edge enhancements, it is necessary to take a look at the viable tower deaths in greater organs miles. Based on the evaluations of the big killings in a few very high towers, I propose that the published evaluations on the capability impact of death on the towers are previous and greater careful. The United States Fish and Wildlife Service has installed a Communications Tower operating group with participants of the FWS, the Federal Communications Commission, the Federal Aviation Authority, the telecommunications enterprise and environmental groups. [17] We endorse failure times and the time it takes to get better / repair every Hardware and software on a large Wi-Fi telecommunications device, based on six months of manually recorded crash records. Located

failure and restoration distributions aren't steady with easy excessive-speed processes. The records can be illustrated with the aid of Waybill or two-tier high-pace delivery techniques. A mobile phone (also known as a mobile cellular network, cell phone, or cell phone) is an example of mobile communication (wireless communication). It is an electrical device used for full duplex two-way radio communication in a cellular network of base stations called a cell site. These communication systems may have different facilities. Different types of mobile communication systems include mobile two-way radio, public land radio, mobile telephone and amateur (HAM) radio. While a wireless system provides a fixed or portable endpoint with access to a distributed network, a mobile system provides access to all resources of that distributed network anywhere, barring any issues with local reception or technical area coverage.

5. Face-To-Face Interactions

[18] The modern-day availability of facts that describe social networks transforms our facts into a "micro form" of social bonding. A social relationship is really an integrated one very last stop result many social interactions, including face-to-face conversations or phone calls. Analysis of data on direct contact, such as games, many exciting human sports activities, shows that sports activities are very exciting. The static instance of socialites definitely covers dynamical sequences of sports alongside. The best time group can be measured by combining face-to-face contacts, Smartphone calls or email exchanges and quick social interactions. [19] In face-to-face interactions, head nods rise up in each communication. In maximum instances, humans generating the top nods are not even aware of the social sign they emit: head nods are often the result of automated techniques. The psychology literature suggests that the frequency of head nod events in face-to-face interactions can display personal characteristics or perhaps are awaiting consequences. We advanced and evaluated a multimodal approach to find natural head nods in face-to-face interactions. [20] We superior and evaluated a multimodal method to hit upon natural head nods in face-to-face interactions. Rather than the use of self-evaluations on social media, the new high-end radio with the RFID badge is usually worn as part of the name tag, while on social media. Cellular-cellular cell phone use is associated with interpersonal motives for the usage of cell telephones, face-to-face communiqué, and loneliness. A survey of 232 university students who owned a cell Smartphone positioned that affection and inclusion have been drastically strong motivations for the use of voice calls and textual content messaging, and that interpersonal reasons were in reality associated with the quantity of cellular-cellular phone use, which embody calling and texting. The quantity of face-to-face interplay has become absolutely associated with the participants' mobile-cell Smartphone use and their interpersonal reasons for using cellular telephones.

6. Conclusion

The GSM tool is a mature technology that UMTS is at the beginning of its analysis curve. Therefore, despite the cost and emissions of each of the UMDS network components, and useful resources in the production and use of equipment, it can be effectively inferred that enormous improvements are possible. Millimeter-wave (mm Wave) mobile Systems operating in the 30-300 GHz band appear to be a good candidate for the next generation 5G cell device, which is actually predicted to support actual charges of two GB / s. However, the use of mm waves must overcome the diffusion characteristics and channel defects of the high frequency bands. Due to the optimal provider frequency, the main barriers to mm wave propagation are high path loss, which reduces scattering, which reduces variance and elevation. In addition, the impact of noise power is extra recommended due to using large bandwidths. The 2d form of cellular Wi-Fi community is the infrastructure-less cellular network, usually known as an ad hoc community. Infrastructure, much less networks, has no regularity. A quick survey of the global situation finished through the manner of the writer suggests tower proliferation global, evaluations of nocturnal migrant deaths however no indication Interest or movement of government or organization. Proper monitoring of deaths in towers is essential. We also evaluated the multimedia technique for finding natural nodes in face-to-face communication. Rather than the usage of self-critiques of social interactions, we accrued extremely good-grained records When making face-to-face communication using the newly upgraded radio frequency identification devices (RFID) badge, it's normally worn as part of a nametag.

References

[1]. Miritello, Giovanna, Esteban Moro, Rubén Lara, Rocío Martínez-López, John Belchamber, Sam GB Roberts, and Robin IM Dunbar. "Time as a limited resource: Communication strategy in mobile phone networks." Social networks 35, no. 1 (2013): 89-95.

[2]. Faist Emmenegger, Mireille, Rolf Frischknecht, Markus Stutz, Michael Guggisberg, Res Witschi, and Tim Otto. "Life cycle assessment of the mobile communication system UMTS: towards eco-efficient systems (12 pp)." The International Journal of Life Cycle Assessment 11, no. 4 (2006): 265-276.

[3]. Gohil, Asvin, Hardik Modi, and Shobhit K. Patel. "5G technology of mobile communication: A survey." In 2013 international conference on intelligent systems and signal processing (ISSP), pp. 288-292. IEEE, 2013.

[4]. Boss, Dieter, K-D. Kammeyer, and Thorsten Petermann. "Is blind channel estimation feasible in mobile communication systems? A study based on GSM." IEEE Journal on selected areas in communications 16, no. 8 (1998): 1479-1492.

[5]. Al-Ogaili, Fatimah, and Raed M. Shubair. "Millimeter-wave mobile communications for 5G: Challenges and opportunities." In 2016 IEEE International Symposium on Antennas and Propagation (APSURSI), pp. 1003-1004. IEEE, 2016.
[6]. Deepa, N., Asmat Parveen, Anjum Khurshid, M. Ramachandran, C. Sathiyaraj, and C. Vimala. "A study on issues and preventive measures taken to control Covid-19." In AIP Conference Proceedings, vol. 2393, no. 1, p. 020226. AIP Publishing LLC, 2022.
[7]. Sung, Minkyu, Joonyoung Kim, Eon-Sang Kim, Seung-Hyun Cho, Young-Jun Won, Byoung-Chul Lim, Sung-Yeop Pyun, Hoon Lee, Joon Ki Lee, and Jong Hyun Lee. "RoF-based radio access network for 5G mobile communication systems in 28 GHz millimeter-wave." Journal of Lightwave Technology 38, no. 2 (2019): 409-420.
[8]. Imran, D., M. M. Farooqi, M. I. Khattak, Z. Ullah, M. I. Khan, M. A. Khattak, and H. Dar. "Millimeter wave microstrip patch antenna for 5G mobile communication." In 2018 international conference on engineering and emerging technologies (ICEET), pp. 1-6. IEEE, 2018.
[9]. Rani, Preeti, Prem Narayan Singh, Sonia Verma, Nasir Ali, Prashant Kumar Shukla, and Musah Alhassan. "An Implementation of Modified Blowfish Technique with Honey Bee Behavior Optimization for Load Balancing in Cloud System Environment." Wireless Communications and Mobile Computing 2022 (2022).
[10]. Siau, Keng, and Zixing Shen. "Mobile communications and mobile services." International Journal of Mobile Communications 1, no. 1-2 (2003): 3-14.
[11]. Fegade, Vishal, Krishnakumar Gupta, M. Ramachandran, S. Madhu, C. Sathiyaraj, R. Kurinji< alar, and M. Amudha. "A study on various fire retardant additives used for fire reinforced polymeric composites." In AIP Conference Proceedings, vol. 2393, no. 1, p. 020107. AIP Publishing LLC, 2022.
[12]. Pon Bharathi; M. Ramachandran; Vimala Saravanan; Soniya Sriram; S. Sowmiya, "Investigating the Identification of Breast Cancer and Its Risk", Pharmaceutical Sciences and Research, 1(1), (2022): 20-25.
[13]. Patel, Archana, Narayan C. Debnath, and Prashant Kumar Shukla. "SecureOnt: A Security Ontology for Establishing Data Provenance in Semantic Web." Journal of Web Engineering (2022): 1347-1370.
[14]. Lin, Yonghua, Ling Shao, Zhenbo Zhu, Qing Wang, and Ravie K. Sabhikhi. "Wireless network cloud: Architecture and system requirements." IBM Journal of Research and Development 54, no. 1 (2010): 4-1.
[15]. Ksibi, Amel, Mohammed Zakariah, Manel Ayadi, Hela Elmannai, Prashant Kumar Shukla, Halifa Awal, and Monia Hamdi. "Improved Analysis of COVID-19 Influenced Pneumonia from the Chest X-Rays Using Fine-Tuned Residual Networks." Computational Intelligence and Neuroscience 2022 (2022).
[16]. Anderson, Timothy R., Tugrul U. Daim, and Jisun Kim. "Technology forecasting for wireless communication." Technovation 28, no. 9 (2008): 602-614.
[17]. Kurinjimalar Ramu; M. Ramachandran; M. Nathiya; M. Manjula, "Green Supply Chain Management; with Dematel MCDM Analysis", Recent trends in Management and Commerce, 2(3), (2021): 8-15.
[18]. Saxena, Aumreesh Kumar, Sitesh Kumar Sinha, Piyush Kumar Shukla, Prashant Shukla, Manish Maheshwari, and Ratnesh Kumar Dubey. "Multi Agent Based Intrusion Detection System using Artificial Immune System for Distributed Network." ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM) (2020).
[19]. Gupta, Krishnakumar, Vishal Fegade, Jeevan Kittur, M. Ramachandran, S. Madhu, S. Chinnasami, and M. Amudha. "A review on effect of cooling rate in fiber reinforced polymeric composites." In AIP Conference Proceedings, vol. 2393, no. 1, p. 020106. AIP Publishing LLC, 2022.
[20]. Golmie, Nada, David Cypher, and Olivier Rébala. "Performance analysis of low rate wireless technologies for medical applications." Computer Communications 28, no. 10 (2005): 1266-1275.
[21]. Shukla, P. K., and P. Shukla. "Patient health monitoring using feed forward neural network with cloud based Internet of things." Journal of Intelligent Systems and Internet of Things 2 (2019): 65-77.
[22]. M. Amudha, M. Ramachandran, Vimala Saravanan, P. Anusuya, R. Gayathri, "A Study on TOPSIS MCDM Techniques and Its Application", Data Analytics and Artificial Intelligence, 1(1), (2021): 9-14
[23]. Krishnakumari, S., C. Subathra, and K. Arul. "A descriptive study on the behavior of students in online classes during COVID-19 pandemic." In AIP Conference Proceedings, vol. 2405, no. 1, p. 030028. AIP Publishing LLC, 2022.
[24]. Wang, Ning, Naiqian Zhang, and Maohua Wang. "Wireless sensors in agriculture and food industry—Recent development and future perspective." Computers and electronics in agriculture 50, no. 1 (2006): 1-14.
[25]. Royer, Elizabeth M., and Chai-Keong Toh. "A review of current routing protocols for ad hoc mobile wireless networks." IEEE personal communications 6, no. 2 (1999): 46-55.
[26]. Pareek, Piyush Kumar, Chethana Sridhar, R. Kalidoss, Muhammad Aslam, Manish Maheshwari, Prashant Kumar Shukla, and Stephen Jeswinde Nuagah. "IntOPMICM: Intelligent Medical Image Size Reduction Model." Journal of Healthcare Engineering 2022 (2022).
[27]. C. Venkateswaran; M. Ramachandran; Vimala Saravanan; Vidhya Prasanth; Soniya Sriram, "Understanding Various Digital Marketing Strategies and Its Implications", Trends in Banking, Accounting and Business, 1(1), (2022): 21-26
[28]. Fegade, Vishal, M. Ramachandran, S. Madhu, C. Vimala, R. Kurinji Malar, and R. Rajeshwari. "A review on basalt fibre reinforced polymeric composite materials." In AIP Conference Proceedings, vol. 2393, no. 1, p. 020172. AIP Publishing LLC, 2022.

[29]. Subathra, C., S. Krishnakumari, and S. Bharathivasu. "WOMENS'CONTRIBUTION IN AGRICULTURE AND ALLIED ACTIVITIES." International Journal of Management (IJM) 11, no. 12 (2020).
[30]. Wallin, Mats KEB, Therese Marve, and Peter K. Hakansson. "Modern wireless telecommunication technologies and their electromagnetic compatibility with life-supporting equipment." Anesthesia & Analgesia 101, no. 5 (2005): 1393-1400.
[31]. Sathiyaraj Chinnasamy, M. Ramachandran, Soniya Sriram, "An Detailed Study on Unmanned Aerial Vehicle and Its Surveillance", Environmental Science and Engineering, 1(1), (2022): 41-47
[32]. Shukla, Prashant Kumar, and Akhilesh Tiwari. "Review on Relay Node Selection for Wireless Network." International Journal of Computer Applications 141, no. 3 (2016).
[33]. Balakrishnan, H., and R. Krishnaveni. "A Study on Customer Relationship Management Practices in Selected Private Sector Banks with Reference to Coimbatore District." The SIJ Transactions on Industrial, Financial & Business Management (IFBM) 2, no. 1 (2014): 15-20.
[34]. Zhou, Shidong, Ming Zhao, Xibin Xu, Jing Wang, and Yan Yao. "Distributed wireless communication system: a new architecture for future public wireless access." IEEE Communications Magazine 41, no. 3 (2003): 108-113.
[35]. Anderson, Paul K. "Wireless telecommunications and night flying birds: We may be sacrificing millions of migrants for convenience, entertainment and profit." Biodiversity 4, no. 1 (2003): 10-17.
[36]. EM Jerin Shibu, Renganathan, M. Ramachandran, Sathiyaraj Chinnasamy, Vidhya Prasanth, "Exploring Various Landscape Design and its Characteristics", Sustainable Architecture and Building Materials, 1(1), (2022): 32-42
[37]. Chandra Prakash, RC. Narayanan, N. Ganesh, M. Ramachandran, S. Chinnasami, R. Rajeshwari. "A study on image processing with data analysis. "In AIP Conference Proceedings, vol. 2393, no. 1, p. 020225. AIP Publishing LLC, 2022.
[38]. Alalmai, Ali, and Dr Gulnaz Fatma. "A., Arun & Aarif, Mohd.(2022). Significance and Challenges of Online Education during and After Covid-19. Türk Fizyoterapi ve Rehabilitasyon Dergisi." Turkish Journal of Physiotherapy and Rehabilitation 32: 6509-6520.
[39]. Bharti, Santosh Kumar, Rajeev Kumar Gupta, Prashant Kumar Shukla, Wesam Atef Hatamleh, Hussam Tarazi, and Stephen Jeswinde Nuagah. "Multimodal Sarcasm Detection: A Deep Learning Approach." Wireless Communications and Mobile Computing 2022 (2022).
[40]. Matz, Steven M., Lawrence G. Votta, and Mohammad Malkawi. "Analysis of failure and recovery rates in a wireless telecommunications system." In Proceedings International Conference on Dependable Systems and Networks, pp. 687-693. IEEE, 2002.
[41]. Kurinjimalar Ramu, M. Ramachandran, Vimala Saravanan, Manjula Selvam, Sowmiya Soundharaj, "Big Data Analytics for Mobility Prediction and Its Classification", Data Analytics and Artificial Intelligence, 2(2), (2022):74-81.
[42]. Sridhar, Chethana, Piyush Kumar Pareek, R. Kalidoss, Sajjad Shaukat Jamal, Prashant Kumar Shukla, and Stephen Jeswinde Nuagah. "Optimal medical image size reduction model creation using recurrent neural network and GenPSOWVQ." Journal of Healthcare Engineering 2022 (2022).
[43]. Kaur, Chamandeep & Boush, Mawahib & Hassen, Samar & Hakami, Wafaa & Abdalraheem, Mohammed & Galam, Najla & Hadi, Nedaa & Benjeed, Atheer. (2022). Incorporating sentimental analysis into development of a hybrid classification model: A comprehensive study. International Journal of Health Sciences. 6. 1709-1720. 10.53730/ijhs.v6nS1.4924.
[44]. Zhao, Kun, Juliette Stehlé, Ginestra Bianconi, and Alain Barrat. "Social network dynamics of face-to-face interactions." Physical review E 83, no. 5 (2011): 056109.
[45]. Pandit, Shraddha, Piyush Kumar Shukla, Akhilesh Tiwari, Prashant Kumar Shukla, Manish Maheshwari, and Rachana Dubey. "Review of video compression techniques based on fractal transform function and swarm intelligence." International Journal of Modern Physics B 34, no. 08 (2020): 2050061.
[46]. R. Dhaneesh; Iswarya V.S; D.R. Pallavi; Ramachandran; Vimala Saravanan, "The Impact of Self-help Groups on the Women Empowerment in Tamil Nadu", Trends in Banking, Accounting and Business, 1(1), (2022): 1-5.
[47]. Mawahib, Sharafeldin & Kaur, Chamandeep. (2022). A Design for the Bandwidth Improvement for the Microstrip Patch Antenna for Wireless Network Sensor. International Journal of Scientific Research in Computer Science Engineering and Information Technology. 9. 396. 10.32628/IJSRSET2293130.
[48]. Nguyen, Laurent, Jean-Marc Odobez, and Daniel Gatica-Perez. "Using self-context for multimodal detection of head nods in face-to-face interactions." In Proceedings of the 14th ACM international conference on Multimodal interaction, pp. 289-292. 2012.
[49]. Elmer, Timon, and Christoph Stadtfeld. "Depressive symptoms are associated with social isolation in face-to-face interaction networks." Scientific reports 10, no. 1 (2020): 1-12.
[50]. Kendon, Adam. "Differential perception and attentional frame in face-to-face interaction: Two problems for investigation." (1978): 305-316.

