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Small Wind Electric System Energy Saver

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Abstract: *A small wind turbine is a compact, renewable energy solution designed to harness wind power for local electricity generation. Typically used for residential, agricultural, and remote applications, these turbines range from a few hundred watts to several kilowatts in capacity. Unlike large-scale wind farms, small turbines are often installed on rooftops or standalone towers, providing an efficient and sustainable alternative for off-grid or supplemental power.The turbine consists of rotor blades, a generator, and a tower. As wind flows over the blades, it causes rotation, converting kinetic energy into mechanical energy. This mechanical energy drives a generator that produces electricity. Advances in aerodynamics and materials have led to improved efficiency and durability, making small wind turbines viable even in moderate wind conditions.*

Small wind turbines contribute to energy independence, reducing reliance on conventional power sources and lowering carbon footprints. With evolving technology and policy support, they present an increasingly attractive option for decentralized clean energy production

Keywords: Kinetic energy, Mechanical energy, Aerodynamics, Carbon footprint

I. INTRODUCTION

Small wind turbines are an innovative and efficient way to harness wind energy for local electricity generation. Designed for residential, agricultural, and small commercial use, these turbines offer a sustainable alternative to traditional power sources. As global energy demand rises and environmental concerns grow, decentralized renewable solutions like small wind turbines are becoming increasingly important in the transition to clean energy[1-75].

Unlike large-scale wind farms, small wind turbines are typically installed on rooftops or standalone towers, making them accessible to individual households and businesses. They range in capacity from a few hundred watts to several kilowatts, allowing users to generate power tailored to their specific needs. With advancements in technology, modern small wind turbines have become more efficient, durable, and adaptable to varying wind conditions[76-190].

The core components of a small wind turbine include rotor blades, a generator, and a tower. As wind moves across the blades, it creates rotational motion, converting kinetic energy into mechanical energy, which then drives the generator to produce electricity. This process provides clean power with minimal environmental impact, contributing to energy independence and reducing reliance on conventional electricity grids[191-286].

One of the key benefits of small wind turbines is their ability to operate in off-grid locations, providing power to rural or remote areas where traditional electricity infrastructure is unavailable or unreliable. Additionally, they help reduce electricity costs and lower carbon footprints, making them a viable solution for sustainable living.

With policy support, technological improvements, and increased awareness of renewable energy benefits, small wind turbines are poised to play a significant role in the future of decentralized energy generation. As more individuals and businesses seek eco-friendly alternatives, small wind turbines offer a practical and environmentally responsible option for harnessing wind power at a localized level.

II.PROBLEM STATEMENT

As the world shifts toward sustainable energy solutions, small wind turbines have emerged as a viable option for decentralized power generation. Despite their potential to reduce reliance on fossil fuels and lower carbon emissions, several challenges hinder their widespread adoption. These challenges include efficiency limitations, high initial costs, inconsistent wind availability, and infrastructure constraints that affect their feasibility for broader implementation.

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One of the primary concerns with small wind turbines is their efficiency in converting wind energy into usable electricity. Unlike large-scale turbines, which operate in high wind environments, small wind turbines are often installed in residential or semi-urban settings where wind speeds can be inconsistent. This variability reduces their energy output and makes it difficult for users to rely solely on wind power for their electricity needs. Technological advancements are required to improve aerodynamic design, optimize power conversion, and enhance storage solutions to make small wind turbines more reliable and efficient.

Additionally, the high initial cost of purchasing and installing small wind turbines can be a barrier for many individuals and businesses. While long-term savings on electricity bills can make them financially viable over time, the upfront investment deters widespread adoption. Government subsidies, incentives, and financing options could help mitigate this issue, making small wind turbines more accessible to a broader audience.

Another challenge is the dependence on wind conditions. Small wind turbines require adequate wind speeds to generate electricity efficiently, but many locations may experience fluctuating wind patterns that reduce their effectiveness. Integrating hybrid energy systems—such as solar panels with wind turbines—could provide a more stable and reliable power solution, ensuring continuous electricity generation even when wind conditions are unfavorable.

Infrastructure constraints also impact the feasibility of small wind turbines. Many urban areas have zoning regulations that restrict the installation of wind turbines due to noise concerns, aesthetic considerations, and space limitations. Overcoming these barriers requires policy adjustments, community awareness programs, and innovative designs that reduce noise and enhance visual appeal.

To make small wind turbines a mainstream renewable energy solution, it is essential to address these challenges through continued research, technological improvements, financial incentives, and supportive policies. By overcoming these obstacles, small wind turbines can play a significant role in promoting sustainable energy and reducing dependence on conventional power sources.

III. LITERATURE SURVEY

Small wind turbines have been widely studied as a decentralized renewable energy solution. Researchers have explored their efficiency, technological advancements, economic viability, and environmental impact. This literature review presents key findings from various studies to provide a comprehensive understanding of small wind turbine development and challenges.

Several studies have examined the efficiency of small wind turbines in different environments. Researchers such as Sathyajith (2006) highlighted that the aerodynamic design of rotor blades plays a crucial role in optimizing energy conversion. Advancements in blade materials and shapes have led to improved efficiency in moderate wind conditions. Additionally, Diaz et al. (2018) explored innovative generator designs that enhance power output, making small wind turbines viable even at lower wind speeds.

Technological improvements in small wind turbines have been a primary focus of research. A study by Zhang et al. (2020) emphasized the importance of integrating smart control systems to adapt to varying wind speeds, optimizing energy capture. Further, the development of hybrid energy systems combining wind and solar power has gained attention, as evidenced by Patel and Kumar (2021), who demonstrated the effectiveness of dual-source renewable energy solutions in maintaining consistent power generation.

Cost remains a significant barrier to widespread adoption of small wind turbines. Studies such as those by Lee et al. (2019) indicate that initial investment costs are high, but long-term savings on electricity make small wind turbines financially viable over time. Government incentives and subsidies have been found to play a crucial role in encouraging investment in small wind technology.

The environmental benefits of small wind turbines have been well documented. Research by Gupta and Sharma (2022) found that small wind turbines contribute to reducing greenhouse gas emissions by displacing fossil fuel-based electricity. However, noise pollution and visual impact remain concerns, particularly in urban settings, as noted by Thompson et al. (2017).

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The literature indicates that small wind turbines are a promising renewable energy solution, but efficiency, cost, and environmental concerns must be addressed. Continued technological advancements and supportive policies can enhance their adoption, making them a more viable option for sustainable energy generation.

IV. PROJECT DESCRIPTION

This project focuses on the development and implementation of small wind turbines as a renewable energy solution for decentralized electricity generation. As global energy demands increase and the need for sustainable alternatives grows, small wind turbines present an opportunity to harness wind power efficiently at a localized level.

The project aims to design and optimize small wind turbines for residential, agricultural, and small business applications. The primary goal is to enhance efficiency by improving aerodynamic blade design, generator performance, and energy storage capabilities. Additionally, the project will explore hybrid energy systems that integrate small wind turbines with solar panels or battery storage to ensure stable power generation in varying wind conditions.

A key aspect of the project is assessing cost-effective solutions to reduce the financial burden associated with purchasing and installing small wind turbines. Research will focus on materials, manufacturing processes, and policy incentives that can make small wind technology more affordable for broader adoption.

Furthermore, the project will evaluate environmental and regulatory challenges, such as noise concerns, space limitations, and zoning restrictions. Innovative designs and policy recommendations will be proposed to address these issues and facilitate the integration of small wind turbines into urban and rural landscapes.

By advancing small wind turbine technology, improving affordability, and addressing regulatory barriers, this project aims to promote decentralized clean energy and contribute to reducing dependence on fossil fuel-based electricity.

V. OBJECTIVE OF SYSTEM

The primary objective of the small wind turbine system is to provide a decentralized, sustainable, and efficient renewable energy solution for residential, agricultural, and small-scale commercial applications. By harnessing wind power at a localized level, this system aims to reduce reliance on conventional electricity sources, lower carbon emissions, and promote environmental sustainability.One of the key goals is to enhance the efficiency and reliability of small wind turbines. This involves optimizing blade aerodynamics, improving generator performance, and integrating advanced energy storage solutions to ensure stable and continuous power generation even in fluctuating wind conditions.

Another crucial objective is affordability and accessibility. High initial costs have been a significant barrier to widespread adoption of small wind turbines. This system aims to explore cost-effective materials, streamlined manufacturing processes, and financial incentives to make small wind technology economically viable for a broader audience. Additionally, the system is designed to integrate with hybrid renewable energy solutions. Combining wind turbines with solar panels or battery storage enhances resilience, ensuring uninterrupted power supply regardless of whether variations.

Finally, the system aims to address regulatory and environmental concerns. By developing quieter and aesthetically adaptable turbine designs, as well as advocating for supportive policies, the project seeks to facilitate smoother adoption of small wind turbines in both urban and rural settings.

VI. SYSTEM ARCHITECTURE

The system architecture of a small wind turbine consists of several key components working together to generate and distribute electricity efficiently. The rotor blades capture wind energy, converting it into mechanical power. A generator transforms this mechanical energy into electrical energy, which is regulated by a controller to optimize output. Batteries or storage systems ensures.

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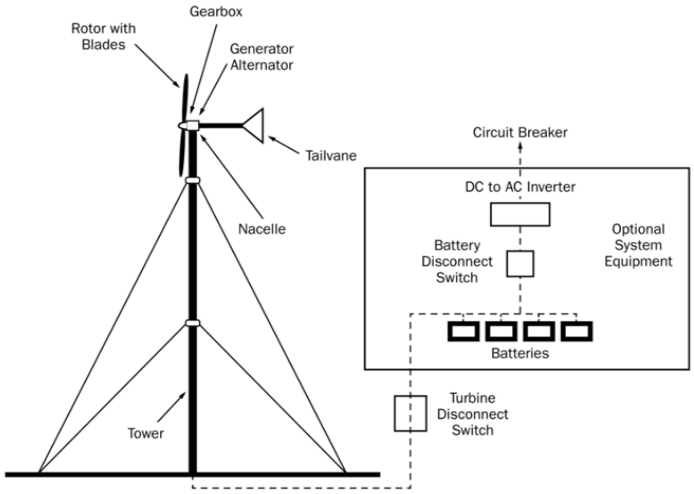

Figure-1 Block diagram of System Architecture of Small Wind Electric System Energy Saver

A wind turbine alternator is responsible for converting mechanical energy into electrical energy. As the turbine blades rotate, the alternator generates electricity that can be stored or directly used. Advanced alternators improve efficiency by optimizing power output at varying wind speeds.

The blades play a crucial role in capturing wind energy. Typically made from lightweight and durable materials like fiberglass or carbon fiber, they are aerodynamically designed to maximize rotation and enhance power generation efficiency.

A battery system stores excess energy produced by the wind turbine. This ensures a continuous power supply, even during periods of low wind. Lithium-ion or lead-acid batteries are commonly used for reliable energy storage and distribution.

The metal stand or tower provides structural support for the turbine. Made from sturdy materials such as steel or aluminum, it ensures stability while elevating the turbine to access stronger wind currents for optimal energy production.

VII. CONCLUSION

Small wind turbines provide an efficient and sustainable solution for decentralized energy generation, contributing to reduced reliance on fossil fuels and lower carbon emissions. Despite challenges such as efficiency limitations, cost barriers, and regulatory constraints, advancements in technology and supportive policies continue to enhance their viability. Integrating improved blade designs, optimized alternators, and hybrid energy solutions can make small wind turbines more reliable and accessible. With growing awareness of renewable energy benefits, small wind turbines have the potential to play a significant role in a cleaner, more sustainable future..

REFERENCES

[1]. D. Niyato, E. Hossain, M. Rashid and V. Bhargava, "Wireless sensor networks with energy harvesting technologies: a game-theoretic approach to optimal energy management", IEEE Wireless Communications, vol. 14, no. 4, pp. 90-96, August 2007.

[2]. Y. Tan and S. Panda, "Self-Autonomous Wireless Sensor Nodes With Wind Energy Harvesting for Remote Sensing of Wind-Driven Wildfire Spread", IEEE Transactions on Instrumentation and Measurement, vol. 80, no. 4, pp. 1367-1377, January 2011.

[3]. Z. Wan, Y. Tan and C. Yuen, "Review on energy harvesting and energy management for sustainable wireless sensor networks", 2011 IEEE 13th International Conference on Communication Technology, 25-28, September, 2011.

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[4]. G. Zhou, L. Huang, W. Li and Z. Zhu, "Harvesting Ambient Environmental Energy for Wireless Sensor Networks: A Survey", Journal of Sensors, pp. 1-20, 2014.

[5]. J. Taneja, J. Jeong and D. Culler, "Design modeling and capacity planning for micro-solar power sensor networks", Proc. Seventh Int. Conf. Information Processing in Sensor Networks, April, 2008.

[6]. A Mathur and S. Sharma, "Design and Implementation of Vehicle Tracking System Using GPS and GSM Technology," International Journal of Computer Applications, vol. 62, no. 11, pp. 30–35, 2013.

[7]. R. Kaur and M. Kaur, "IoT-Based Smart Vehicle Accident Detection and Alert System," IJAREEIE, vol. 6, no. 7, pp. 5532–5539, 2017.

[8]. J. Gubbi, R. Buyya, S. Marusic, and M. Palaniswami, "Internet of Things (IoT): A Vision, Architectural Elements, and Future Directions," Future Generation Computer Systems, vol. 29, no. 7, pp. 1645–1660, 2013.

[9]. B. Singh and D. Soni, "Vehicle Accident Detection Using NodeMCU and GPS Module," IJET, vol. 6, issue 2, pp. 85–89, 2020.

[10]. S. V. Kapse and S. R. Pawar, "Smart Vehicle Accident Detection System Using GPS and GSM," IRJET, vol. 6, issue 5, pp. 4217–4221, 2019.

[11]. M. A. Hannan, A. Hussain, and S. A. Samad, "Wireless Sensor Network Based Vehicle Accident Detection and Reporting System," Computer and Information Science, vol. 3, no. 1, pp. 15–20, 2010.

[12]. N. Jain, P. Nema, and R. Singh, "Design and Implementation of Automatic Accident Detection System," IJRTE, vol. 2, no. 4, pp. 12–15, 2014.

[13]. R. Ramya and S. Shanmuga Priya, "Automatic Accident Detection and Ambulance Rescue with Intelligent Traffic Light System," IJAREEIE, vol. 3, no. 2, 2014.

[14]. T. Patil and S. Prabhu, "Accident Detection System Using IoT," International Journal of Engineering Research and Technology (IJERT), vol. 7, no. 4, 2018.

[15]. P. Verma and J. S. Bhatia, "Design and Development of GPS-GSM Based Tracking System with Google Map Based Monitoring," International Journal of Computer Science, Engineering and Applications, vol. 3, no. 3, 2013.

[16]. G. N. Pandey and A. Jain, "Real Time Vehicle Tracking System Using GSM and GPS Technology— An Anti-theft Tracking System," International Journal of Electronics and Computer Science Engineering, vol. 1, no. 3, 2012.

[17]. A Tiwari and S. Deshmukh, "IoT Based Smart Accident Detection and Alert System," IJCRT, vol. 7, issue 2, 2019.

[18]. J. Lopez, R. Roman, and C. Alcaraz, "Analysis of Security Requirements for Cyber-Physical Systems," IEEE Computer, vol. 46, no. 4, pp. 16–23, 2013.

[19]. Arduino Uno Datasheet. [Online]. Available: https://www.arduino.cc/en/Main/ArduinoBoardUno

[20]. ESP32 Technical Reference Manual. [Online]. Available: https://www.espressif.com/sites/default/files/documentation/esp32_technical_reference_manual_en.pdf

[21]. Firebase Realtime Database Documentation. [Online]. Available: https://firebase.google.com/docs/database

[22]. GSM Module SIM800 Datasheet. [Online]. Available: https://components101.com/sites/default/files/component_datasheet/SIM800-Series_AT_Command_Manual_V1.09.pdf

[23]. GPS Module Neo-6M Datasheet. [Online]. Available: https://www.u-blox.com/sites/default/files/NEO-6_DataSheet_(GPS.G6-HW-09005).pdf

[24]. Y. Kim and S. Lee, "Automobile Accident Notification System Using Mobile and GPS," 2012 IEEE International Conference on Consumer Electronics, pp. 72–73, 2012.

[25]. H. Pasha, V. Sunkara, "Vehicle Collision Detection and Reporting System Using GPS and GSM," IJIREEICE, vol. 4, issue 5, pp. 153–157, 2016.

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[26]. Sabre, Mohamad Syafiq Mohd, Shahram Shah Abdullah, and Amul Faruq. "Flood warning and monitoring system utilizing internet of things technology." Kinetic: Game Technology, Information System, Computer Network, Computing, Electronics, and Control (2019): 287-296.

[27]. Darian, Agus, Unuk Darussalam, and Novi Dian Natasha. "Water Level Monitoring and Flood Early Warning Using Microcontroller with IoT Based Ultrasonic Sensor." Journal Teknik Informatic CIT Medico 11.1 (2019): 22-28.

[28]. Hadi, M. I., et al. "Designing early warning flood detection and monitoring system via IoT." IOP Conference Series: Earth and Environmental Science. Vol. 479. No. 1. IOP Publishing, 2020.

[29]. Lai, T. W., Oo, Z. L., & Moe, A. (2019). Real time water level monitoring for early warning system of flash floods using Internet of Things (IoT). In 2019 Joint International Conference on Science, Technology, and Innovation, 16th September, Mandalay, Myanmar (pp. 1-6).

[30]. Shankar, B. Maruthi, et al. "Internet of things based smart flood forecasting and early warning system." 2021 5th International Conference on Computing Methodologies and Communication (ICCMC). IEEE, 2021.

[31]. Nugroho, Dwi Novian to. "Flood Notification System Using Nodemcu with Telegram Monitoring." INAJEEE (Indonesian Journal of Electrical and Electronics Engineering) 6.1 (2023): 9-12.

[32]. Sophia, S. "Flood alerting system through water level meter." International Research Journal of Engineering and Technology (IRJET) 5.03 (2018): 1123-1128.

[33]. Kusumodestoni, R. Hadapiningradja, et al. "Internet of Things Innovation for Flood Detection: Monitoring Water Level, Temperature, and Humidity with Node MCU and Telegram Bot." Journal of Computational Analysis and Applications (Jokai) 33.05 (2024): 850-859.

[34]. Noar, Nor Anum Zu Raimi Md, and Mahanian Md Kamal. "The development of smart flood monitoring system using ultrasonic sensor with blank applications." In 2017 IEEE 4th international conference on smart instrumentation, measurement and application (ICSIMA), pp. 1-6. IEEE, 2017.

[35]. https://www.ijitee.org/wp-content/uploads/papers/v9i6/F3854049620.pdf

[36]. H. Hamidon, "Flood level indicator and risk warning system for remote location monitoring flood observatory system", WSEAS Trans. Syst. Control, vol. 5, no.3, pp. 153-163,2010

[37]. . Gyusoo Kim and Seulgi Lee, "2014 Payment Research", Bank of Korea, Vol. 2015, No. 1, Jan. 2015.

[38]. A.M. Leman, K.A. Rahman, M.N.M. Salleh, I. Baba, D. Feriyanto, L.S.C. Johnson, and S.N Hidayah M., "A review of flood catastrophic management in Malaysia, vol.11, no. 14, Jul 2016.

[39]. W, Lo, J.H. WF.P. Lin, and C. H. Hsu, "Cyber surveillance for flood disaster," sensors (Switzerland),2015.

[40]. Qing gong Ma, et al., "Application of Internet of Things in Urban Flooding Prevention Management system", Advances in Internet of Things, 7,1-9,2017.

[41]. U.s. De, et al., "Urban flooding in recent decades in four megacities of India", J. Ind. Geophys Union, Vol.17, No.2, pp. 153-165, 2013.

[42]. Z. M. Taib, N. S. Jaharuddin, and Z. D. Mansor, "A review of flood disaster and disaster management in Malaysia," International Journal of Accounting & Business Management, vol. 4, no. 3, 2016.

[43]. Arabinda Nanda, OmkarPattanaik, BiswajitaMohanty, "Wireless Sensor Network for Prediction of Tides using Mamdani Fuzzy Inference System", in International Journal of Coms putter Information Systems (ISSN 2229 5208) Volume 1, Number 2, September 2010.

[44]. H. Kung. J. Hua and C. Chen. "Draught forecast model and framework" using wireless sensor network, Journal of Information Science and Engineering vo. 22, 2006pp. 751-769.

[45]. Altaf O. Mulani, Arti Vasant Bang, Ganesh B. Birajadar, Amar B. Deshmukh, and Hemlata Makarand Jadhav, (2024). IoT Based Air, Water, and Soil Monitoring System for Pomegranate Farming, Annals of Agri-Bio Research. 29 (2): 71-86, 2024.

[46]. BhawanaParihar, AjmeeraKiran, SabithaValaboju, Syed Zahidur Rashid, and Anita Sofia Liz D R. (2025). Enhancing Data Security in Distributed Systems Using Homomorphic Encryption and Secure Computation Techniques, ITM Web Conf., 76 (2025) 02010

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Impact Factor: 7.67

[47]. DOI: https://doi.org/10.1051/itmconf/20257602010

[48]. C. Veena, M. Sridevi, K. K. S. Liyakat, B. Saha, S. R. Reddy and N. Shirisha,(2023). HEECCNB: An Efficient IoT-Cloud Architecture for Secure Patient Data Transmission and Accurate Disease Prediction in Healthcare Systems, 2023 Seventh International Conference on Image Information Processing (ICIIP), Solan, India, 2023, pp. 407-410, doi: 10.1109/ICIIP61524.2023.10537627. Available at: https://ieeexplore.ieee.org/document/10537627

[49]. D. A. Tamboli, V. A. Sawant, M. H. M. and S. Sathe, (2024). AI-Driven-IoT(AIIoT) Based Decision-Making- KSK Approach in Drones for Climate Change Study, 2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS), Gobichettipalayam, India, 2024, pp. 1735-1744, doi: 10.1109/ICUIS64676.2024.10866450.

[50]. K. Rajendra Prasad, SantoshachandraRaoKaranam et al. (2024). AI in public-private partnership for IT infrastructure development, Journal of High Technology Management Research, Volume 35, Issue 1, May 2024, 100496. https://doi.org/10.1016/j.hitech.2024.100496

[51]. K. K. S. Liyakat. (2023).Detecting Malicious Nodes in IoT Networks Using Machine Learning and Artificial Neural Networks, 2023 International Conference on Emerging Smart Computing and Informatics (ESCI), Pune, India, 2023, pp. 1-5, doi:10.1109/ESCI56872.2023.10099544. Available at: https://ieeexplore.ieee.org/document/10099544/

[52]. K. Kasat, N. Shaikh, V. K. Rayabharapu, and M. Nayak. (2023). Implementation and Recognition of Waste Management System with Mobility Solution in Smart Cities using Internet of Things, 2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), Trichy, India, 2023, pp. 1661-1665, doi: 10.1109/ICAISS58487.2023.10250690 . Available at: https://ieeexplore.ieee.org/document/10250690/

[53]. Kazi, K. (2024a). AI-Driven IoT (AIIoT) in Healthcare Monitoring. In T. Nguyen & N. Vo (Eds.), Using Traditional Design Methods to Enhance AI-Driven Decision Making (pp. 77-101). IGI Global. https://doi.org/10.4018/979-8-3693-0639-0.ch003 available at: https://www.igi-global.com/chapter/ai-driven-iot-aiiot-in-healthcare-monitoring/336693

[54]. Kazi, K. (2024b). Modelling and Simulation of Electric Vehicle for Performance Analysis: BEV and HEV Electrical Vehicle Implementation Using Simulink for E-Mobility Ecosystems. In L. D., N. Nagpal, N. Kassarwani, V. Varthanan G., & P. Siano (Eds.), E-Mobility in Electrical Energy Systems for Sustainability (pp. 295-320). IGI Global.https://doi.org/10.4018/979-8-3693-2611-4.ch014 Available at: https://www.igi-global.com/gateway/chapter/full-text-pdf/341172

[55]. Kazi, K. (2025). Machine Learning-Powered IoT (MLIoT) for Retail Apparel Industry. In T. Tarnanidis, E. Papachristou, M. Karypidis, & V. Manda (Eds.), Sustainable Practices in the Fashion and Retail Industry (pp. 345-372). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-9959-0.ch015

[56]. Kazi, K. S. (2025). Braille-Lippi Numbers and Characters Detection and Announcement System for Blind Children Using KSK Approach: AI-Driven Decision-Making Approach. In T. Murugan, K. P., & A. Abirami (Eds.), Driving Quality Education Through AI and Data Science (pp. 531-556). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8292-9.ch023

[57]. Kazi, K. S. (2025). AI-Driven IoT (AIIoT)-Based Decision-Making System for High BP Patient Healthcare Monitoring: KSK1 Approach for BP Patient Healthcare Monitoring. In T. Mzili, A. Arya, D. Pamucar, & M. Shaheen (Eds.), Optimization, Machine Learning, and Fuzzy Logic: Theory, Algorithms, and Applications (pp. 71-102). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-7352-1.ch003

[58]. Kazi, K. S. (2025a). Advancing Towards Sustainable Energy With Hydrogen Solutions: Adaptation and Challenges. In F. Özsungur, M. ChaychiSemsari, & H. KüçükBayraktar (Eds.), Geopolitical Landscapes of Renewable Energy and Urban Growth (pp. 357-394). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8814-3.ch013

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[59]. Kazi, S. (2024). Machine Learning-Based Pomegranate Disease Detection and Treatment. In M. Zia Ul Haq & I. Ali (Eds.), Revolutionizing Pest Management for Sustainable Agriculture (pp. 469-498). IGI Global. https://doi.org/10.4018/979-8-3693-3061-6.ch019

[60]. Kazi, S. (2024a). Computer-Aided Diagnosis in Ophthalmology: A Technical Review of Deep Learning Applications. In M. Garcia & R. de Almeida (Eds.), Transformative Approaches to Patient Literacy and Healthcare Innovation (pp. 112-135). IGI Global. https://doi.org/10.4018/979-8-3693-3661-8.ch006 Available at: https://www.igi-global.com/chapter/computer-aided-diagnosis-in-ophthalmology/342823

[61]. Kazi, S. (2024b). IoT Driven by Machine Learning (MLIoT) for the Retail Apparel Sector. In T. Tarnanidis, E. Papachristou, M. Karypidis, & V. Ismyrlis (Eds.), Driving Green Marketing in Fashion and Retail (pp. 63-81). IGI Global. https://doi.org/10.4018/979-8-3693-3049-4.ch004

[62]. Kazi, S. (2025c). AI-Driven-IoT (AIIoT)-Based Decision Making in Drones for Climate Change: KSK Approach. In S. Aouadni& I. Aouadni (Eds.), Recent Theories and Applications for Multi-Criteria Decision-Making (pp. 311-340). IGI Global. https://doi.org/10.4018/979-8-3693-6502-1.ch011

[63]. Kazi, S. (2024d). Artificial Intelligence (AI)-Driven IoT (AIIoT)-Based Agriculture Automation. In S. Satapathy & K. Muduli (Eds.), Advanced Computational Methods for Agri-Business Sustainability (pp. 72-94). IGI Global. https://doi.org/10.4018/979-8-3693-3583-3.ch005

[64]. Kazi, S. (2025). Machine Learning-Driven Internet of Medical Things (ML-IoMT)-Based Healthcare Monitoring System. In B. Soufiene& C. Chakraborty (Eds.), Responsible AI for Digital Health and Medical Analytics (pp. 49-86). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-6294-5.ch003

[65]. Kazi, S. (2025a). Transformation of Agriculture Effectuated by Artificial Intelligence-Driven Internet of Things (AIIoT). In J. Garwi, M. Dzingirai, & R. Masengu (Eds.), Integrating Agriculture, Green Marketing Strategies, and Artificial Intelligence (pp. 449-484). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-6468-0.ch015

[66]. K S K, (2024c). Vehicle Health Monitoring System (VHMS) by Employing IoT and Sensors, Grenze International Journal of Engineering and Technology,Vol 10, Issue 2, pp- 5367-5374. Available at: https://thegrenze.com/index.php?display=page&view=journalabstract&absid=3371&id=8

[67]. K S K, (2024e). A Novel Approach on ML based Palmistry, Grenze International Journal of Engineering and Technology,Vol 10, Issue 2, pp- 5186-5193. Available at: https://thegrenze.com/index.php?display=page&view=journalabstract&absid=3344&id=8

[68]. K S K, (2024f).IoT based Boiler Health Monitoring for Sugar Industries, Grenze International Journal of Engineering and Technology,Vol 10, Issue 2, pp. 5178 -5185. Available at: https://thegrenze.com/index.php?display=page&view=journalabstract&absid=3343&id=8

[69]. Keerthana, R., K, V., Bhagyalakshmi, K., Papinaidu, M., V, V., &Liyakat, K. K. S. (2025). Machine learning based risk assessment for financial management in big data IoT credit. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5086671

[70]. Kazi, K. S. (2025d). AI-Driven-IoT (AIIoT)-Based Jawar Leaf Disease Detection: KSK Approach for Jawar Disease Detection. In U. Bhatti, M. Aamir, Y. Gulzar, & S. Ullah Bazai (Eds.), Modern Intelligent Techniques for Image Processing (pp. 439-472). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-9045-0.ch019

[71]. Kazi, K. S. (2025e). AI-Powered-IoT (AIIoT)-Based Decision-Making System for BP-Patient Healthcare Monitoring: BP-Patient Health Monitoring Using KSK Approach. In M. Lytras & S. Alajlan (Eds.), Transforming Pharmaceutical Research With Artificial Intelligence (pp. 189-218). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-6270-9.ch007

[72]. Kazi, K. S. (2025f). A Study on AI-Driven Internet of Battlefield Things (IoBT)-Based Decision Making: KSK Approach in IoBT. In M. Tariq (Ed.), Merging Artificial Intelligence With the Internet of Things (pp. 203-238). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8547-0.ch007

[73]. Kazi, K. S. (2025g). KK Approach to Increase Resilience in Internet of Things: A T-Cell Security Concept. In M. Almaiah& S. Salloum (Eds.), Cryptography, Biometrics, and Anonymity in Cybersecurity

Management (pp. 199-228). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8014-7.ch010

[74]. Kutubuddin Kazi (2024). Explainable AI in Healthcare. In: Explainable Artificial Intelligence in healthcare System, editors: A. AnithaKamaraj, Debi PrasannaAcharjya. ISBN: 979-8-89113-598-7. DOI: https://doi.org/10.52305/GOMR8163

[75]. Kutubuddin Kazi, (2024a). Machine Learning (ML)-Based Braille Lippi Characters and Numbers Detection and Announcement System for Blind Children in Learning, In GamzeSart (Eds.), Social Reflections of Human-Computer Interaction in Education, Management, and Economics, IGI Global. https://doi.org/10.4018/979-8-3693-3033-3.ch002

[76]. Liyakat, K.K.S. (2023a). Machine Learning Approach Using Artificial Neural Networks to Detect Malicious Nodes in IoT Networks. In: Shukla, P.K., Mittal, H., Engelbrecht, A. (eds) Computer Vision and Robotics. CVR 2023. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-99-4577-1_3

[77]. LiyakatKazi, K. S. (2024). ChatGPT: An Automated Teacher's Guide to Learning. In R. Bansal, A. Chakir, A. HafazNgah, F. Rabby, & A. Jain (Eds.), AI Algorithms and ChatGPT for Student Engagement in Online Learning (pp. 1-20). IGI Global. https://doi.org/10.4018/979-8-3693-4268-8.ch001

[78]. Liyakat. (2025). IoT Technologies for the Intelligent Dairy Industry: A New Challenge. In S. Thandekkattu& N. Vajjhala (Eds.), Designing Sustainable Internet of Things Solutions for Smart Industries (pp. 321-350). IGI Global. https://doi.org/10.4018/979-8-3693-5498-8.ch012

[79]. Liyakat, K. K. (2025a). Heart Health Monitoring Using IoT and Machine Learning Methods. In A. Shaik (Ed.), AI-Powered Advances in Pharmacology (pp. 257-282). IGI Global. https://doi.org/10.4018/979-8-3693-3212-2.ch010

[80]. Liyakat. (2025d). AI-Driven-IoT(AIIoT)-Based Decision Making in Kidney Diseases Patient Healthcare Monitoring: KSK Approach for Kidney Monitoring. In L. Özgür Polat & O. Polat (Eds.), AI-Driven Innovation in Healthcare Data Analytics (pp. 277-306). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-7277-7.ch009

[81]. Liyakat, K.K.S. (2024). Machine Learning Approach Using Artificial Neural Networks to Detect Malicious Nodes in IoT Networks. In: Udgata, S.K., Sethi, S., Gao, XZ. (eds) Intelligent Systems. ICMIB 2023. Lecture Notes in Networks and Systems, vol 728. Springer, Singapore.https://doi.org/10.1007/978-981-99-3932-9_12 available at: https://link.springer.com/chapter/10.1007/978-981-99-3932-9_12

[82]. M Pradeepa, et al. (2022). Student Health Detection using a Machine Learning Approach and IoT, 2022 IEEE 2nd Mysore sub section International Conference (MysuruCon), 2022. Available at: https://ieeexplore.ieee.org/document/9972445

[83]. Mahant, M. A. (2025). Machine Learning-Driven Internet of Things (MLIoT)-Based Healthcare Monitoring System. In N. Wickramasinghe (Ed.), Digitalization and the Transformation of the Healthcare Sector (pp. 205-236). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-9641-4.ch007

[84]. Mulani AO, Liyakat KKS, Warade NS, et al (2025). . ML-powered Internet of Medical Things Structure for Heart Disease Prediction. Journal of Pharmacology and Pharmacotherapeutics. 2025; 0(0). doi:10.1177/0976500X241306184

[85]. Odnala, S., Shanthy, R., Bharathi, B., Pandey, C., Rachapalli, A., &Liyakat, K. K. S. (2025). Artificial Intelligence and Cloud-Enabled E-Vehicle Design with Wireless Sensor Integration. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5107242

[86]. P. Neeraja, R. G. Kumar, M. S. Kumar, K. K. S. Liyakat and M. S. Vani. (2024), DL-Based Somnolence Detection for Improved Driver Safety and Alertness Monitoring. 2024 IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT), Greater Noida, India, 2024, pp. 589-594, doi: 10.1109/IC2PCT60090.2024.10486714. Available at: https://ieeexplore.ieee.org/document/10486714

[87]. Prashant K Magadum (2024). Machine Learning for Predicting Wind Turbine Output Power in Wind Energy Conversion Systems, Grenze International Journal of Engineering and Technology, Jan Issue, Vol

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
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10, Issue 1, pp. 2074-2080. Grenze ID: 01.GIJET.10.1.4_1 Available at: https://thegrenze.com/index.php?display=page&view=journalabstract&absid=2514&id=8

[88]. PriyaMangeshNerkar, BhagyarekhaUjjwalganeshDhaware. (2023). Predictive Data Analytics Framework Based on Heart Healthcare System (HHS) Using Machine Learning, Journal of Advanced Zoology, 2023, Volume 44, Special Issue -2, Page 3673:3686. Available at: https://jazindia.com/index.php/jaz/article/view/1695

[89]. PriyaNerkar and Sultanabanu, (2024). IoT-Based Skin Health Monitoring System, International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS). 2024, 13(11): 5937-5950. https://doi.org/10.31032/IJBPAS/2024/13.11.8488

[90]. S. B. Khadake, A. B. Chounde, A. A. Suryagan, M. H. M. and M. R. Khadatare, (2024). AI-Driven-IoT(AIIoT) Based Decision Making System for High-Blood Pressure Patient Healthcare Monitoring, 2024 International Conference on Sustainable Communication Networks and Application (ICSCNA), Theni, India, 2024, pp. 96-102, doi: 10.1109/ICSCNA63714.2024.10863954.

[91]. Sayyad. (2025a). AI-Powered-IoT (AIIoT)-Based Decision-Making System for BP Patient's Healthcare Monitoring: KSK Approach for BP Patient Healthcare Monitoring. In S. Aouadni& I. Aouadni (Eds.), Recent Theories and Applications for Multi-Criteria Decision-Making (pp. 205-238). IGI Global.https://doi.org/10.4018/979-8-3693-6502-1.ch008

[92]. Sayyad (2025b). AI-Powered IoT (AI IoT) for Decision-Making in Smart Agriculture: KSK Approach for Smart Agriculture. In S. Hai-Jew (Ed.), Enhancing Automated Decision-Making Through AI (pp. 67-96). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-6230-3.ch003

[93]. Sayyad (2025c). KK Approach to Increase Resilience in Internet of Things: A T-Cell Security Concept. In D. Darwish & K. Charan (Eds.), Analyzing Privacy and Security Difficulties in Social Media: New Challenges and Solutions (pp. 87-120). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-9491-5.ch005

[94]. Sayyad, (2025). KK Approach for IoT Security: T-Cell Concept. In Rajeev Kumar, Sheng-Lung Peng, & Ahmed Elngar (Eds.), Deep Learning Innovations for Securing Critical Infrastructures. IGI Global Scientific Publishing.

[95]. Sayyad (2025d). Healthcare Monitoring System Driven by Machine Learning and Internet of Medical Things (MLIoMT). In V. Kumar, P. Katina, & J. Zhao (Eds.), Convergence of Internet of Medical Things (IoMT) and Generative AI (pp. 385-416). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-6180-1.ch016

[96]. Shinde, S. S., Nerkar, P. M., Kazi, S. S., & Kazi, V. S. (2025). Machine Learning for Brand Protection: A Review of a Proactive Defense Mechanism. In M. Khan & M. Amin Ul Haq (Eds.), Avoiding Ad Fraud and Supporting Brand Safety: Programmatic Advertising Solutions (pp. 175-220). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-7041-4.ch007

[97]. Upadhyaya, A. N., Surekha, C., Malathi, P., Suresh, G., Suriyan, K., &Liyakat, K. K. S. (2025). Pioneering cognitive computing for transformative healthcare innovations. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5086894.

[98]. AshitGaikwad, AmogsidhaChendke, NizamMulani, and MangruleSarika, "Submersible Pump Theft Indicator", IEJRD - International Multidisciplinary Journal, vol. 5, no. 4, p. 5, May 2020. Available at: https://www.iejrd.com/index.php/%20/article/view/627

[99]. Mr. Akhilesh Raut, Mr. Mahesh Mali, Miss. TruptiMashale, Prof. Kazi K. S. (2018). Bagasse Level Monitoring System, International Journal of Trend in Scientific Research and Development (ijtsrd), Volume-2, Issue-3, April 2018, pp.1657-1659, URL: https://www.ijtsrd.com/papers/ijtsrd11469.pdf

[100]. Altaf Osman Mulani, Rajesh Maharudra Patil "Discriminative Appearance Model For Robust Online Multiple Target Tracking", Telematique, 2023, Vol 22, Issue 1, pp. 24- 43.

[101]. M Sunil Kumar, D Ganesh, Anil V Turukmane, UmamaheswararaoBatta, ,"Deep Convolution Neural Network based solution for detecting plant Diseases", Journal of Pharmaceutical Negative Results, 2022, Vol 13, Special Issue- I, pp. 464-471,

[102]. Halli U M, "Nanotechnology in IoT Security", Journal of Nanoscience, Nanoengineering & Applications, 2022, Vol 12, issue 3, pp. 11 – 16.

[103]. Wale Anjali D., Rokade Dipali, et al, "Smart Agriculture System using IoT", International Journal of Innovative Research In Technology, 2019, Vol 5, Issue 10, pp.493 - 497.

[104]. Kazi K. S., "Significance And Usage Of Face Recognition System", Scholarly Journal For Humanity Science and English Language, 2017, Vol 4, Issue 20, pp. 4764 - 4772.

[105]. Miss. A. J. Dixit, et al, "Iris Recognition by Daugman's Method", International Journal of Latest Technology in Engineering, Management & Applied Science, 2015, Vol 4, Issue 6, pp 90 - 93.

[106]. Kazi K S L, "Significance of Projection and Rotation of Image in Color Matching for High-Quality Panoramic Images used for Aquatic study", International Journal of Aquatic Science, 2018, Vol 09, Issue 02, pp. 130 – 145.

[107]. Halli U.M., "Nanotechnology in E-Vehicle Batteries", International Journal of Nanomaterials and Nanostructures. 2022; Vol 8, Issue 2, pp. 22–27.

[108]. Pankaj R Hotkar, Vishal Kulkarni, et al, "Implementation of Low Power and area efficient carry select Adder", International Journal of Research in Engineering, Science and Management, 2019, Vol 2, Issue 4, pp. 183 - 184.

[109]. Kazi K S, "Detection of Malicious Nodes in IoT Networks based on Throughput and ML", Journal of Electrical and Power System Engineering, 2023, Volume-9, Issue 1, pp. 22- 29.

[110]. Karale Nikita, JadhavSupriya, et al, "Design of Vehicle system using CAN Protocol", International Journal of Research in Applied science and Engineering Technology, 2020, Vol 8, issue V, pp. 1978 - 1983, http://doi.org/10.22214/ijraset.2020.5321.

[111]. K. Kazi, "Lassar Methodology for Network Intrusion Detection", Scholarly Research Journal for Humanity science and English Language, 2017, Vol 4, Issue 24, pp.6853 - 6861.

[112]. Miss Argonda U A, "Review paper for design and simulation of a Patch antenna by using HFSS", International Journal of Trends in Scientific Research and Development, 2018, Vol 2, issue-2, pp. 158 - 160.

[113]. Kazi K., "Hybrid optimum model development to determine the Break", Journal of Multimedia Technology & Recent Advancements, 2022, vol 9, issue 2, pp. 24 – 32.

[114]. Ms. Yogita Shirdale, et al, "Analysis and design of Capacitive coupled wideband Microstrip antenna in C and X band: A Survey", Journal GSD-International society for green, Sustainable Engineering and Management, 2014, Vol 1, issue 15, pp. 1 - 7.

[115]. Ms. Shweta Nagare, et al., "Different Segmentation Techniques for brain tumor detection: A Survey", MM-International society for green, Sustainable Engineering and Management, 2014, Vol 1, issue 14, pp.29 - 35.

[116]. Kazi K., "Reverse Engineering's Neural Network Approach to human brain", Journal of Communication Engineering & Systems, 2022, vol 12, issue 2, pp. 17 – 24.

[117]. Miss. A. J. Dixit, et al, "A Review paper on Iris Recognition", Journal GSD International society for green, Sustainable Engineering and Management, 2014, Vol 1, issue 14, pp. 71 - 81.

[118]. Ms. Shweta Nagare, et al., "An Efficient Algorithm brain tumor detection based on Segmentation and Thresholding", Journal of Management in Manufacturing and services, 2015, Vol 2, issue 17, pp.19 - 27.

[119]. Kazi K., "Model for Agricultural Information system to improve crop yield using IoT", Journal of open Source development, 2022, vol 9, issue 2, pp. 16 – 24.

[120]. Miss. A. J. Dixit, et al, "Iris Recognition by Daugman's Algorithm – an Efficient Approach", Journal of applied Research and Social Sciences, 2015, Vol 2, issue 14, pp. 1 - 4.

[121]. Shirgan S S, " Face Recognition based on Principal Component Analysis and Feed Forward Neural Network", National Conference on Emerging trends in Engineering, Technology, Architecture, 2010, pp. 250 - 253.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[122]. Ms. Yogita Shirdale, et al., "Coplanar capacitive coupled probe fed micro strip antenna for C and X band", International Journal of Advanced Research in Computer and Communication Engineering, 2016, Vol 5, Issue 4, pp. 661 - 663.

[123]. Ravi Aavula, Amar Deshmukh, V A Mane, et al, "Design and Implementation of sensor and IoT based Remembrance system for closed one", Telematique, 2022, Vol 21, Issue 1, pp. 2769 - 2778.

[124]. Salunke Nikita, et al, "Announcement system in Bus", Journal of Image Processing and Intelligent remote sensing, 2022, Vol 2, issue 6.

[125]. MadhupriyaSagarKamuni, et al, "Fruit Quality Detection using Thermometer", Journal of Image Processing and Intelligent Remote Sensing, 2022, Vol 2, Issue 5.

[126]. Shweta Kumtole, et al, " Automatic wall painting robot Automatic wall painting robot", Journal of Image Processing and Intelligent remote sensing, 2022, Vol 2, issue 6

[127]. Kadam Akansha, et al, "Email Security", Journal of Image Processing and Intelligent remote sensing, 2022, Vol 2, issue 6.

[128]. K. Kazi, "Systematic Survey on Alzheimer (AD) Diseases Detection", 2022.

[129]. K. Kazi, "A Review paper Alzheimer", 2022.

[130]. Mrunal M Kapse, et al, "Smart Grid Technology", International Journal of Information Technology and Computer Engineering, Vol 2, Issue 6 .

[131]. SatputePratiskhaVaijnath, Mali Prajakta et al. "Smart safty Device for Women", International Journal of Aquatic Science, 2022, Vol 13, Issue 1, pp. 556 - 560.

[132]. Miss. Priyanka M Tadlagi, et al, "Depression Detection", Journal of Mental Health Issues and Behavior (JHMIB), 2022, Vol 2, Issue 6, pp. 1 – 7.

[133]. Waghmare Maithili, et al, "Smart watch system", International journal of information Technology and computer engineering (IJITC), 2022, Vol 2, issue 6, pp. 1 - 9.

[134]. Prof. Kazi Kutubuddin S. L., "Situation Invariant face recognition using PCA and Feed Forward Neural network", Proceeding of International Conference on Advances in Engineering, Science and Technology, 2016, pp. 260- 263.

[135]. Prof. Kazi Kutubuddin S. L., "An Approach on Yarn Quality Detection for Textile Industries using Image Processing", Proceeding of International Conference on Advances in Engineering, Science and Technology, 2016, pp. 325-330.

[136]. Divya Swami, et al, "Sending notification to someone missing you through smart watch", International journal of information Technology & computer engineering (IJITC), 2022, Vol 2, issue 8, pp. 19 – 24.

[137]. Shreya Kalmkar, Afrin, et al., " 3D E-Commers using AR", International Journal of Information Technology & Computer Engineering (IJITC), 2022, Vol 2, issue 6, pp. 18-27.

[138]. Kazi Kutubuddin S. L., "Predict the Severity of Diabetes cases, using K-Means and Decision Tree Approach", Journal of Advances in Shell Programming, 2022, Vol 9, Issue 2, pp. 24-31.

[139]. K. K. Sayyad Liyakat, "Nanotechnology Application in Neural Growth Support System", Nano Trends: A Journal of Nanotechnology and Its Applications, 2022, Vol 24, issue 2, pp. 47 – 55.

[140]. Kazi Kutubuddin S. L., "A novel Design of IoT based 'Love Representation and Remembrance' System to Loved One's", Gradiva Review Journal, 2022, Vol 8, Issue 12, pp. 377 - 383.

[141]. Sakshi M. Hosmani, et al., "Implementation of Electric Vehicle system", Gradiva Review Journal, 2022, Vol 8, Issue 12, pp. 444 – 449.

[142]. K. K., "Multiple object Detection and Classification using sparsity regularized Pruning on Low quality Image/ video with Kalman Filter Methodology (Literature review)", 2022.

[143]. K. Kazi, "Smart Grid energy saving technique using Machine Learning" Journal of Instrumentation Technology and Innovations, 2022, Vol 12, Issue 3, pp. 1 – 10.

[144]. Waghmode D S, et al, "Voltage Sag mitigation in DVR based on Ultra capacitor", Lambart Publications. 2022, ISBN – 978-93-91265-41-0

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[145]. Prof. Vinay S , et al, "Multiple object detection and classification based on Pruning using YOLO", Lambart Publications, 2022, ISBN – 978-93-91265-44-1

[146]. Kazi Kutubuddin S. L., "Business Mode and Product Life Cycle to Improve Marketing in Healthcare Units", E-Commerce for future & Trends, 2022, vol 9, issue 3, pp. 1-9.

[147]. Dr. A. O. Mulani, "Effect of Rotation and Projection on Real time Hand Gesture Recognition system for Human Computer Interaction", Journal of The Gujrat Research Society, 2019, Vol 21, issue 16, pp. 3710 – 3718.

[148]. Kazi K S, "IoT based Healthcare system for Home Quarantine People", Journal of Instrumentation and Innovation sciences, 2023, Vol 8, Issue 1, pp. 1- 8.

[149]. Ms. MachhaBabitha, C Sushma, et al, "Trends of Artificial Intelligence for online exams in education", International journal of Early Childhood special Education, 2022, Vol 14, Issue 01, pp. 2457-2463.

[150]. Dr. J. Sirisha Devi, Mr. B. Sreedhar, et al, "A path towards child-centric Artificial Intelligence based Education", International Journal of Early Childhood special Education, 2022, Vol 14, Issue 03, pp. 9915-9922.

[151]. Mr. D. Sreenivasulu, Dr. J. Sirishadevi, et al, "Implementation of Latest machine learning approaches for students Grade Prediction", International Journal of Early Childhood special Education, 2022, Vol 14, Issue 03, pp. 9887-9894.

[152]. Nilima S. Warhade, Rahul S. Pol, Hemlata M. Jadhav, Altaf O. Mulani, "Yarn Quality detection for Textile Industries using Image Processing", Journal of Algebraic Statistics, 2022, Vol 13, Issue 3, pp. 3465-3472.

[153]. Rahul S. Pole, Amar Deshmukh, MakarandJadhav, et al, "iButton Based Physical access Authorization and security system", Journal of Algebraic Statistics, 2022, Vol 13, issue 3, pp. 3822-3829.

[154]. V A Mane, Dr K P Pardeshi, Dr. D.B Kadam, Dr. Pandyaji K K, "Development of Pose invariant Face Recognition method based on PCA and Artificial Neural Network", Journal of Algebraic Statistics, 2022, Vol 13, issue 3, pp. 3676-3684.

[155]. Dr. K. P. Pardeshi et al, "Development of Machine Learning based Epileptic Seizureprediction using Web of Things (WoT)" ,NeuroQuantology, 2022, Vol 20, Issue 8, pp. 9394- 9409.

[156]. Dr. K. P. Pardeshi et al, "Implementation of Fault Detection Framework for Healthcare Monitoring System Using IoT, Sensors in Wireless Environment", Telematique, 2022, Vol 21, Issue 1, pp. 5451 – 5460.

[157]. Dr. B. D. Kadam et al, "Implementation of Carry Select Adder (CSLA) for Area, Delay and Power Minimization", Telematique, 2022, Vol 21, issue 1, pp. 5461 – 5474.

[158]. Kazi K S L, "IoT-based weather Prototype using WeMos", Journal of Control and Instrumentation Engineering, 2023, Vol 9, Issue 1, pp. 10 – 22.

[159]. Ravi A., et al, "Pattern Recognition- An Approach towards Machine Learning", Lambert Publications, 2022, ISBN- 978-93-91265-58-8

[160]. Kazi Kutubuddin, "Detection of Malicious Nodes in IoT Networks based on packet loss using ML", Journal of Mobile Computing, Communication & mobile Networks, 2022, Vol 9, Issue 3, pp. 9 -16.

[161]. Kazi Kutubuddin, "Big data and HR Analytics in Talent Management: A Study", Recent Trends in Parallel Computing, 2022, Vol 9, Issue 3, pp. 16-26.

[162]. Kazi K S, "IoT-Based Healthcare Monitoring for COVID-19 Home Quarantined Patients", Recent Trends in Sensor Research & Technology, 2022, Vol 9, Issue 3. pp. 26 – 32.

[163]. GouseMohiuddinKosgiker, "Machine Learning- Based System, Food Quality Inspection and Grading in Food industry", International Journal of Food and Nutritional Sciences, 2018, Vol 11, Issue 10, pp. 723-730.

[164]. U M Halli, Voltage Sag Mitigation Using DVR and Ultra Capacitor. Journal of Semiconductor Devices and Circuits. 2022; 9(3): 21–31p.

[165]. Kazi Kutubuddin, "Blockchain-Enabled IoT Environment to Embedded System a Self-Secure Firmware Model", Journal of Telecommunication study, 2023, Vol 8, Issue 1.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[166]. Kazi Kutubuddin, "A Study HR Analytics Big Data in Talent Management", Research and Review: Human Resource and Labour Management, 2023, Volume-4, Issue-1, pp. 16-28.

[167]. NarenderChinthamu, M. Prasad, "Self-Secure firmware model for Blockchain-Enabled IOT environment to Embedded system", Eur. Chem. Bull., 2023, 12(S3), pp. 653 – 660. DOI:10.31838/ecb/2023.12.s3.075

[168]. Vahida, et al, "Deep Learning, YOLO and RFID based smart Billing Handcart", Journal of Communication Engineering & Systems, 2023, 13(1), pp. 1-8.

[169]. KaziKutubuddinSayyadLiyakat, "Analysis for Field distribution in Optical Waveguide using Linear Fem method", Journal of Optical communication Electronics, 2023, Vol 9, Issue 1, pp. 23- 28.

[170]. Miss. Mamdyal, Miss. Sandupatia, et al, "GPS Tracking System", International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), 2022, Vol 2, issue- 1, pp. 2492 – 2529, Available at: https://ijarsct.co.in/A7317.pdf

[171]. Rajesh MaharudraPatil, "Modelo De AparienciaDiscriminatorio Para Un SólidoSeguimiento En Línea De MúltiplesObjetivos", Telematique, 2023, Vol 22, Issue 1, pp. 24- 43.

[172]. KaraleAishwarya A, et al, "Smart Billing Cart Using RFID, YOLO and Deep Learning for Mall Administration", International Journal of Instrumentation and Innovation Sciences, 2023, Vol 8, Issue- 2.

[173]. Sultanabanu Kazi, et al.(2023), Fruit Grading, Disease Detection, and an Image Processing Strategy, Journal of Image Processing and Artificial Intelligence, 9(2), 17-34.

[174]. SultanabanuKazi, MardanaliShaikh, "Machine Learning in the Production Process Control of Metal Melting" Journal of Advancement in Machines, Volume 8 Issue 2 (2023).

[175]. KaziKutubuddinSayyadLiyakat, "IoT based Smart HealthCare Monitoring", In: RhiturajSaikia (eds), Liberation of Creativity: Navigating New Frontiers in Multidisciplinary Research, Vol. 2, July 2023, pp. 456- 477, ISBN: 979-8852143600

[176]. KaziKutubuddinSayyadLiyakat, "IoT based Substation Health Monitoring", In: RhiturajSaikia (eds), Magnification of Research: Advanced Research in Social Sciences and Humanities, Volume 2, October 2023, pp. 160 – 171, ISBN: 979-8864297803

[177]. PriyaMangeshNerkar, Sunita Sunil Shinde, et al, "Monitoring Fresh Fruit and Food Using IoT and Machine Learning to Improve Food Safety and Quality", TuijinJishu/Journal of Propulsion Technology, Vol. 44, No. 3, (2023) , pp. 2927 – 2931.

[178]. KaziSultanabanuSayyadLiyakat (2023). Integrating IoT and Mechanical Systems in Mechanical Engineering Applications, Journal of Mechanical Robotics, 8(3), 1-6.

[179]. KaziSultanabanuSayyadLiyakat (2023). IoT Changing the Electronics Manufacturing Industry, Journal of Analog and Digital Communications, 8(3), 13-17.

[180]. KaziSultanabanuSayyadLiyakat (2023). IoT in the Electric Power Industry, Journal of Controller and Converters, 8(3), 1-7.

[181]. KaziSultanabanuSayyadLiyakat (2023). Review of Integrated Battery Charger (IBC) for Electric Vehicles (EV), Journal of Advances in Electrical Devices, 8(3), 1-11.

[182]. KaziSultanabanuSayyadLiyakat (2023). ML in the Electronics Manufacturing Industry, Journal of Switching Hub, 8(3), 9-13.

[183]. KaziSultanabanuSayyadLiyakat (2023). IoT in Electrical Vehicle: A Study, Journal of Control and Instrumentation Engineering, 9(3), 15-21.

[184]. KaziSultanabanuSayyadLiyakat (2023). PV Power Control for DC Microgrid Energy Storage Utilisation, Journal of Digital Integrated Circuits in Electrical Devices, 8(3), 1-8.

[185]. KaziSultanabanuSayyadLiyakat (2023). Electronics with Artificial Intelligence Creating a Smarter Future: A Review, Journal of Communication Engineering and Its Innovations, 9(3), 38-42.

[186]. KaziSultanabanuSayyadLiyakat (2023). Dispersion Compensation in Optical Fiber: A Review, Journal of Telecommunication Study, 8(3), 14-19.

[187]. KaziSultanabanuSayyadLiyakat (2023). IoT Based Arduino-Powered Weather Monitoring System, Journal of Telecommunication Study, 8(3), 25-31.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[188]. KaziSultanabanuSayyadLiyakat (2023). Arduino Based Weather Monitoring System, Journal of Switching Hub, 8(3), 24-29.

[189]. V D Gund, et al. (2023). PIR Sensor-Based Arduino Home Security System, Journal of Instrumentation and Innovation Sciences, 8(3), 33-37.

[190]. KaziKutubuddinSayyadLiyakat (2023), System for Love Healthcare for Loved Ones based on IoT. Research Exploration: Transcendence of Research Methods and Methodology, Volume 2, ISBN: 979-8873806584, ASIN : B0CRF52FSX

[191]. K K S Liyakat (2022). Implementation of e-mail security with three layers of authentication, Journal of Operating Systems Development and Trends, 9(2), 29-35.

[192]. Mishra Sunil B., et al. (2024). Nanotechnology's Importance in Mechanical Engineering, Journal of Fluid Mechanics and Mechanical Design, 6(1), 1-9.

[193]. KaziKutubuddinSayyadLiyakat (2024). Blynk IoT-Powered Water Pump-Based Smart Farming, Recent Trends in Semiconductor and Sensor Technology, 1(1), 8-14.

[194]. SultanabanuSayyadLiyakat, (2024). IoT-based Alcohol Detector using Blynk, Journal of Electronics Design and Technology, 1(1), 10-15.

[195]. KaziSultanabanuSayyadLiyakat, (2023). Accepting Internet of Nano-Things: Synopsis, Developments, and Challenges. Journal of Nanoscience, Nanoengineering & Applications. 2023; 13(2): 17–26p. DOI: https://doi.org/10.37591/jonsnea.v13i2.1464

[196]. Mishra Sunil B., et al. (2024). Review of the Literature and Methodological Structure for IoT and PLM Integration in the Manufacturing Sector, Journal of Advancement in Machines, 9(1), 1-5.

[197]. Mishra Sunil B., et al. (2024). AI-Driven IoT (AI IoT) in Thermodynamic Engineering, Journal of Modern Thermodynamics in Mechanical System, 6(1), 1-8.

[198]. KaziKutubuddinSayyadLiyakat (2024). Impact of Solar Penetrations in Conventional Power Systems and Generation of Harmonic and Power Quality Issues, Advance Research in Power Electronics and Devices, 1(1), 10-16.

[199]. Sayyad Liyakat. Intelligent Watering System (IWS) for Agricultural Land Utilising Raspberry Pi. Recent Trends in Fluid Mechanics. 2023; 10(2): 26–31p.

[200]. Sunil ShivajiDhanwe, et al. (2024). AI-driven IoT in Robotics: A Review, Journal of Mechanical Robotics, 9(1), 41-48.

[201]. KaziSultanabanuSayyadLiyakat, KaziKutubuddinSayyadLiyakat. Nanomedicine as a Potential Therapeutic Approach to COVID-19. International Journal of Applied Nanotechnology. 2023; 9(2): 27–35p. Available at: https://materials.journalspub.info/index.php?journal=IJAN&page=article&op=view&path%5B%5D=1038

[202]. Megha Nagrale, Rahul S. Pol, Ganesh B. Birajadar, Altaf O. Mulani, (2024). Internet of Robotic Things in Cardiac Surgery: An Innovative Approach, African Journal of Biological Sciences, Vol 6, Issue 6, pp. 709-725 doi: 10.33472/AFJBS.6.6.2024.709-725

[203]. KaziKutubuddinSayyadLiyakat, (2023). IoT based Healthcare Monitoring for COVID- Subvariant JN-1, Journal of Electronic Design Technology, Vol 14, No 3 (2023).

[204]. KaziKutubuddinSayyadLiyakat (2023). Smart Motion Detection System using IoT: A NodeMCU and Blynk Framework, Journal of Microelectronics and Solid State Devices, Vol 10, No 3 (2023).

[205]. ChopadeMallikarjunAbhangrao (2024), Internet of Things in Mechatronics for Design and Manufacturing: A Review, Journals of Mechatronics Machine Design and Manufacturing, Vol 6, Issue 1.

[206]. KaziKutubuddinSayyadLiyakat (2023). Nanotechnology in Precision Farming: The Role of Research, International Journal of Nanomaterials and Nanostructures, Vol 9, No 2 (2023), https://doi.org/10.37628/ijnn.v9i2.1051

[207]. KaziKutubuddinSayyadLiyakat. (2023). Home Automation System Based on GSM. Journal of VLSI Design Tools & Technology. 2023; 13(3): 7–12p. https://doi.org/10.37591/jovdtt.v13i3.7877

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[208]. KaziKutubuddinSayyadLiyakat, (2024). Intelligent Watering System(IWS) for Agricultural Land Utilising Raspberry Pi, Recent Trends in Fluid Mechanics, Vol 10, No 2, pp. 26-31.

[209]. KaziKutubuddinSayyadLiyakat (2024). IoT and Sensor-based Smart Agriculturing Driven by NodeMCU, Research & Review: Electronics and Communication Engineering, 1(2), 25-33. Available at: https://matjournals.net/engineering/index.php/RRECE/article/view/742

[210]. KaziKutubuddinSayyadLiyakat (2024). Smart Agriculture based on AI-Driven-IoT(AIIoT): A KSK Approach, Advance Research in Communication Engineering and its Innovations, 1(2), 23-32. Available at: https://matjournals.net/engineering/index.php/ARCEI/article/view/746

[211]. K Kazi(2024). Complications with Malware Identification in IoT and an Overview of Artificial Immune Approaches. Research & Reviews: A Journal of Immunology. 2024; 14(01):54-62. Available from: https://journals.stmjournals.com/rrjoi/article=2024/view=144241

[212]. Nida N. Shaikh, Milind D. Chavan, V.G. Shirshikar,(2023). PV Penetrations in Conventional Power System and Generation of Harmonic and Power Quality Issues: A Review. International Journal of Power Electronics Controllers and Converters. 2023; 9(2): 12–19p. Available at: https://ecc.journalspub.info/index.php?journal=JPECC&page=article&op=view&path%5B%5D=1976

[213]. Vaibhav L. Jadhav, Arjun P. Shinde, (2024). Detection of Fire in the Environment via a Robot Based Fire Fighting System Using Sensors, International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), Volume 4, Issue 4, pp. 410 – 418.

[214]. KaziKutubuddinSayyadLiyakat (2024). Nanotechnology in Medical Applications: A Study. Nano Trends: A Journal of Nanotechnology and Its Applications. 2024; 26(2): 1–11p.

[215]. KaziKutubuddinSayyadLiyakat. (2024). Nanotechnology in BattleField: A Study. Journal of Nanoscience, Nanoengineering & Applications. 2024; 14(2): 18–30p.

[216]. SultananbanuSayyadLiyakatKazi, (2024). Polymer Applications in Energy Generation and Storage: A Forward Path. Journal of Nanoscience, Nanoengineering & Applications. 2024; 14(2): 31–39p.

[217]. KaziKutubuddinSayyadLiyakat, (2024). Review of Biopolymers in Agriculture Application: An Eco-Friendly Alternative. International Journal of Composite and Constituent Materials. 2024; 10(1): 50–62p.

[218]. KaziKutubuddinSayyadLiyakat (2024). Railway Health-Monitoring Using KSK Approach: Decision-Making Using AIIoT Approach in Railways, Journal of Controller and Converters, 9(3), 1-10. Available at: https://matjournals.net/engineering/index.php/JCC/article/view/1047

[219]. K KSayyadLiyakat. (2024). Impact of Nanotechnology on Battlefield Welfare: A Study. International Journal of Nanobiotechnology. 2024; 10(2): 19– 32p.

[220]. SultanabanuSayyadLiyakat, (2024q). Nanotechnology in Healthcare Applications: A Study. International Journal of Nanobiotechnology. 2024; 10(2): 48–58p.

[221]. KaziKutubuddinSayyadLiyakat (2024). A Study on AI-driven IoT (AIIoT) based Decision Making: KSK Approach in Robot for Medical Applications, Recent Trends in Semiconductor and Sensor Technology, 1(3), 1-17. Available at: https://matjournals.net/engineering/index.php/RTSST/article/view/1044

[222]. KaziKutubuddinSayyadLiyakat (2024). Wireless Train Collision Avoidance System, Advance Research in Communication Engineering and its Innovations, 1(3), 16-25.

[223]. KaziKutubuddinSayyadLiyakat. (2024). Internet of Battlefield Things: An IoBT-inspired Battlefield of Tomorrow. Journal of Telecommunication, Switching Systems and Networks. 2024; 11(3): 11–19p.

[224]. Sunil B. Mishra (2024d). AI-Driven-IoT (AIIoT)-Based Decision Making in Manufacturing Processes in Mechanical Engineering, Journal of Mechanical Robotics, 9(2), 27-38.

[225]. Sunil B. Mishra (2024e). AI-Driven-IoT (AIIoT) Based Decision-Making in Molten Metal Processing, Journal of Industrial Mechanics, 9(2), 45-56.

[226]. KaziKutubuddinSayyadLiyakat, Impact of Nanotechnology on Battlefield Welfare: A Study. International journal of Nanobiotechnology. 2024; 10(02): 19-32p.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[227]. KaziSultanabanuSayyadLiyakat and KaziKutubuddinSayyadLiyakat, Nanosensors in Agriculture Field: A Study. International Journal of Applied Nanotechnology. 2024; 10(02): 12-22p. Available from:https://journalspub.com/publication/ijan-v10i02-11625/

[228]. KaziKutubuddinSayyadLiyakat, Nanotechnology in Space Study. International Journal of Applied Nanotechnology. 2024; 10(02): 39-46p. Available from:https://journalspub.com/publication/ijan-v10i02-11616/

[229]. Dr. KaziKutubuddinSayyadLiyakat. (2024). KSK Approach to Smart Agriculture: Utilizing AI-Driven Internet of Things (AI IoT). Journal of Microcontroller Engineering and Applications. 2024; 11(03):21-32.

[230]. KaziKutubuddinSayyadLiyakat. (2024). Microwave Communication in the Internet of Things: A Study. Journal of RF and Microwave Communication Technologies, 38–49. Retrieved from https://matjournals.net/engineering/index.php/JoRFMCT/article/view/1276

[231]. KaziKutubuddinSayyadLiyakat, (2023). Nanorobotics: A Review, International Journal of Applied Nanotechnology (IJAN), 9(2), pp. 36 – 43. DOI: https://doi.org/10.37628/ijan.v9i2.1019

[232]. Dr. KaziKutubuddinSayyadLiyakat. Sensor and IoT centered Smart Agriculture by NodeMCU. Recent Trends in Sensor Research & Technology. 2024; 11(03):24-32. Available from: https://journals.stmjournals.com/rtsrt/article=2024/view=179744

[233]. KaziKutubuddinSayyadLiyakat.(2024). Carbon based Supercapacitor for Electric Vehicles. Journal of Nanoscience, NanoEngineering& Applications. 2024; 14(03):01-11. Available from: https://journals.stmjournals.com/jonsnea/article=2024/view=179371.

[234]. G M Kosgiker. Satellite Sensing for Sea Level Monitoring: A Transformative Approach to Understanding Climate Change. Journal of Microwave Engineering & Technologies. 2025; 12(1): 33–41p.

[235]. KaziKutubuddinSayyadLiyakat. Transforming IoT Connectivity Through VLSI Technology. International Journal of VLSI Circuit Design & Technology. 2024; 02(02):1-11. Available from: https://journals.stmjournals.com/ijvcdt/article=2024/view=190803

[236]. KaziKutubuddinSayyadLiyakat, "Internet of Robotics Things in Industrial Applications: A Study," Journal of Control and Instrumentation Engineering, vol. 11, no. 1, pp. 1-10, Feb 2025.

[237]. KaziKutubuddinSayyadLiyakat. Fake Cryptocurrecy Detection using Python. Recent Trends in Programming Languages. 2025; 12(1): 1–7p.

[238]. KaziKutubuddinSayyadLiyakat. The Future is Smelling: Exploring the Potential of e-Nose. Journal of Semiconductor Devices and Circuits. 2025; 12(1): 16–27p.

[239]. SultanabanuSayyadLiyakat. (2025). Quantum Key Distribution in Optical Fiber Communication: A Study. Trends in Opto-electro & Optical Communication. 2025; 15(1): 30–40p.

[240]. KaziKutubuddinSayyadLiyakat. Fake Cryptocurrency Detection Using Python. Recent Trends in Programming languages. 2025; 12(01):1-7. Available from: https://journals.stmjournals.com/rtpl/article=2025/view=201421

[241]. Kutubuddin, KSK Approach in LOVE Health: AI-Driven- IoT(AIIoT) based Decision Making System in LOVE Health for Loved One, GRENZE International Journal of Engineering and Technology, 2025, 11(1), pp. 4628-4635. Grenze ID: 01.GIJET.11.1.371_1

[242]. KaziKutubuddinSayyadLiyakat. Multimedia Technology in Healthcare: A Study. Journal of Multimedia Technology & Recent Advancements. 2025; 12(1): 23–29p.

[243]. KaziKutubuddinSayyadLiyakat. TensorFlow- Based Big Data Analytics for IoT Networks: A Study. International Journal of Data Structure Studies. 2025; 3(1): 32–40p.

[244]. KaziKutubuddinSayyadLiyakat. Brand Protection Using Machine Learning: A New Era. E-Commerce for Future & Trends. 2025; 12(1): 33-44p.

[245]. Dhanve and Liyakat, "Machine Learning Forges a New Future for Metal Processing: A Study," International Journal of Artificial Intelligence in Mechanical Engineering, vol. 1, no. 1, pp. 1-12, Mar. 2025.

[246]. KutubuddinSayyadLiyakat. e-Skin Applications in Healthcare and Robotics: A Study. Journal of Advancements in Robotics. 2025; 12(1):13 –21p.

DOI: 10.48175/IJARSCT-26663

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[247]. KutubuddinSayyadLiyakat. Millimeter Wave in Internet of Things Connectivity: A Study. International Journal of Wireless Security and Networks. 2025; 03(01):13-23.

[248]. KutubuddinSayyadLiyakat. TensorFlow-Based Big Data Analytics for IoT Networks: A Study. International Journal of Data Structure Studies. 2025; 03(01):31-38.

[249]. KutubuddinSayyadLiyakat. Multimedia Technology in Healthcare: A Study. Journal of Multimedia Technology & Recent Advancements. 2025; 12(01):23-29.

[250]. Jatin M. Patil, "Robotic Surgery using AI-Driven-IoT Based Decision Making for Safety: A Study" International Journal of Artificial Intelligence of Things (AIoT) in Communication Industry, vol. 1, no. 1, pp. 35-44, Mar. 2025.

[251]. K. K. S. Liyakat,(2025). VHDL Programming for Secure True Random Number Generators in IoT Security, Research & Review: Electronics and Communication Engineering, vol. 2, no. 1, pp. 38-47, Mar. 2025.

[252]. KaziKutubuddinSayyadLiyakat. E-Comers and AI: Product Recommendation and Pricing. Journal of Artificial Intelligence Research & Advances. 2025; 12(2): 44–52p

[253]. KaziKutubuddinSayyadLiyakat. Nanorobotics in Cancer Treatment: A Study. International Journal of Nanomaterials and Nanostructures. 2025; 11(1): 1–9p.

[254]. KaziKutubuddinSayyadLiyakat, Jatin M. Patil, VelapureAmol S., KhadakeSuhas B. The Intersection of Nanotechnology and IoT: New Era of Connectivity. International Journal of Applied Nanotechnology. 2025; 11(1): 9–17p.

[255]. KaziKutubuddinSayyadLiyakat. Tiny Titans: The Promise of E-Nano Robots in the Fight Against Cancer. Journal of Advancements in Robotics. 2025; 12(2): 12–22p.

[256]. Khadake, S., Kawade, S., Moholkar, S., Pawar, M. (2024). A Review of 6G Technologies and Its Advantages Over 5G Technology. In: Pawar, P.M., et al. Techno-societal 2022. ICATSA 2022. Springer, Cham. https://doi.org/10.1007/978-3-031-34644-6_107.

[257]. V. J. Patil, S. B. Khadake, D. A. Tamboli, H. M. Mallad, S. M. Takpere and V. A. Sawant, "Review of AI in Power Electronics and Drive Systems," 2024 3rd International conference on Power Electronics and IoT Applications in Renewable Energy and its Control (PARC), Mathura, India, 2024, pp. 94-99, doi: 10.1109/PARC59193.2024.10486488

[258]. A BalkrishnaDudgikar, A Ahmad Akbar Ingalgi, A GensidhaJamadar et al., "Intelligent battery swapping system for electric vehicles with charging stations locator on IoT and cloud platform", International Journal of Advanced Research in Science Communication and Technology, vol. 3, no. 1, pp. 204-208, January 2023. DOI: 10.48175/IJARSCT-7867. Available at: https://ijarsct.co.in/Paper7867.pdf

[259]. S. B. Khadake and V. J. Patil, "Prototype Design & Development of Solar Based Electric Vehicle," 2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON), Bangalore, India, 2023, pp. 1-7, doi: 10.1109/SMARTGENCON60755.2023.10442455.

[260]. V. J. Patil, S. B. Khadake, D. A. Tamboli, H. M. Mallad, S. M. Takpere and V. A. Sawant, "A Comprehensive Analysis of Artificial Intelligence Integration in Electrical Engineering," 2024 5th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI), Lalitpur, Nepal, 2024, pp. 484-491, doi: 10.1109/ICMCSI61536.2024.00076.

[261]. Suhas B. Khadake, Sudarshan P. Dolli, K.S. Rathod, O.P. Waghmare and A.V. Deshpande, "AN OVERVIEW OF INTELLIGENT TRAFFIC CONTROL SYSTEM USING PLC AND USE OF CURRENT DATA OF VEHICLE TRAVELS", JournalNX, pp. 1-4, Jan. 2021.

[262]. Shraddha S Magar, Archana S Sugandhi, Shweta H Pawar, Suhas B Khadake, H. M. Mallad,"Harnessing Wind Vibration, a Novel Approach towards Electric Energy Generation- Review", IJARSCT, Volume 4, Issue 2, October 2024, pp. 73-82. DOI: 10.48175/IJARSCT-19811.

[263]. Khadake, S. B., Padavale, P. V., Dhere, P. M., &Lingade, B. M., "Automatic hand dispenser and temperature scanner for Covid-19 prevention", International Journal of Advanced Research in Science,

Communication and Technology, 3(2), 362-367. DOI: 10.48175/IJARSCT-11364. https://ijarsct.co.in/A11364.pdf

[264]. Seema S Landage, Sonali R Chavan, Pooja A Kokate, Sonal P Lohar, M. K. Pawar, Suhas B Khadake.,"Solar Outdoor Air Purifier With Air Quality Monitoring System", Synergies Of Innovation: Proceedings Of Ncstem 2023, Pp. 260-266, September, 2024. Available At: https://www.researchgate.net/publication/383631190_Solar_Outdoor_Air_Purifier_with_Air_Quality_Monitoring_System

[265]. Suhas B. Khadake. (2021). Detecting Salient Objects Of Natural Scene In A Video's Using Spatio-Temporal Saliency &Amp; Colour Map. Journalnx - A Multidisciplinary Peer Reviewed Journal, 2(08), 30–35. Retrieved From Https://Repo.Journalnx.Com/Index.Php/Nx/Article/View/1070

[266]. Khadake Suhas .B. (2021). Detecting Salient Objects In A Video's By Using spatio-Temporal Saliency &Colour Map. International Journal Of Innovations In Engineering Research And Technology, 3(8), 1-9.Https://Repo.Ijiert.Org/Index.Php/Ijiert/Article/View/910.

[267]. Prachi S Bhosale, Pallavi D Kokare, Dipali S Potdar, Shrutika D Waghmode, V A Sawant, Suhas B Khadake.,"DTMF Based Irrigation Water Pump Control System", Synergies Of Innovation: Proceedings Of NCSTEM 2023, Pp. 267-273, September, 2024. Available At: https://www.researchgate.net/publication/383629320_DTMF_Based_Irrigation_Water_Pump_Control_System

[268]. PramodKorake, HarshwardhanMurade, RushikeshDoke, VikasNarale, Suhas B. Khadake, Aniket S Chavan., "Automatic Load Sharing of Distribution Transformer using PLC", Synergies Of Innovation: Proceedings Of NCSTEM 2023, Pp. 253-259, September, 2024. Available At: https://www.researchgate.net/publication/383628063_Automatic_Load_Sharing_of_Distribution_Transformer_using_PLC

[269]. Suhas B khadake, Pranita J Kashid, Asmita M Kawade, Santoshi V Khedekar, H. M. Mallad .,"Electric Vehicle Technology Battery Management –Review", International Journal of Advanced Research in Science, Communication and Technology, Volume 3, Issue 2, Septeber 2023,pp. 319-325. DOI: 10.48175/IJARSCT-13048.Available at: https://www.researchgate.net/publication/374263508_Electric_Vehicle_Technology_Battery_Management_-_Review

[270]. Suhas B. khadake, AmolChounde, Buddhapriy B. Gopnarayan, Karan BabasoPatil, Shashikant S Kamble. (2024). Human Health Care System: A New Approach towards Life, 15th International Conference on Advances in computing, Control, and Telecommunication Technologies, ACT 2024, 2024, 2, pp. 5487-5494.

[271]. Khadake SB, Patil VJ, Mallad HM, Gopnarayan BB, Patil KB. "Maximize farming productivity through agriculture 4.0 based intelligence, with use of agri tech sense advanced crop monitoring system".,GrenzeInt J Eng Technol. 2024;10(2):5127–5134. Available At: Https://Thegrenze.Com/Index.Php?Display=Page&View=Journalabstract&Absid=3336&Id=8

[272]. Suhas B Khadake, Santoshi V Khedekar, Asmita M Kawade, ShradhhaShivajiVyavahare, Pranita J Kashid, ChoundeAmol B, H. M. Mallad., "Solar Based Electric Vehicle Charging System-Review", IJARSCT, vol. 4, Issue 2, December 2024, pp. 42-57, DOI: 10.48175/IJARSCT-22705

[273]. Suhas B khadake, Shraddha S Magar, Archana S Sugandhi, Shweta H Pawar," A Research Paper on Harnessing Wind Vibration Novel Approach towards Electric Energy Generation", IJARSCT, Volume 5, Issue 4, May 2025, pp. 533-552. DOI: 10.48175/IJARSCT-26466

[274]. Avinash. A. Suryagan, Arti L Nemte, Kirti D Thorat, Suhas B Khadake,"IoT Based Flood Monitoring System by usingThing Speak Cloud", IJARSCT, Volume 5, Issue 4, May 2025, pp. 666-687. DOI: 10.48175/IJARSCT-26480

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 5, May 2025
Impact Factor: 7.67

[275]. Sagar M Chavare, Prasad P Nanaware, Shriprasad S Wagh, Ashish T Jadhav, YeoleYogesh, Suhas B Khadake," Smart Plant Monitoring and Automated Irrigation System Using IOT", IJARSCT, Volume 5, Issue 4, May 2025, pp. 688-706. DOI: 10.48175/IJARSCT-26481

[276]. Shraddha S Magar, Archana S Sugandhi, Shweta H Pawar, et.al. ,"A Research Paper on Harnessing Wind VibrationNovel Approach towards Electric EnergyGeneration", IJARSCT, Volume 5, Issue 4, May 2025, pp. 533-552. DOI: 10.48175/IJARSCT-26466.

[277]. Akshay B Randive , SnehaKiranGaikwad , Suhas B Khadake , Mallad H. M., "Biodiesel: A Renewable Source of Fuel", IJARSCT, vol. 4, Issue 3, December 2024, pp. 225-240, DOI: 10.48175/IJARSCT-22836 Available at: https://www.researchgate.net/publication/387352609_Biodiesel_A_Renewable_Source_of_Fuel

[278]. K. K. Sayyad Liyakat, S. B. Khadake, A. B. Chounde, A. A. Suryagan, M. H. M. and M. R. Khadatare, "AI-Driven-IoT(AIIoT) Based Decision Making System for High-Blood Pressure Patient Healthcare Monitoring," 2024 International Conference on Sustainable Communication Networks and Application (ICSCNA), Theni, India, 2024, pp. 96-102, doi: 10.1109/ICSCNA63714.2024.10863954.

[279]. K. K. Sayyad Liyakat, S. B. Khadake, D. A. Tamboli, V. A. Sawant, M. H. M. and S. Sathe, "AI-Driven-IoT(AIIoT) Based Decision-Making- KSK Approach in Drones for Climate Change Study," 2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS), Gobichettipalayam, India, 2024, pp. 1735-1744, doi: 10.1109/ICUIS64676.2024.10866450.

[280]. G.D.Rai."Nonconventionalenergysource",Khannapublication(2010)ISBN9788174090737

[281]. Typesofwindturbine,www.Teachergeek.com

[282]. ObiLaserproductwebsite(2010),http://www.obilaser.com

[283]. PaulKruger"AlternativeEnergyResources:TheQuestforSustainableEnergy"ISBN:978-0-471- 77208-8 February 200

[284]. TheTeslasturbine,Matejpobergas,Adviser:Pro.Dr.RedolfPodornik,Seminar(mach2011)

[285]. KLAVANS, R. Taxonomies; International Comparisons & Policy Applications. Visualization Workshop at National Science Foundation (2008)