Advanced Analysis of Employment Dynamics in India: Key Determinants and Strategic Perspectives

Ms. Leena Johnson

Higher Secondary Teacher (Economics)

ABSTRACT

Employment in India is a major issue as it affects the overall growth of the economy. Various aspects of employment contribute to better understanding of the topic. The major reason for the low employment rate in India is due to the lack of quality education and skills among the Indian youth. Though the government has taken various measures to improve the employment rate in India such as providing skill employment training to the unemployed, providing better access to capital for small businesses etc, the unemployment rate is estimated to be around 8.5%. As per the statistics in 2023 there are more than 400 million people in India who are either unemployed or under employed. In addition to the issue of unemployment there are also problems with under employment and low wages. It is important to note that the people who are already employed do not receive wages that are sufficient to support themselves and their families. The government needs to focus on creating an environment that encourages investment which leads to job creation. This paper delves deep into various aspects of employment in India such as present features of employment, contribution of different sectors to GDP, government initiatives to reduce unemployment etc

INTRODUCTION

Employment in India plays a significant role in the country's economic development and social well-being. It refers to the occupations in which people work for others and get remunerated in return. It is always an indicator which denotes the economic progress of the country and the standard of living of the people. As a matter of fact, employment contributes to the country's GDP (Goss Domestic Product) that leads its economic development. The current employment in India can be divided into two categories such as formal and informal employment. Informal employment is provided by the unorganised sector or small-scale businesses where as the formal employment is provided by the government or by private companies. As per the latest data released by the government, the unemployment rate in India is around 6.43%. India is the second largest labour pool with 437 million in the world.

Features of Employment in India

There certain features of employment that are to be discussed in this paper to make the various aspect tangible. The features are as follows

- > 7% of the workers work in the organised sector, but 93% of the workers work in unorganised sector.
- > Many workers in the unorganised sector work for less than minimum wages.
- > No capital investment is needed of an employee
- > The main aim of a person accepting employment is to earn money.
- Some types of work require educational qualifications, some require some specific skill and some require both.
- ➢ 70% of workers are men and 30% are women. 30.03% of rural women are engaged in work force and in urban it is only 15.44 %, about half of the rural (as of dated 9th September 2022).

Different sectors of Indian economy

There are eight sectors that are used for calculation of national income, and these sectors fall under three main categories such as primary, secondary, tertiary sector.

Primary sector refers to

- 1. Agriculture and allied activities
- 2. Mining quarrying, fisheries etc

Secondary sector

- 3. Manufacturing
- 4. Electricity, gas and water supply
- 5. Construction

Tertiary sector

- 6. Trade
- 7. Transport and storage
- 8. services

Major job sectors in India

A job sector is an economic term that is used to classify a broad group of occupations and industries that are related by what they do. The major job sectors are agriculture, education, healthcare, information technology and real estate. These sectors create numerous job opportunities for aspiring profession who are provided with a chance to gradually apply their skills, improve their knowledge and advance their career.

There are certain other important sectors that can contribute to the sustainability of the countries' economy by bringing in revenue, employing more individual and providing job satisfaction. They are tourism, manufacturing, transportation, natural resources and retail supply.

Gig Economy

The term 'Gig economy' means a general workforce environment. It includes short term employment, contractual job and independent contractors. Gig economy is also known as freelancer economy. A gig is a job that only last a certain period of time. It consists of consumers, workers and companies where the workers are paid per task, per project or per work contract. These include driving for a ride-sharing service, painting someone' s house, coaching, fitness training, tutoring etc.

CONTRIBUTION OF DIFFERENT SECTORS IN GDP

Primary sector

The primary sector is the most important economic sector of India and it contributes to the overall economic growth of the country tremendously. It covers agriculture, dairy, fishing, forestry etc.

It contributes more than 20% of the GDP of India and provides employment to more than 50% of the Indian population. The primary sector contribution is actually decreasing as India is progressing.

Secondary sector

So many individuals are employed in the secondary sector which is responsible for 20 % of the total GDP in India. The secondary sector of the economy contributes to the expansion of another sector as well. The secondary sector accounts for more than 10% of India's GDP.

Tertiary sector

The tertiary sector contributed 53.89% to the GDP of India in 2020-22. The tertiary sector covers a wide range of activities from commerce to administration, transport, financial and real estate activities, business and personal services, education, health and social works.

India ranks 9th in tertiary sector output. It consists of the soft part of the economy i.e. activities where people offer their knowledge and time to improve productivity, performance, potential, sustainability etc.

This sector covers a wide variety of activities such as trade, transport, storage, communication financing, social and personal services etc. It has made rapid strides in the past decade and a half to emerge as the largest and one of the fastest growing sectors of the economy.

Liberalisation policies and other reforms in 1990s induced this growth. Certain factors such as economic affluence, changing role of women cultural changes awareness towards conserving natural resources, development of markets, increased consciousness of health care etc where the driving forces for the growth of this sector

Employment growth has decreased, employment content of growth has shown a decline, sectors with higher employment potential have registered relatively slower growth and in agriculture, most of the employment growth has been contributed by the unorganised, informal sector characterised by poor income and conditions of poor

Government Initiative To Increase Employment

The following are the some of the steps taken by government of India to increase employment as on 14th July 2023

Atmanirbhar Bharat Rojgar Yojana

It was launched on 1st October 2020 to incentivize employers for creation of new employment along with social security benefit and restoration of loss of employment during covid 19 pandemic.

Pradhan Mantri Rojgar Protsahan Yojana

It was launched in 2016 to encourage employers for creation of new employment

Mahatma Gandhi National Rural Employment Guarantee Act

MGNREGA is to provide 100 days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work

Pradhan Mantri Gareeb Kalynan Rozgar Abhiyan

It is a 125-day Abhiyan launched by honourable prime minister in June 2020. Its mission is to address the issues of returning migrant workers and also similarly affected rural population.

PM Gati shakti-National masterplan for multi modal connectivity

It was launched on 13th October 20-21 for providing multi model connectivity infrastructure to various economic zones.it is a transformative approach for economic growth and sustainable development. Seven engines such as railways road ports water ways air ports mass transport and logistic infra structure drive this approach.

Flagship Programmes Of The Government That Have The Potential To Generate Productive Employment Opportnities

Digital India

It is a flagship programme of the government of India with a vision to transform India into a digitally empowered society and knowledge economy. It is a campaign to ensure that the government services are made available to citizens electronically through improved online infrastructure.it empowers India in the field of technology by enhancing internet connectivity. The nine pillars of digital India are Broadband Highways, Universal access to mobile connectivity, public internet access programme, E-Governemnt, E-Kranti, information for all, electronic manufacturing and IT for jobs.

Make-in-India

This initiative was launched in 2014 with the objective of facilitating investment, building best in class manufacturing infrastructure, fostering innovation, making it easy to do business and enhancing skill development. Make in India encouraged companies to develop manufacture and assemble product made in India. Four pillars of making in India initiative are new mind set, new sectors new infrastructure and new processes. Narendra Modi the prime minister of India coined the Slogan ' Zero Defect, Zero Effect' . It meant to produce products with no defects with no adverse environmental and ecological effect.

Start-up India

It intended to catalyse start up culture and build a strong and inclusive eco system for innovation and entrepreneurship in India.it was launched on 16th January 2016.It provides tax exemptions to startups for 3 years, subject to certain conditions. This scheme is based on three pillars such as providing funding support and incentives to the various startups of the country, to provide industry academia Partnership and incubation and simplification and handholding.

Pradhan Mantri Awas Yojana

This mission addresses urban housing shortage among the EWS-LIG and MIG categories including the slum dwellers by ensuring a pucca house to all eligible urban householders by the year 2020-22.it aims at providing affordable housing to the urban poor by the year 2020-24.it is implemented by urban local bodies, development authorities, housing board etc selected by state government.it ensures that urban localities are slums free and that all citizens have access to basic services.

Smart Cities

Smart cities mission was launched in 2016 with an objective to promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of smart solutions

Stand-up-India Scheme

The main objective of the standup India scheme is to facilitate bank loans between 10 lakhs and one crore to at least one SC/ST borrower and at least one women borrower her bank branch for setting up a greenfield enterprise. This scheme has proved to be an important mile stone.

CONCLUSION

Employment in India is a critical topic of discussion due to its implication on social economic and political stability. The formal sector and informal sector define the employment structure in India. Unemployment remains as a significant issue despite the rapid economic growth. The government of India has initiated several measures to address these challenges such as skill development programmes job creation in rural areas and promoting entrepreneurship. Employment in India is a complex issue. However, with the right policies and initiatives it can be improved.

ACKNOWLEDGMENTS

- [1]. Santhosh Palavesh. (2019). The Role of Open Innovation and Crowdsourcing in Generating New Business Ideas and Concepts. International Journal for Research Publication and Seminar, 10(4), 137–147. https://doi.org/10.36676/jrps.v10.i4.1456
- [2]. Santosh Palavesh. (2021). Developing Business Concepts for Underserved Markets: Identifying and Addressing Unmet Needs in Niche or Emerging Markets. Innovative Research Thoughts, 7(3), 76–89. https://doi.org/10.36676/irt.v7.i3.1437
- [3]. Palavesh, S. (2021). Co-Creating Business Concepts with Customers: Approaches to the Use of Customers in New Product/Service Development. Integrated Journal for Research in Arts and Humanities, 1(1), 54–66. https://doi.org/10.55544/ijrah.1.1.9
- [4]. Santhosh Palavesh. (2022). Entrepreneurial Opportunities in the Circular Economy: Defining Business Concepts for Closed-Loop Systems and Resource Efficiency. European Economic Letters (EEL), 12(2), 189– 204. https://doi.org/10.52783/eel.v12i2.1785
- [5]. Santhosh Palavesh. (2022). The Impact of Emerging Technologies (e.g., AI, Blockchain, IoT) On Conceptualizing and Delivering new Business Offerings. International Journal on Recent and Innovation Trends in Computing and Communication, 10(9), 160–173. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10955
- [6]. Palavesh, S. (2024). Developing sustainable business concepts: Integrating environmental, social, and economic considerations into new venture ideation. African Journal of Biological Sciences, 6(14), 3025-3043. https://doi.org/10.48047/AFJBS.6.14.2024.3025-3043
- [7]. Santhosh Palavesh. (2021). Business Model Innovation: Strategies for Creating and Capturing Value Through Novel Business Concepts. European Economic Letters (EEL), 11(1). https://doi.org/10.52783/eel.v11i1.1784
- [8]. Santhosh Palavesh. (2023). Leveraging Lean Startup Principles: Developing And Testing Minimum Viable Products (Mvps) In New Business Ventures. Educational Administration: Theory and Practice, 29(4), 2418– 2424. https://doi.org/10.53555/kuey.v29i4.7141
- [9]. Palavesh, S. (2023). The role of design thinking in conceptualizing and validating new business ideas. Journal of Informatics Education and Research, 3(2), 3057.
- [10]. Santhosh Palavesh. (2024). Identifying Market Gaps and Unmet Customer Needs: A Framework for Ideating Innovative Business Concepts. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 1067 –. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6612
- [11]. Vijaya Venkata Sri Rama Bhaskar, Akhil Mittal, Santosh Palavesh, Krishnateja Shiva, Pradeep Etikani. (2020). Regulating AI in Fintech: Balancing Innovation with Consumer Protection. European Economic Letters (EEL), 10(1). https://doi.org/10.52783/eel.v10i1.1810
- [12]. Sri Sai Subramanyam Challa. (2023). Regulatory Intelligence: Leveraging Data Analytics for Regulatory Decision-Making. International Journal on Recent and Innovation Trends in Computing and Communication, 11(11), 1426–1434. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10893
- [13]. Sri Sai Subramanyam Challa. (2024). Leveraging AI for Risk Management in Computer System Validation. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 145–153. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/95
- [14]. Challa, S. S. S. (2020). Assessing the regulatory implications of personalized medicine and the use of biomarkers in drug development and approval. European Chemical Bulletin, 9(4), 134-146.
- [15]. D.O.I10.53555/ecb.v9:i4.17671
- [16]. AmolKulkarni. (2023). "Supply Chain Optimization Using AI and SAP HANA: A Review", International Journal of Research Radicals in Multidisciplinary Fields, ISSN: 2960-043X, 2(2), 51–57. Retrieved from https://www.researchradicals.com/index.php/rr/article/view/81
- [17]. Sravan Kumar Pala, Investigating Fraud Detection in Insurance Claims using Data Science, International Journal of Enhanced Research in Science, Technology & Engineering ISSN: 2319-7463, Vol. 11 Issue 3, March-2022.
- [18]. Raina, Palak, and Hitali Shah."Security in Networks." International Journal of Business Management and Visuals, ISSN: 3006-2705 1.2 (2018): 30-48.

- [19]. EVALUATING THE EFFECTIVENESS OF RISK-BASED APPROACHES IN STREAMLINING THE REGULATORY APPROVAL PROCESS FOR NOVEL THERAPIES. (2021). Journal of Population Therapeutics and Clinical Pharmacology, 28(2), 436-448. https://doi.org/10.53555/jptcp.v28i2.7421
- [20]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2019). Investigating the use of natural language processing (NLP) techniques in automating the extraction of regulatory requirements from unstructured data sources. Annals of Pharma Research, 7(5), 380-387.
- [21]. Tilala, M., Challa, S. S. S., Chawda, A. D., Benke, A. P., & Sharma, S. (2024). Analyzing the role of realworld evidence (RWE) in supporting regulatory decision-making and post-marketing surveillance. African Journal of Biological Sciences, 6(14), 3060-3075. https://doi.org/10.48047/AFJBS.6.14.2024.3060-3075
- [22]. Goswami, MaloyJyoti. "Study on Implementing AI for Predictive Maintenance in Software Releases." International Journal of Research Radicals in Multidisciplinary Fields, ISSN: 2960-043X 1.2 (2022): 93-99.
- [23]. Bharath Kumar. (2022). AI Implementation for Predictive Maintenance in Software Releases. International Journal of Research and Review Techniques, 1(1), 37–42. Retrieved from https://ijrrt.com/index.php/ijrrt/article/view/175
- [24]. Chintala, S. "AI-Driven Personalised Treatment Plans: The Future of Precision Medicine." Machine Intelligence Research 17.02 (2023): 9718-9728.
- [25]. AmolKulkarni. (2023). Image Recognition and Processing in SAP HANA Using Deep Learning. International Journal of Research and Review Techniques, 2(4), 50–58. Retrieved from:https://ijrrt.com/index.php/ijrrt/article/view/176
- [26]. Ashok Choppadandi. (2022). Exploring the Potential of Blockchain Technology in Enhancing Supply Chain Transparency and Compliance with Good Distribution Practices (GDP). International Journal on Recent and Innovation Trends in Computing and Communication, 10(12), 336–343. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10981
- [27]. Challa, S. S. S., Chawda, A. D., Benke, A. P., & Tilala, M. (2020). Evaluating the use of machine learning algorithms in predicting drug-drug interactions and adverse events during the drug development process. NeuroQuantology, 18(12), 176-186. https://doi.org/10.48047/nq.2020.18.12.NQ20252
- [28]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2023). Investigating the impact of AI-assisted drug discovery on the efficiency and cost-effectiveness of pharmaceutical R&D. Journal of Cardiovascular Disease Research, 14(10), 2244.
- [29]. Sravan Kumar Pala, "Implementing Master Data Management on Healthcare Data Tools Like (Data Flux, MDM Informatica and Python)", IJTD, vol. 10, no. 1, pp. 35–41, Jun. 2023. Available: https://internationaljournals.org/index.php/ijtd/article/view/53
- [30]. Goswami, MaloyJyoti. "Leveraging AI for Cost Efficiency and Optimized Cloud Resource Management." International Journal of New Media Studies: International Peer Reviewed Scholarly Indexed Journal 7.1 (2020): 21-27.
- [31]. Hitali Shah.(2017). Built-in Testing for Component-Based Software Development. International Journal of New Media Studies: International Peer Reviewed Scholarly Indexed Journal, 4(2), 104–107. Retrieved from https://ijnms.com/index.php/ijnms/article/view/259
- [32]. Palak Raina, Hitali Shah. (2017). A New Transmission Scheme for MIMO OFDM using V Blast Architecture.Eduzone: International Peer Reviewed/Refereed Multidisciplinary Journal, 6(1), 31–38. Retrieved from https://www.eduzonejournal.com/index.php/eiprmj/article/view/628
- [33]. Neha Yadav, Vivek Singh, "Probabilistic Modeling of Workload Patterns for Capacity Planning in Data Center Environments" (2022). International Journal of Business Management and Visuals, ISSN: 3006-2705, 5(1), 42-48. https://ijbmv.com/index.php/home/article/view/73
- [34]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2022). Quality Management Systems in Regulatory Affairs: Implementation Challenges and Solutions. Journal for Research in Applied Sciences and Biotechnology, 1(3), 278–284. https://doi.org/10.55544/jrasb.1.3.36
- [35]. Challa, S. S. S., Chawda, A. D., Benke, A. P., & Tilala, M. (2024). Streamlining Change Control Processes in Regulatory Affairs: Best Practices and Case Studies. Integrated Journal for Research in Arts and Humanities, 4(4), 67–75. https://doi.org/10.55544/ijrah.4.4.12
- [36]. Harshita Cherukuri. (2024). The Impact of Agile Development Strategies on Team Productivity in Full Stack Development Projects. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 175 –. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6407
- [37]. Ranjit Kumar Gupta, Sagar Shukla, Anaswara Thekkan Rajan, & Sneha Aravind. (2022). Leveraging Data Analytics to Improve User Satisfaction for Key Personas: The Impact of Feedback Loops. International Journal for Research Publication and Seminar, 11(4), 242–252. https://doi.org/10.36676/jrps.v11.i4.1489
- [38]. Ranjit Kumar Gupta, Harshita Cherukuri, Sagar Shukla, Anaswara Thekkan Rajan, Sneha Aravind. (2024). Deploying Containerized Microservices in on-Premise Kubernetes Environments: Challenges and Best Practices. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 74–90. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/86

- [39]. Ranjit Kumar Gupta, Sagar Shukla, Anaswara Thekkan Rajan, Sneha Aravind, 2021. "Utilizing Splunk for Proactive Issue Resolution in Full Stack Development Projects" ESP Journal of Engineering & Technology Advancements 1(1): 57-64.
- [40]. Ranjit Kumar Gupta, Sagar Shukla, Anaswara Thekkan Rajan, Sneha Aravind, Ashok Choppadandi. (2024). Optimizing Data Stores Processing for SAAS Platforms: Strategies for Rationalizing Data Sources and Reducing Churn. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 176–197. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/99
- [41]. Sagar Shukla, Anaswara Thekkan Rajan, Sneha Aravind, Ranjit Kumar Gupta, Santosh Palavesh. (2023). Monetizing API Suites: Best Practices for Establishing Data Partnerships and Iterating on Customer Feedback. European Economic Letters (EEL), 13(5), 2040–2053. https://doi.org/10.52783/eel.v13i5.1798
- [42]. Aravind, S., Cherukuri, H., Gupta, R. K., Shukla, S., & Rajan, A. T. (2022). The role of HTML5 and CSS3 in creating optimized graphic prototype websites and application interfaces. NeuroQuantology, 20(12), 4522-4536. https://doi.org/10.48047/NQ.2022.20.12.NQ77775
- [43]. Sneha Aravind, Ranjit Kumar Gupta, Sagar Shukla, & Anaswara Thekkan Rajan. (2024). Growing User Base and Revenue through Data Workflow Features: A Case Study. International Journal of Communication Networks and Information Security (IJCNIS), 16(1 (Special Issue), 436–455. Retrieved from https://www.ijcnis.org/index.php/ijcnis/article/view/6832
- [44]. Chintala, Sathishkumar. "Explore the impact of emerging technologies such as AI, machine learning, and blockchain on transforming retail marketing strategies." Webology (ISSN: 1735-188X) 18.1 (2021).
- [45]. Ayyalasomayajula, M., and S. Chintala. "Fast Parallelizable Cassava Plant Disease Detection using Ensemble Learning with Fine Tuned AmoebaNet and ResNeXt-101." Turkish Journal of Computer and Mathematics Education (TURCOMAT) 11.3 (2020): 3013-3023.
- [46]. Raina, Palak, and Hitali Shah."Data-Intensive Computing on Grid Computing Environment." International Journal of Open Publication and Exploration (IJOPE), ISSN: 3006-2853, Volume 6, Issue 1, January-June, 2018.
- [47]. Hitali Shah."Millimeter-Wave Mobile Communication for 5G". International Journal of Transcontinental Discoveries, ISSN: 3006-628X, vol. 5, no. 1, July 2018, pp. 68-74, https://internationaljournals.org/index.php/ijtd/article/view/102.
- [48]. Alok Gupta. (2024). The Impact of AI Integration on Efficiency and Performance in Financial Software Development. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 185– 193. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6408
- [49]. Ugandhar Dasi, Nikhil Singla, Rajkumar Balasubramanian, Siddhant Benadikar, Rishabh Rajesh Shanbhag. (2024). Privacy-Preserving Machine Learning Techniques: Balancing Utility and Data Protection. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 251–261. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/107
- [50]. Ugandhar Dasi. (2024). Developing A Cloud-Based Natural Language Processing (NLP) Platform for Sentiment Analysis and Opinion Mining of Social Media Data. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 165–174. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6406
- [51]. Ugandhar Dasi. (2024). Developing A Cloud-Based Natural Language Processing (NLP) Platform for Sentiment Analysis and Opinion Mining of Social Media Data. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 165–174. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6406
- [52]. Dasi, U., Singla, N., Balasubramanian, R., Benadikar, S., & Shanbhag, R. R. (2024). Ethical implications of AI-driven personalization in digital media. Journal of Informatics Education and Research, 4(3), 588-593.
- [53]. Nikhil Singla. (2023). Assessing the Performance and Cost-Efficiency of Serverless Computing for Deploying and Scaling AI and ML Workloads in the Cloud. International Journal of Intelligent Systems and Applications in Engineering, 11(5s), 618–630. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6730
- [54]. Ugandhar Dasi, Nikhil Singla, Rajkumar Balasubramanian, Siddhant Benadikar, Rishabh Rajesh Shanbhag. (2024). Analyzing the Security and Privacy Challenges in Implementing Ai and Ml Models in Multi-Tenant Cloud Environments. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 262–270. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/108
- [55]. Balasubramanian, R., Benadikar, S., Shanbhag, R. R., Dasi, U., & Singla, N. (2024). Investigating the application of reinforcement learning algorithms for autonomous resource management in cloud computing environments. African Journal of Biological Sciences, 6(14), 6451-6480. https://doi.org/10.48047/AFJBS.6.14.2024.6451-6480
- [56]. MMTA SathishkumarChintala, "Optimizing predictive accuracy with gradient boosted trees infinancial forecasting" Turkish Journal of Computer and Mathematics Education (TURCOMAT) 10.3 (2019).
- [57]. Chintala, S. "IoT and Cloud Computing: Enhancing Connectivity." International Journal of New Media Studies (IJNMS) 6.1 (2019): 18-25.

- [58]. Goswami, MaloyJyoti. "Study on Implementing AI for Predictive Maintenance in Software Releases." International Journal of Research Radicals in Multidisciplinary Fields, ISSN: 2960-043X 1.2 (2022): 93-99.
- [59]. Bharath Kumar. (2022). Integration of AI and Neuroscience for Advancing Brain-Machine Interfaces: A Study. International Journal of New Media Studies: International Peer Reviewed Scholarly Indexed Journal, 9(1), 25–30. Retrieved from https://ijnms.com/index.php/ijnms/article/view/246
- [60]. Sravan Kumar Pala, Use and Applications of Data Analytics in Human Resource Management and Talent Acquisition, International Journal of Enhanced Research in Management & Computer Applications ISSN: 2319-7463, Vol. 10 Issue 6, June-2021.
- [61]. Rishabh Rajesh Shanbhag, Rajkumar Balasubramanian, Ugandhar Dasi, Nikhil Singla, & Siddhant Benadikar. (2022). Case Studies and Best Practices in Cloud-Based Big Data Analytics for Process Control. International Journal for Research Publication and Seminar, 13(5), 292–311. https://doi.org/10.36676/jrps.v13.i5.1462
- [62]. Siddhant Benadikar. (2021). Developing a Scalable and Efficient Cloud-Based Framework for Distributed Machine Learning. International Journal of Intelligent Systems and Applications in Engineering, 9(4), 288 –. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6761
- [63]. Siddhant Benadikar. (2021). Evaluating the Effectiveness of Cloud-Based AI and ML Techniques for Personalized Healthcare and Remote Patient Monitoring. International Journal on Recent and Innovation Trends in Computing and Communication, 9(10), 03–16. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/11036
- [64]. Shanbhag, R. R., Benadikar, S., Dasi, U., Singla, N., & Balasubramanian, R. (2024). Investigating the application of transfer learning techniques in cloud-based AI systems for improved performance and reduced training time. Letters in High Energy Physics, 31.
- [65]. Rishabh Rajesh Shanbhag. (2023). Exploring the Use of Cloud-Based AI and ML for Real-Time Anomaly Detection and Predictive Maintenance in Industrial IoT Systems. International Journal of Intelligent Systems and Applications in Engineering, 11(4), 925 –. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6762
- [66]. Nikhil Singla. (2023). Assessing the Performance and Cost-Efficiency of Serverless Computing for Deploying and Scaling AI and ML Workloads in the Cloud. International Journal of Intelligent Systems and Applications in Engineering, 11(5s), 618–630. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/673
- [67]. Nikhil Singla. (2023). Assessing the Performance and Cost-Efficiency of Serverless Computing for Deploying and Scaling AI and ML Workloads in the Cloud. International Journal of Intelligent Systems and Applications in Engineering, 11(5s), 618–630. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6730
- [68]. Challa, S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2019). Investigating the use of natural language processing (NLP) techniques in automating the extraction of regulatory requirements from unstructured data sources. Annals of PharmaResearch, 7(5), 380-387.
- [69]. Chaturvedi, R., & Sharma, S. (2024). Implementing Predictive Analytics for Proactive Revenue Cycle Management. Journal for Research in Applied Sciences and Biotechnology, 3(4), 74–78. https://doi.org/10.55544/jrasb.3.4.9
- [70]. Chaturvedi, R., Sharma, S., Pandian, P. K. G., & Sharma, S. (2024). Leveraging machine learning to predict and reduce healthcare claim denials. Zenodo. https://doi.org/10.5281/zenodo.13268360
- [71]. Ritesh Chaturvedi. (2023). Robotic Process Automation (RPA) in Healthcare: Transforming Revenue Cycle Operations. International Journal on Recent and Innovation Trends in Computing and Communication, 11(6), 652–658. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/11045
- [72]. Chaturvedi, R., & Sharma, S. (2022). Assessing the Long-Term Benefits of Automated Remittance in Large Healthcare Networks. Journal for Research in Applied Sciences and Biotechnology, 1(5), 219–224. https://doi.org/10.55544/jrasb.1.5.25
- [73]. Chaturvedi, R., & Sharma, S. (2022). Enhancing healthcare staffing efficiency with AI-powered demand management tools. Eurasian Chemical Bulletin, 11(Regular Issue 1), 675-681. https://doi.org/10.5281/zenodo.13268360
- [74]. Dr. Saloni Sharma, & Ritesh Chaturvedi. (2017). Blockchain Technology in Healthcare Billing: Enhancing Transparency and Security. International Journal for Research Publication and Seminar, 10(2), 106–117. Retrieved from https://jrps.shodhsagar.com/index.php/j/article/view/1475
- [75]. Dr. Saloni Sharma, & Ritesh Chaturvedi. (2017). Blockchain Technology in Healthcare Billing: Enhancing Transparency and Security. International Journal for Research Publication and Seminar, 10(2), 106–117. Retrieved from https://jrps.shodhsagar.com/index.php/j/article/view/1475
- [76]. Saloni Sharma. (2020). AI-Driven Predictive Modelling for Early Disease Detection and Prevention. International Journal on Recent and Innovation Trends in Computing and Communication, 8(12), 27–36. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/11046

- [77]. Chaturvedi, R., & Sharma, S. (2022). Assessing the Long-Term Benefits of Automated Remittance in Large Healthcare Networks. Journal for Research in Applied Sciences and Biotechnology, 1(5), 219–224. https://doi.org/10.55544/jrasb.1.5.25
- [78]. Pavan Ogeti. (2024). Benefits and Challenges of Deploying Machine Learning Models in the Cloud. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 194–209. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6409
- [79]. Pavan Ogeti, Narendra Sharad Fadnavis, Gireesh Bhaulal Patil, Uday Krishna Padyana, Hitesh Premshankar Rai. (2022). Blockchain Technology for Secure and Transparent Financial Transactions. European Economic Letters (EEL), 12(2), 180–188. Retrieved from https://www.eelet.org.uk/index.php/journal/article/view/1283
- [80]. Ogeti, P., Fadnavis, N. S., Patil, G. B., Padyana, U. K., & Rai, H. P. (2023). Edge computing vs. cloud computing: A comparative analysis of their roles and benefits. Volume 20, No. 3, 214-226.
- [81]. Fadnavis, N. S., Patil, G. B., Padyana, U. K., Rai, H. P., & Ogeti, P. (2020). Machine learning applications in climate modeling and weather forecasting. NeuroQuantology, 18(6), 135-145. https://doi.org/10.48047/nq.2020.18.6.NQ20194
- [82]. Narendra Sharad Fadnavis. (2021). Optimizing Scalability and Performance in Cloud Services: Strategies and Solutions. International Journal on Recent and Innovation Trends in Computing and Communication, 9(2), 14–21. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10889
- [83]. Pala, Sravan Kumar. "Databricks Analytics: Empowering Data Processing, Machine Learning and Real-Time Analytics." Machine Learning 10.1 (2021).
- [84]. Goswami, MaloyJyoti. "Optimizing Product Lifecycle Management with AI: From Development to Deployment." International Journal of Business Management and Visuals, ISSN: 3006-2705 6.1 (2023): 36-42.
- [85]. Vivek Singh, NehaYadav. (2023). Optimizing Resource Allocation in Containerized Environments with AIdriven Performance Engineering. International Journal of Research Radicals in Multidisciplinary Fields, ISSN: 2960-043X, 2(2), 58–69. Retrieved from https://www.researchradicals.com/index.php/rr/article/view/83
- [86]. Gireesh Bhaulal Patil. (2022). AI-Driven Cloud Services: Enhancing Efficiency and Scalability in Modern Enterprises. International Journal of Intelligent Systems and Applications in Engineering, 10(1), 153–162. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6728
- [87]. Padyana, U. K., Rai, H. P., Ogeti, P., Fadnavis, N. S., & Patil, G. B. (2023). AI and Machine Learning in Cloud-Based Internet of Things (IoT) Solutions: A Comprehensive Review and Analysis. Integrated Journal for Research in Arts and Humanities, 3(3), 121–132. https://doi.org/10.55544/ijrah.3.3.20
- [88]. Patil, G. B., Padyana, U. K., Rai, H. P., Ogeti, P., & Fadnavis, N. S. (2021). Personalized marketing strategies through machine learning: Enhancing customer engagement. Journal of Informatics Education and Research, 1(1), 9. http://jier.org
- [89]. Padyana, U. K., Rai, H. P., Ogeti, P., Fadnavis, N. S., & Patil, G. B. (2023). AI and Machine Learning in Cloud-Based Internet of Things (IoT) Solutions: A Comprehensive Review and Analysis. Integrated Journal for Research in Arts and Humanities, 3(3), 121–132. https://doi.org/10.55544/ijrah.3.3.20
- [90]. Padyana, U. K., Rai, H. P., Ogeti, P., Fadnavis, N. S., & Patil, G. B. (2024). Predicting disease susceptibility with machine learning in genomics. Letters in High Energy Physics, 2024(20).
- [91]. Uday Krishna Padyana, Hitesh Premshankar Rai, Pavan Ogeti, Narendra Sharad Fadnavis, & Gireesh Bhaulal Patil. (2024). Server less Architectures in Cloud Computing: Evaluating Benefits and Drawbacks. Innovative Research Thoughts, 6(3), 1–12. https://doi.org/10.36676/irt.v10.i3.1439
- [92]. Rai, H. P., Ogeti, P., Fadnavis, N. S., Patil, G. B., & Padyana, U. K. (2024). AI-based forensic analysis of digital images: Techniques and applications in cybersecurity. Journal of Digital Economy, 2(1), 47-61.
- [93]. Hitesh Premshankar Rai, Pavan Ogeti, Narendra Sharad Fadnavis, Gireesh Bhaulal Patil, & Uday Krishna Padyana. (2024). Integrating Public and Private Clouds: The Future of Hybrid Cloud Solutions. Universal Research Reports, 8(2), 143–153. https://doi.org/10.36676/urr.v9.i4.1320
- [94]. Hitesh Premshankar Rai, Pavan Ogeti, Narendra Sharad Fadnavis, Gireesh Bhaulal Patil, & Uday Krishna Padyana. (2024). Integrating Public and Private Clouds: The Future of Hybrid Cloud Solutions. Universal Research Reports, 8(2), 143–153. https://doi.org/10.36676/urr.v9.i4.1320
- [95]. Ugandhar Dasi. (2024). Developing A Cloud-Based Natural Language Processing (NLP) Platform for Sentiment Analysis and Opinion Mining of Social Media Data. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 165–174. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6406
- [96]. Dasi, U., Singla, N., Balasubramanian, R., Benadikar, S., & Shanbhag, R. R. (2024). Ethical implications of AI-driven personalization in digital media. Journal of Informatics Education and Research, 4(3), 588-593.
- [97]. Krishnateja Shiva. (2024). Natural Language Processing for Customer Service Chatbots: Enhancing Customer Experience. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 155–164. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6405

- [98]. Krishnateja Shiva. (2022). Leveraging Cloud Resource for Hyperparameter Tuning in Deep Learning Models. International Journal on Recent and Innovation Trends in Computing and Communication, 10(2), 30–35. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10980
- [99]. Shiva, K., Etikani, P., Bhaskar, V. V. S. R., Palavesh, S., & Dave, A. (2022). The rise of robo-advisors: AI-powered investment management for everyone. Journal of Namibian Studies, 31, 201-214.
- [100]. Etikani, P., Bhaskar, V. V. S. R., Choppadandi, A., Dave, A., & Shiva, K. (2024). Forecasting climate change with deep learning: Improving climate modeling accuracy. African Journal of Bio-Sciences, 6(14), 3903-3918. https://doi.org/10.48047/AFJBS.6.14.2024.3903-3918
- [101]. Etikani, P., Bhaskar, V. V. S. R., Nuguri, S., Saoji, R., & Shiva, K. (2023). Automating machine learning workflows with cloud-based pipelines. International Journal of Intelligent Systems and Applications in Engineering, 11(1), 375–382. https://doi.org/10.48047/ijisae.2023.11.1.375
- [102]. Etikani, P., Bhaskar, V. V. S. R., Palavesh, S., Saoji, R., & Shiva, K. (2023). AI-powered algorithmic trading strategies in the stock market. International Journal of Intelligent Systems and Applications in Engineering, 11(1), 264–277. https://doi.org/10.1234/ijsdip.org_2023-Volume-11-Issue-1_Page_264-277
- [103]. Shiva, K., Etikani, P., Bhaskar, V. V. S. R., Mittal, A., Dave, A., Thakkar, D., Kanchetti, D., & Munirathnam, R. (2024). Anomaly detection in sensor data with machine learning: Predictive maintenance for industrial systems. J. Electrical Systems, 20-10s, 454–462.
- [104]. Bhaskar, V. V. S. R., Etikani, P., Shiva, K., Choppadandi, A., & Dave, A. (2019). Building explainable AI systems with federated learning on the cloud. Journal of Cloud Computing and Artificial Intelligence, 16(1), 1–14.
- [105]. Ogeti, P., Fadnavis, N. S., Patil, G. B., Padyana, U. K., & Rai, H. P. (2022). Blockchain technology for secure and transparent financial transactions. European Economic Letters, 12(2), 180-192. http://eelet.org.uk
- [106]. Vijaya Venkata Sri Rama Bhaskar, Akhil Mittal, Santosh Palavesh, Krishnateja Shiva, Pradeep Etikani. (2020). Regulating AI in Fintech: Balancing Innovation with Consumer Protection. European Economic Letters (EEL), 10(1). https://doi.org/10.52783/eel.v10i1.1810
- [107]. Sravan Kumar Pala, "Synthesis, characterization and wound healing imitation of Fe3O4 magnetic nanoparticle grafted by natural products", Texas A&M University - Kingsville ProQuest Dissertations Publishing, 2014. 1572860.Available online at: https://www.proquest.com/openview/636d984c6e4a07d16be2960caa1f30c2/1?pqorigsite=gscholar&cbl=18750
- [108]. Sravan Kumar Pala, Improving Customer Experience in Banking using Big Data Insights, International Journal of Enhanced Research in Educational Development (IJERED), ISSN: 2319-7463, Vol. 8 Issue 5, September-October 2020.
- [109]. Bharath Kumar. (2022). Challenges and Solutions for Integrating AI with Multi-Cloud Architectures. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 1(1), 71–77. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/76
- [110]. Krishnateja Shiva, Pradeep Etikani, Vijaya Venkata Sri Rama Bhaskar, Savitha Nuguri, Arth Dave. (2024). Explainable Ai for Personalized Learning: Improving Student Outcomes. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(2), 198–207. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/100
- [111]. Dave, A., Shiva, K., Etikani, P., Bhaskar, V. V. S. R., & Choppadandi, A. (2022). Serverless AI: Democratizing machine learning with cloud functions. Journal of Informatics Education and Research, 2(1), 22-35. http://jier.org
- [112]. Dave, A., Etikani, P., Bhaskar, V. V. S. R., & Shiva, K. (2020). Biometric authentication for secure mobile payments. Journal of Mobile Technology and Security, 41(3), 245-259.
- [113]. Saoji, R., Nuguri, S., Shiva, K., Etikani, P., & Bhaskar, V. V. S. R. (2021). Adaptive AI-based deep learning models for dynamic control in software-defined networks. International Journal of Electrical and Electronics Engineering (IJEEE), 10(1), 89–100. ISSN (P): 2278–9944; ISSN (E): 2278–9952
- [114]. Narendra Sharad Fadnavis. (2021). Optimizing Scalability and Performance in Cloud Services: Strategies and Solutions. International Journal on Recent and Innovation Trends in Computing and Communication, 9(2), 14–21. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10889
- [115]. Varun Nakra. (2023). Enhancing Software Project Management and Task Allocation with AI and Machine Learning. International Journal on Recent and Innovation Trends in Computing and Communication, 11(11), 1171–1178. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10684
- [116]. Arth Dave, Lohith Paripati, Venudhar Rao Hajari, Narendra Narukulla, & Akshay Agarwal. (2024). Future Trends: The Impact of AI and ML on Regulatory Compliance Training Programs. Universal Research Reports, 11(2), 93–101. Retrieved from https://urr.shodhsagar.com/index.php/j/article/view/1257
- [117]. Joel lopes, Arth Dave, Hemanth Swamy, Varun Nakra, & Akshay Agarwal. (2023). Machine Learning Techniques And Predictive Modeling For Retail Inventory Management Systems. Educational Administration: Theory and Practice, 29(4), 698–706. https://doi.org/10.53555/kuey.v29i4.5645

- [118]. Varun Nakra, Arth Dave, Savitha Nuguri, Pradeep Kumar Chenchala, Akshay Agarwal. (2023). Robo-Advisors in Wealth Management: Exploring the Role of AI and ML in Financial Planning. European Economic Letters (EEL), 13(5), 2028–2039. Retrieved from https://www.eelet.org.uk/index.php/journal/article/view/1514
- [119]. Akhil Mittal, Pandi Kirupa Gopalakrishna Pandian. (2023). Adversarial Machine Learning for Robust Intrusion Detection Systems. International Journal on Recent and Innovation Trends in Computing and Communication, 11(11), 1459–1466. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10918
- [120]. Akhil Mittal, Pandi Kirupa Gopalakrishna Pandian. (2024). Deep Learning Approaches to Malware Detection and Classification. International Journal of Multidisciplinary Innovation and Research Methodology, ISSN: 2960-2068, 3(1), 70–76. Retrieved from https://ijmirm.com/index.php/ijmirm/article/view/94
- [121]. Mittal, A., & Pandian, P. K. G. (2022). Anomaly detection in network traffic using unsupervised learning. International Journal on Recent and Innovation Trends in Computing and Communication, 10(12), 312. https://www.ijritcc.org
- [122]. Akhil Mittal. (2024). Machine Learning-Based Phishing Detection: Improving Accuracy and Adaptability. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 587–595. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6524
- [123]. Nitin Prasad. (2024). Integration of Cloud Computing, Artificial Intelligence, and Machine Learning for Enhanced Data Analytics. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 11–20. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6381
- [124]. Nitin Prasad. (2022). Security Challenges and Solutions in Cloud-Based Artificial Intelligence and Machine Learning Systems. International Journal on Recent and Innovation Trends in Computing and Communication, 10(12), 286–292. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10750
- [125]. Prasad, N., Narukulla, N., Hajari, V. R., Paripati, L., & Shah, J. (2020). AI-driven data governance framework for cloud-based data analytics. Volume 17, (2), 1551-1561.
- [126]. Jigar Shah, Joel lopes, Nitin Prasad, Narendra Narukulla, Venudhar Rao Hajari, Lohith Paripati. (2023). Optimizing Resource Allocation And Scalability In Cloud-Based Machine Learning Models. Migration Letters, 20(S12), 1823–1832. Retrieved from https://migrationletters.com/index.php/ml/article/view/10652
- [127]. Big Data Analytics using Machine Learning Techniques on Cloud Platforms. (2019). International Journal of Business Management and Visuals, ISSN: 3006-2705, 2(2), 54-58. https://ijbmv.com/index.php/home/article/view/76
- [128]. Shah, J., Narukulla, N., Hajari, V. R., Paripati, L., & Prasad, N. (2021). Scalable machine learning infrastructure on cloud for large-scale data processing. Tuijin Jishu/Journal of Propulsion Technology, 42(2), 45-53.
- [129]. Narukulla, N., Hajari, V. R., Paripati, L., Shah, J., Prasad, N., & Pandian, P. K. G. (2024). Edge computing and its role in enhancing artificial intelligence and machine learning applications in the cloud. J. Electrical Systems, 20(9s), 2958-2969.
- [130]. Narukulla, N., Lopes, J., Hajari, V. R., Prasad, N., & Swamy, H. (2021). Real-time data processing and predictive analytics using cloud-based machine learning. Tuijin Jishu/Journal of Propulsion Technology, 42(4), 91-102
- [131]. Secure Federated Learning Framework for Distributed Ai Model Training in Cloud Environments. (2019). International Journal of Open Publication and Exploration, ISSN: 3006-2853, 7(1), 31-39. https://ijope.com/index.php/home/article/view/145
- [132]. Lohith Paripati. (2024). Edge Computing for AI and ML: Enhancing Performance and Privacy in Data Analysis . International Journal on Recent and Innovation Trends in Computing and Communication, 12(2), 445–454. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10848
- [133]. Paripati, L., Prasad, N., Shah, J., Narukulla, N., & Hajari, V. R. (2021). Blockchain-enabled data analytics for ensuring data integrity and trust in AI systems. International Journal of Computer Science and Engineering (IJCSE), 10(2), 27–38. ISSN (P): 2278–9960; ISSN (E): 2278–9979.
- [134]. Arth Dave. (2024). Improving Financial Forecasting Accuracy with AI-Driven Predictive Analytics. International Journal of Intelligent Systems and Applications in Engineering, 12(21s), 3866 –. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6158
- [135]. Hajari, V. R., Chaturvedi, R., Sharma, S., Tilala, M., & Chawda, A. D. (2024). Risk-based testing methodologies for FDA compliance in medical devices. African Journal of Biological Sciences, 6(Si4), 3949-3960. https://doi.org/10.48047/AFJBS.6.Si4.2024.3949-3960
- [136]. Hajari, V. R., Prasad, N., Narukulla, N., Chaturvedi, R., & Sharma, S. (2023). Validation techniques for AI/ML components in medical diagnostic devices. NeuroQuantology, 21(4), 306-312. https://doi.org/10.48047/NQ.2023.21.4.NQ23029
- [137]. Hajari, V. R., Chaturvedi, R., Sharma, S., Tilala, M., Chawda, A. D., & Benke, A. P. (2023). Interoperability testing strategies for medical IoT devices. Tuijin Jishu/Journal of Propulsion Technology, 44(1), 258.

- [138]. Kumar, A., Dodda, S., Kamuni, N., & Arora, R. K. (2024). Unveiling the impact of macroeconomic policies: A double machine learning approach to analyzing interest rate effects on financial markets. arXiv. https://arxiv.org/abs/2404.07225
- [139]. Suresh Dodda, Anoop Kumar, Navin Kamuni, et al. Exploring Strategies for Privacy-Preserving Machine Learning in Distributed Environments. TechRxiv. April 18, 2024.
- [140]. DOI: 10.36227/techrxiv.171340711.17793838/v1
- [141]. Kumar, A., Ayyalasomayajula, M. M. T., Panwar, D., & Vasa, Y. (2024). Optimizing photometric light curve analysis: Evaluating Scipy's minimize function for eclipse mapping of cataclysmic variables. arXiv. https://doi.org/10.48550/arXiv.2406.00071
- [142]. Kumar, A., Dodda, S., Kamuni, N., & Vuppalapati, V. S. M. (2024). The emotional impact of game duration: A framework for understanding player emotions in extended gameplay sessions. arXiv. https://doi.org/10.48550/arXiv.2404.00526
- [143]. Kumar, A. (2019). Implementation core business intelligence system using modern IT development practices (Agile & DevOps). International Journal of Management, IT and Engineering, 8(9), 444-464. https://doi.org/10.5281/zenodo.1234567
- [144]. Ashutosh Tripathi, Low-Code/No-Code Development Platforms, International Journal of Computer Applications (IJCA), 4(1), 2023, pp. 27–35. https://iaeme.com/Home/issue/IJCA?Volume=4&Issue=1
- [145]. Ashutosh Tripathi, Optimal Serverless Deployment Methodologies: Ensuring Smooth Transitions and Enhanced Reliability, Face Mask Detection, Journal of Computer Engineering and Technology (JCET) 5(1), 2022, pp. 21-28.
- [146]. Tripathi, A. (2020). AWS serverless messaging using SQS. IJIRAE: International Journal of Innovative Research in Advanced Engineering, 7(11), 391-393.
- [147]. Tripathi, A. (2019). Serverless architecture patterns: Deep dive into event-driven, microservices, and serverless APIs. International Journal of Creative Research Thoughts (IJCRT), 7(3), 234-239. Retrieved from http://www.ijcrt.org
- [148]. Bellapukonda, P., Vijaya, G., Subramaniam, S., & Chidambaranathan, S. (2024). Security and optimization in IoT networks using AI-powered digital twins. In Harnessing AI and Digital Twin Technologies in Businesses (p. 14). https://doi.org/10.4018/979-8-3693-3234-4.ch024
- [149]. E. A. Banu, S. Chidambaranathan, N. N. Jose, P. Kadiri, R. E. Abed and A. Al-Hilali, "A System to Track the Behaviour or Pattern of Mobile Robot Through RNN Technique," 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), Greater Noida, India, 2024, pp. 2003-2005, doi: 10.1109/ICACITE60783.2024.10617430.
- [150]. Patil, Y. M., Abraham, A. R., Chaubey, N. K., Baskar, K., & Chidambaranathan, S. (2024). A comparative analysis of machine learning techniques in creating virtual replicas for healthcare simulations. In Harnessing AI and Digital Twin Technologies in Businesses (p. 12). https://doi.org/10.4018/979-8-3693-3234-4.ch002
- [151]. George, B., Oswal, N., Baskar, K., & Chidambaranathan, S. (2024). Innovative approaches to simulating human-machine interactions through virtual counterparts. In Harnessing AI and Digital Twin Technologies in Businesses (p. 11). https://doi.org/10.4018/979-8-3693-3234-4.ch018
- [152]. Charaan, R. M. D., Chidambaranathan, S., Jothivel, K. M., Subramaniam, S., & Prabu, M. (2024). Machine learning-driven data fusion in wireless sensor networks with virtual replicas: A comprehensive evaluation. In Harnessing AI and Digital Twin Technologies in Businesses (p. 11). https://doi.org/10.4018/979-8-3693-3234-4.ch020
- [153]. Ayyavaraiah, M., Jeyakumar, B., Chidambaranathan, S., Subramaniam, S., Anitha, K., & Sangeetha, A. (2024). Smart transportation systems: Machine learning application in WSN-based digital twins. In Harnessing AI and Digital Twin Technologies in Businesses (p. 11). https://doi.org/10.4018/979-8-3693-3234-4.ch026
- [154]. Venkatesan, B., Mannanuddin, K., Chidambaranathan, S., Jeyakumar, B., Rayapati, B. R., & Baskar, K. (2024). Deep learning safeguard: Exploring GANs for robust security in open environments. In Enhancing Security in Public Spaces Through Generative Adversarial Networks (GANs) (p. 14). https://doi.org/10.4018/979-8-3693-3597-0.ch009
- [155]. P. V, V. R and S. Chidambaranathan, "Polyp Segmentation Using UNet and ENet," 2023 6th International Conference on Recent Trends in Advance Computing (ICRTAC), Chennai, India, 2023, pp. 516-522, doi: 10.1109/ICRTAC59277.2023.10480851.
- [156]. Athisayaraj, A. A., Sathiyanarayanan, M., Khan, S., Selvi, A. S., Briskilla, M. I., Jemima, P. P., Chidambaranathan, S., Sithik, A. S., Sivasankari, K., & Duraipandian, K. (2023). Smart thermal-cooler umbrella (UK Design No. 6329357).
- [157]. Krishnateja Shiva. (2024). Natural Language Processing for Customer Service Chatbots: Enhancing Customer Experience. International Journal of Intelligent Systems and Applications in Engineering, 12(22s), 155–164. Retrieved from https://ijisae.org/index.php/IJISAE/article/view/6405

- [158]. Shiva, K., Etikani, P., Bhaskar, V. V. S. R., Mittal, A., Dave, A., Thakkar, D., Kanchetti, D., & Munirathnam, R. (2024). Anomaly detection in sensor data with machine learning: Predictive maintenance for industrial systems. Journal of Electrical Systems, 20(10s), 454-462.
- [159]. Kanchetti, D., Munirathnam, R., & Thakkar, D. (2024). Integration of Machine Learning Algorithms with Cloud Computing for Real-Time Data Analysis. Journal for Research in Applied Sciences and Biotechnology, 3(2), 301–306. https://doi.org/10.55544/jrasb.3.2.46
- [160]. Challa, S. S. S., Chawda, A. D., Benke, A. P., & Tilala, M. (2023). Regulatory intelligence: Leveraging data analytics for regulatory decision-making. International Journal on Recent and Innovation Trends in Computing and Communication, 11, 10.
- [161]. Challa, S. S. S., Chawda, A. D., Benke, A. P., & Tilala, M. (2024). Streamlining change control processes in regulatory affairs: Best practices and case studies. Integrated Journal for Research in Arts and Humanities, 4(4), 4.
- [162]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2019). Investigating the use of natural language processing (NLP) techniques in automating the extraction of regulatory requirements from unstructured data sources. Annals of Pharma Research, 7(5),
- [163]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2021). Navigating regulatory requirements for complex dosage forms: Insights from topical, parenteral, and ophthalmic products. NeuroQuantology, 19(12), 15.
- [164]. Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2022). Quality management systems in regulatory affairs: Implementation challenges and solutions. Journal for Research in Applied Sciences and Biotechnology, 1(3),
- [165]. Gajera, B., Shah, H., Parekh, B., Rathod, V., Tilala, M., & Dave, R. H. (2024). Design of experiments-driven optimization of spray drying for amorphous clotrimazole nanosuspension. AAPS PharmSciTech, 25(6),
- [166]. Hajari, V. R., Chaturvedi, R., Sharma, S., Tilala, M., & Chawda, A. D. (2024). Risk-based testing methodologies for FDA compliance in medical devices. African Journal of Biological Sciences, 6(4),
- [167]. Tilala, M. (2023). Real-time data processing in healthcare: Architectures and applications for immediate clinical insights. International Journal on Recent and Innovation Trends in Computing and Communication, 11, 20.
- [168]. Tilala, M. H., Chenchala, P. K., Choppadandi, A., Kaur, J., Naguri, S., Saoji, R., & ... (2024). Ethical considerations in the use of artificial intelligence and machine learning in health care: A comprehensive review. Cureus, 16(6), 2.
- [169]. Tilala, M., & Chawda, A. D. (2020). Evaluation of compliance requirements for annual reports in pharmaceutical industries. NeuroQuantology, 18(11), 27.
- [170]. Tilala, M., Challa, S. S. S., Chawda, A. D., Pandurang, A., & Benke, D. S. S. (2024). Analyzing the role of real-world evidence (RWE) in supporting regulatory decision-making and post-marketing surveillance. African Journal of Biological Sciences, 6(14),
- [171]. Tilala, M., Chawda, A. D., & Benke, A. P. (2023). Enhancing regulatory compliance through training and development programs: Case studies and recommendations. Journal of Cardiovascular Research, 14(11),
- [172]. Ashok Choppadandi, Jagbir Kaur, Pradeep Kumar Chenchala, Akshay Agarwal, Varun Nakra, Pandi Kirupa Gopalakrishna Pandian, 2021. "Anomaly Detection in Cybersecurity: Leveraging Machine Learning Algorithms" ESP Journal of Engineering & Technology Advancements 1(2): 34-41.
- [173]. Ashok Choppadandi et al, International Journal of Computer Science and Mobile Computing, Vol.9 Issue.12, December- 2020, pg. 103-112. (Google scholar indexed)
- [174]. Choppadandi, A., Kaur, J., Chenchala, P. K., Nakra, V., & Pandian, P. K. K. G. (2020). Automating ERP Applications for Taxation Compliance using Machine Learning at SAP Labs. International Journal of Computer Science and Mobile Computing, 9(12), 103-112. https://doi.org/10.47760/ijcsmc.2020.v09i12.014
- [175]. [Chenchala, P. K., Choppadandi, A., Kaur, J., Nakra, V., & Pandian, P. K. G. (2020). Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. International Journal of Open Publication and Exploration, 8(2), 43-50. https://ijope.com/index.php/home/article/view/127]
- [176]. AI-Driven Customer Relationship Management in PK Salon Management System. (2019). International Journal of Open Publication and Exploration, ISSN: 3006-2853, 7(2), 28-35. https://ijope.com/index.php/home/article/view/128
- [177]. Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). AI Applications in Smart Cities(Jagbir 2019)"
- [178]. Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service. International Journal of Transcontinental Discoveries, 6(1), 29-34. https://internationaljournals.org/index.php/ijtd/article/view/98]
- [179]. Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service. International

Journal of Transcontinental Discoveries, 6(1), 29-34. https://internationaljournals.org/index.php/ijtd/article/view/98]

- [180]. [Tilala, M. H., Chenchala, P. K., Choppadandi, A., Kaur, J., Naguri, S., Saoji, R., & Devaguptapu, B. (2024). Ethical Considerations in the Use of Artificial Intelligence and Machine Learning in Health Care: A Comprehensive Review. Cureus, 16(6), e62443. https://doi.org/10.7759/cureus.62443]
- [181]. Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. (2020). International Journal of Open Publication and Exploration, ISSN: 3006-2853, 8(2), 43-50. https://ijope.com/index.php/home/article/view/127
- [182]. Chenchala, P. K., Choppadandi, A., Kaur, J., Nakra, V., & Pandian, P. K. G. (2020). Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. International Journal of Open Publication and Exploration, 8(2), 43-50. https://ijope.com/index.php/home/article/view/127
- [183]. Pradeep Kumar Chenchala. (2023). Social Media Sentiment Analysis for Enhancing Demand Forecasting Models Using Machine Learning Models. International Journal on Recent and Innovation Trends in Computing and Communication, 11(6), 595–601. Retrieved from https://www.ijritcc.org/index.php/ijritcc/article/view/10762
- [184]. 2021
- [185]. (Ashok : "Ashok Choppadandi, Jagbir Kaur, Pradeep Kumar Chenchala, Akshay Agarwal, Varun Nakra, Pandi Kirupa Gopalakrishna Pandian, 2021. "Anomaly Detection in Cybersecurity: Leveraging Machine Learning Algorithms" ESP Journal of Engineering & Technology Advancements 1(2): 34-41."
- [186]. [. Ashok : "Choppadandi, A., Kaur, J., Chenchala, P. K., Nakra, V., & Pandian, P. K. K. G. (2020). Automating ERP Applications for Taxation Compliance using Machine Learning at SAP Labs. International Journal of Computer Science and Mobile Computing, 9(12), 103-112. https://doi.org/10.47760/ijcsmc.2020.v09i12.014"]
- [187]. Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. (2020). International Journal of Open Publication and Exploration, ISSN: 3006-2853, 8(2), 43-50. https://ijope.com/index.php/home/article/view/127
- [188]. Chenchala, P. K., Choppadandi, A., Kaur, J., Nakra, V., & Pandian, P. K. G. (2020). Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. International Journal of Open Publication and Exploration, 8(2), 43-50. https://ijope.com/index.php/home/article/view/127
- [189]. 2019
- [190]. Jagbir. : "Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). AI Applications in Smart Cities(Jagbir 2019)"]
- [191]. Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service. International Journal of Transcontinental Discoveries, 6(1), 29-34. https://internationaljournals.org/index.php/ijtd/article/view/98]
- [192]. Choppadandi, A., Kaur, J., Chenchala, P. K., Kanungo, S., & Pandian, P. K. K. G. (2019). AI-Driven Customer Relationship Management in PK Salon Management System. International Journal of Open Publication and Exploration, 7(2), 28-35. https://ijope.com/index.php/home/article/view/128.]
- [193]. Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service. International Journal of Transcontinental Discoveries, 6(1), 29-34. https://internationaljournals.org/index.php/ijtd/article/view/98]