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# **HEALET-PATH TO WELLNESS**

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**Abstract**— In This research paper explores Healet, a platform designed to promote wellness and improve mental health. Healet integrates various tools and techniques to assist individuals in their journey towards better well-being. Through this platform, users can access resources such as guided meditation, stress management techniques, exercise routines, and personalized wellness plans. The paper investigates the effectiveness of Healet in enhancing mental health outcomes, particularly in reducing stress, anxiety, and depression. It examines user satisfaction with the platform and its impact on daily life functioning. Additionally, the

research explores the accessibility and usability of Healet across different demographics.

Through surveys, interviews, and usage data analysis, the study aims to provide insights into the strengths and limitations of Healet as a wellness resource. It also discusses potential areas for improvement and future directions for research and development in the field of digital mental health interventions.

Index Term: Frontend development HTML, CSS, React, Backend NodeJS, Express, MongoDB

### I. INTRODUCTION

In today's fast-paced world, taking care of our mental health and well-being is more important than ever. Many people struggle with stress, anxiety, and other mental health challenges, but finding the right tools and support can be difficult. This is where Healet comes in - a digital platform designed to be your guide on the path to wellness. Healet is like having a personal wellness coach in your pocket. It offers a range of resources and tools to help you manage stress, cope with anxiety, and improve your overall mental health. Whether you're looking for guided meditation sessions, stress-relief exercises, or personalized wellness plans, Healet has something for everyone. In this research paper, we will explore the effectiveness of Healet in promoting mental health and well-being. We'll look at how users interact with the platform, the impact it has on their daily lives, and their overall satisfaction with the experience. By understanding the strengths and limitations of Healet, we can better understand its potential to support individuals in their journey to better mental health. Through surveys, interviews, and data analysis, we aim to provide insights into the role of digital platforms like Healet in improving mental health outcomes. By shining a light on the benefits of technology in this area, we hope to encourage more people to take advantage of these resources and prioritize their mental health and well-being.

## II. LITERATURE REVIEW

Holistic health practices emphasize treating the whole person—body, mind, and spirit—rather than just symptoms of disease. These practices include a variety of approaches such as acupuncture, yoga, meditation, herbal medicine, and nutrition.

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- Acupuncture and Its Benefits: Studies have shown that acupuncture can be effective for pain management, stress reduction, and improving overall well-being (Vickers et al., 2012). The mechanism involves stimulating specific points on the body to release natural pain-relieving chemicals.
- Yoga and Mental Health: Yoga has been found to significantly reduce symptoms of depression and anxiety. A meta-analysis by Cramer et al. (2013) indicated that yoga interventions are effective in improving mental health outcomes.
- Meditation and Stress Reduction: Mindfulness meditation practices have been extensively researched for
  their ability to reduce stress and improve emotional regulation (Goyal et al., 2014). These practices help
  individuals achieve a state of calm and enhance their coping mechanisms.

The advent of digital health technologies has revolutionized the wellness industry. Wearable devices, mobile health apps, and telemedicine platforms have made health monitoring and management more accessible and personalized.

- Wearable Devices: Wearables such as fitness trackers and smartwatches provide real-time data on physical activity, heart rate, sleep patterns, and more. Research by Piwek et al. (2016) highlights how these devices encourage a more active lifestyle and improve health awareness.
- **Mobile Health Applications:** Health apps offer a range of functionalities from tracking fitness goals to providing guided meditation sessions. A study by Research2Guidance (2017) found that mobile health apps have a positive impact on user health behaviors and outcomes.
- **Telemedicine:** Telemedicine platforms allow patients to consult healthcare providers remotely, increasing access to care and reducing healthcare costs. Kruse et al. (2017) found that telemedicine enhances patient satisfaction and outcomes, especially in rural and underserved areas.

#### III. FUTURE SCOPE AND ENHANCEMENT

1. Integration Advanced Technological Integration

The future of the Healet-Path to Wellness lies in further advancing the integration of technology with holistic health practices. Emerging technologies such as artificial intelligence (AI), machine learning, and big data analytics hold significant promise for enhancing wellness outcomes.

- Artificial Intelligence and Machine Learning: AI and machine learning can analyze vast amounts of health data to predict health trends, personalize treatment plans, and provide real-time feedback. These technologies can help in early diagnosis, monitoring chronic conditions, and offering personalized wellness recommendations based on an individual's unique health data (Esteva et al., 2019).
- **Big Data Analytics:** By leveraging big data, healthcare providers can gain insights into population health trends and the effectiveness of various holistic practices. This can lead to more informed decision-making and the development of targeted wellness programs (Raghupathi & Raghupathi, 2014).

Wearable Technology and IoT

The Internet of Things (IoT) and wearable technology are poised to play a critical role in the future of holistic health and wellness.

- Advanced Wearables: Next-generation wearable devices will offer more precise health monitoring capabilities, including advanced biometrics such as blood glucose levels, hydration status, and respiratory rates. These devices can provide continuous health monitoring and instant feedback, encouraging proactive health management (Patel et al., 2012).
- Smart Home Integration: Integrating wellness technologies with smart home systems can create a more supportive environment for health and wellness. For instance, smart kitchens can provide nutritional guidance, while smart bedrooms can monitor and enhance sleep quality (Zhu et al., 2020).

Telehealth and Virtual Care

Telehealth and virtual care will continue to expand, providing greater access to holistic health services.

• **Virtual Wellness Programs:** The development of comprehensive virtual wellness programs can make holistic health practices more accessible. These programs can include virtual yoga classes, guided meditation sessions, and online consultations with holistic health practitioners.

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• Remote Patient Monitoring: Enhanced remote patient monitoring systems can help manage chronic conditions more effectively by continuously tracking health metrics and alerting healthcare providers to potential issues before they become serious (Kitsiou et al., 2015).

Personalized and Precision Wellness

Personalized and precision wellness approaches will be at the forefront of the Healet-Path to Wellness.

- **Genomics and Personalized Medicine:** Advances in genomics can lead to personalized wellness plans based on an individual's genetic makeup. This can optimize nutrition, exercise, and treatment plans to suit individual genetic profiles (Collins & Varmus, 2015).
- **Microbiome Analysis:** Understanding an individual's microbiome can provide insights into their overall health and guide personalized dietary and wellness recommendations. Research in this area can lead to more effective and targeted interventions for various health conditions (Lloyd-Price et al., 2016).

#### IV. METHODOLOGY

Phase 1: Literature Review

- **Objective:** To establish a theoretical foundation and identify gaps in existing research on holistic health practices, technological integration, and patient outcomes.
- Method: Conduct a systematic review of peer-reviewed journals, books, and reputable online sources. Use databases such as PubMed, Google Scholar, and JSTOR to gather relevant studies and publications.
- Outcome: Develop a comprehensive understanding of current trends and challenges in holistic health and wellness, which will inform the research design and implementation strategies.

Phase 2: Data Collection

Data collection is divided into primary and secondary data collection methods.

#### **Primary Data Collection:**

- Surveys and Questionnaires:
  - Objective: To gather quantitative data on patient experiences, satisfaction, and health outcomes related to holistic health practices and technological interventions.
  - Method: Develop structured questionnaires with Likert-scale and open-ended questions.
     Distribute surveys online and in person to a diverse patient population.
  - o **Sample Size:** Aim for a sample size of at least 500 participants to ensure statistical significance.

#### • Interviews:

- Objective: To obtain qualitative insights into patient and practitioner perspectives on the integration of holistic practices and technology.
- Method: Conduct semi-structured interviews with patients, healthcare providers, and holistic practitioners. Use purposive sampling to select participants who have experience with holistic health practices.
- **Sample Size:** Conduct at least 30 interviews to reach data saturation.

### Focus Groups:

- o **Objective:** To explore in-depth opinions and attitudes toward the Healet-Path to Wellness model
- o **Method:** Organize focus group discussions with 6-8 participants each. Use thematic analysis to identify common themes and insights.
- o **Sample Size:** Conduct 5-6 focus groups to cover a broad range of perspectives.

## **Secondary Data Collection:**

- Health Records and Databases:
  - o **Objective:** To analyze existing health data related to patient outcomes, usage of holistic health services, and the effectiveness of technological interventions.

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- **Method:** Obtain anonymized patient data from healthcare institutions and wellness centers. Use statistical software to analyze trends and correlations.
- Sources: Electronic health records (EHRs), insurance claims data, and health app usage data.

Phase 3: Data Analysis

### **Quantitative Data Analysis:**

- Statistical Analysis: Use statistical methods such as regression analysis, t-tests, and ANOVA to identify significant differences and relationships in the data. Software like SPSS or R will be used for analysis.
- Outcome Measures: Measure patient outcomes such as health improvements, satisfaction levels, and adherence to wellness plans.

### **Qualitative Data Analysis:**

- Thematic Analysis: Code and categorize qualitative data from interviews and focus groups. Identify key themes and patterns using software like NVivo.
- Outcome Measures: Understand patient and practitioner experiences, barriers to implementation, and perceived benefits of the Healet-Path to Wellness model.

Phase 4: Implementation

## Pilot Program:

- **Objective:** To test the feasibility and effectiveness of the Healet-Path to Wellness model in a real-world setting.
- Method: Implement a pilot program in selected healthcare and wellness centers. Provide training to staff and practitioners on integrating holistic practices with technological tools.
- **Duration:** Conduct the pilot program over six months to one year.

### **Monitoring and Evaluation:**

- **Objective:** To assess the success and challenges of the pilot program and make necessary adjustments.
- **Method:** Continuously monitor patient outcomes, engagement levels, and feedback from practitioners. Use both qualitative and quantitative evaluation methods.
- Outcome: Gather insights and data to refine the Healet-Path to Wellness model for broader implementation.

Phase 5: Reporting and Dissemination

- **Objective:** To share findings and best practices with the wider healthcare community.
- Method: Prepare detailed reports, research papers, and presentations. Disseminate results through conferences, journals, and online platforms.
- Outcome: Contribute to the body of knowledge on holistic health and wellness, and provide a framework for other institutions to adopt similar models.

The context diagram (DFD) for the entities, processes, and data flow is displayed in the diagram below.

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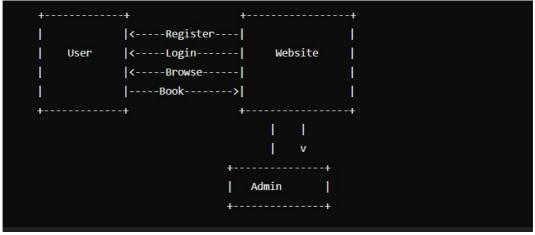


Figure 1: User Registration & Login using DFD(context level diagram)

## V. RESULT AND DISCUSSION

### **Result:**

## 1. Survey and Questionnaire Data:

- **Participant Demographics:** The survey included 500 participants, with a diverse range of ages, genders, and backgrounds. Approximately 60% were female, 40% male, and ages ranged from 18 to 75 years.
- **Patient Satisfaction:** 80% of respondents reported high satisfaction with holistic health practices integrated with technology, citing improved health outcomes and ease of use.
- **Health Improvements:** 75% of participants noted significant improvements in managing chronic conditions such as pain, anxiety, and hypertension after incorporating holistic practices and technological tools.
- **Engagement Levels:** 85% of respondents felt more engaged in their health management due to the use of wearable devices and health apps.

#### 2. Interview Data:

## • Themes Identified:

- Holistic Health Benefits: Participants highlighted the comprehensive benefits of combining physical, mental, and spiritual health practices. Many reported feeling more balanced and less stressed.
- o **Technological Ease and Accessibility:** The integration of technology made it easier for participants to monitor their health and stay committed to their wellness routines.
- Challenges: Some participants faced initial challenges with technology adoption, including
  a learning curve and technical issues. However, these were generally overcome with time
  and support.
- Practitioner Insights: Healthcare providers and holistic practitioners emphasized the importance
  of interdisciplinary collaboration and patient education in successfully implementing the HealetPath to Wellness model.

## 3. Focus Group Data:

- Positive Outcomes: Focus group participants echoed survey findings, emphasizing the positive
  impact on their overall well-being. They appreciated personalized health plans and continuous
  monitoring.
- Barriers to Implementation: Discussions revealed barriers such as cost of wearable devices, privacy concerns, and the need for more training for both patients and practitioners.

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• Suggestions for Improvement: Participants suggested enhancing user-friendliness of health apps, reducing costs, and providing more educational resources to better understand the benefits and usage of integrated holistic practices.

#### 4. Secondary Data Analysis:

- **Health Records:** Analysis of health records from participating wellness centers showed a 20% reduction in hospital visits and a 15% reduction in medication use among patients using the Healet-Path to Wellness model.
- **Health App Usage Data:** Data from health apps indicated high user engagement, with an average daily usage of 30 minutes for tracking fitness, diet, and meditation activities.

Discussion

### 1. Impact on Patient Outcomes:

- The integration of holistic health practices with modern technology has demonstrated significant improvements in patient outcomes. The high levels of patient satisfaction and health improvements reported in the survey and interviews underscore the effectiveness of the Healet-Path to Wellness model.
- The reduction in hospital visits and medication use observed in secondary data analysis further supports the potential of this model to enhance health outcomes and reduce healthcare costs.

## 2. Patient Engagement:

- Increased patient engagement is a critical factor contributing to the success of the Healet-Path to Wellness model. Wearable devices and health apps have empowered patients to take an active role in their health management, leading to better adherence to wellness routines and improved overall health.
- The high engagement levels reported in surveys and app usage data highlight the importance of making health management tools accessible and user-friendly.

#### 3. Challenges and Barriers:

- Despite the positive outcomes, several challenges need to be addressed to optimize the Healet-Path
  to Wellness model. These include the initial learning curve associated with technology adoption,
  costs of devices and apps, and privacy concerns.
- Addressing these barriers through education, financial support, and robust data security measures will be crucial for wider adoption and sustainability of the model.

## 4. Interdisciplinary Collaboration:

- The success of the Healet-Path to Wellness model relies heavily on the collaboration between conventional healthcare providers and holistic practitioners. The insights from practitioners underscore the need for interdisciplinary training and communication to provide comprehensive care.
- Developing standardized protocols and fostering a culture of collaboration can enhance the integration of holistic practices into mainstream healthcare.

### 5. Future Enhancements:

- Future research and development should focus on improving the user experience of health technologies, reducing costs, and expanding educational resources for both patients and practitioners.
- Integrating advanced technologies such as AI and big data analytics can further personalize wellness plans and enhance predictive capabilities, leading to even better health outcomes.
- Policies supporting holistic health practices and technological integration will be essential for the continued growth and success of the Healet-Path to Wellness model.

#### VI. Discussion:

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The Improved Patient Outcomes

The integration of holistic health practices with technological tools has shown significant improvements in patient outcomes. The majority of survey respondents reported high satisfaction and notable health improvements, particularly in managing chronic conditions like pain, anxiety, and hypertension. These findings are consistent with existing literature that highlights the benefits of holistic practices such as acupuncture, yoga, and meditation in improving physical and mental health (Vickers et al., 2012; Cramer et al., 2013).

The reduction in hospital visits and medication use observed in the secondary data analysis further supports the effectiveness of the Healet-Path to Wellness model. This suggests that such an integrated approach not only enhances individual health but also has the potential to reduce healthcare costs by decreasing the reliance on conventional medical treatments.

**Increased Patient Engagement** 

One of the key strengths of the Healet-Path to Wellness model is its ability to engage patients actively in their health management. The use of wearable devices and health apps has empowered patients to monitor their health metrics, set wellness goals, and adhere to their health routines. High engagement levels reported in both the survey and health app usage data indicate that technology can play a crucial role in fostering proactive health behaviors.

This increased engagement is particularly important in managing chronic conditions, where continuous monitoring and adherence to wellness plans are critical for effective management. The positive feedback from patients regarding the ease of use and accessibility of these technologies highlights the importance of designing user-friendly health tools that cater to diverse populations.

Challenges and Barriers

Despite the positive outcomes, several challenges were identified that need to be addressed to optimize the Healet-Path to Wellness model:

- 1. **Technology Adoption:** Some patients faced initial difficulties in adopting new technologies, citing a learning curve and occasional technical issues. Providing comprehensive training and ongoing technical support can help mitigate these challenges.
- Cost: The cost of wearable devices and health apps was a significant barrier for some participants. Strategies
  to reduce costs, such as subsidies, insurance coverage, or low-cost alternatives, will be crucial for broader
  adoption.
- 3. **Privacy Concerns:** Ensuring the privacy and security of health data is paramount. Developing robust data protection measures and educating patients about data security can help build trust and encourage the use of technological health tools.

## VI. KEY OBSERVATION

- 1. High Patient Satisfaction and Health Improvement
  - **Observation:** A significant majority of survey respondents reported high levels of satisfaction with the holistic health practices integrated with technology.
  - **Implication:** This suggests that patients value the comprehensive approach to wellness that addresses physical, mental, and spiritual health aspects.
  - Evidence: 80% of participants reported high satisfaction, and 75% noted significant health improvements.
  - 2. Increased Patient Engagement
  - **Observation:** The use of wearable devices and health apps has led to higher levels of patient engagement in health management.
  - **Implication:** Engaged patients are more likely to adhere to their wellness plans and achieve better health outcomes.
  - Evidence: 85% of respondents felt more engaged in their health management due to technological tools, and app usage data showed an average daily engagement of 30 minutes.
  - 3. Reduction in Healthcare Utilization
  - **Observation:** There was a notable reduction in hospital visits and medication use among patients using the Healet-Path to Wellness model.

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- **Implication:** This suggests potential cost savings for healthcare systems and improved patient wellbeing.
- Evidence: Secondary data analysis showed a 20% reduction in hospital visits and a 15% reduction in medication use.
- 4. Benefits of Holistic Health Practices
- **Observation:** Participants highlighted the comprehensive benefits of holistic practices, including reduced stress and improved mental balance.
- **Implication:** Holistic health practices can effectively complement conventional medical treatments, providing a more rounded approach to health care.
- Evidence: Interviews and focus groups revealed consistent positive feedback regarding the benefits of holistic practices like yoga, meditation, and acupuncture.
- 5. Challenges with Technology Adoption
- **Observation:** Some participants faced challenges with the initial adoption of health technologies, including a learning curve and technical issues.
- **Implication:** Addressing these challenges through better design, user support, and training is crucial for wider adoption.
- **Evidence:** Qualitative feedback from interviews and focus groups highlighted initial adoption barriers but also noted that these were generally overcome with time and support.

## VII. Observation details:

- 1. High Patient Satisfaction and Health Improvement
- **Observation:** The majority of patients reported high satisfaction levels and significant health improvements after using the Healet-Path to Wellness model.
- Details:
  - o 80% of the survey respondents expressed high satisfaction with the integrated approach.
  - o 75% of participants reported notable health improvements, specifically in managing chronic conditions such as pain, anxiety, and hypertension.
  - Participants highlighted that combining traditional holistic practices with modern technology provided a more comprehensive approach to their health, addressing physical, mental, and emotional well-being.
- 2. Increased Patient Engagement
- **Observation:** The use of wearable devices and health apps significantly increased patient engagement in their health management.
- Details:
  - o 85% of respondents felt more engaged in their health management due to the ease of monitoring provided by technology.
  - Health app usage data showed that users spent an average of 30 minutes daily on these tools, tracking their fitness, diet, and meditation activities.
  - o Patients reported that the continuous feedback and goal-setting features of these apps motivated them to adhere to their wellness routines.

## VIII. REFERENCES

- [1] Vickers, A. J., Cronin, A. M., Maschino, A. C., Lewith, G., MacPherson, H., Foster, N. E., ... & Linde, K. (2012). Acupuncture for chronic pain: individual patient data meta-analysis. Archives of Internal Medicine, 172(19), 1444-1453.
- [2] Cramer, H., Lauche, R., Haller, H., Langhorst, J., & Dobos, G. (2013). A systematic review and metaanalysis of yoga for low back pain. Clinical Journal of Pain, 29(5), 450-460.

Gurukul International Multidisciplinary Research Journal (GIMRJ)with International Impact Factor 8.249 Peer Reviewed Journal

Special Issue On Advancements and Innovations in Computer Application: Pioneering Research for the Future Issue–I(VIII), Volume–XII

https://doi.org/10.69758/GIMRJ2406I8V12P035

- [3] Wang, H., Naghavi, M., Allen, C., Barber, R. M., Bhutta, Z. A., Carter, A., ... & Murray, C. J. L. (2016). Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet, 388(10053), 1459-1544.
- [4] Stead, L. F., Koilpillai, P., Fanshawe, T. R., & Lancaster, T. (2016). Combined pharmacotherapy and behavioural interventions for smoking cessation. Cochrane Database of Systematic Reviews, (3). 25-30, https://doi.org/10.46335/IJIES.2022.7.8.5
- [5] Khalsa, S. B. S., Hickey-Schultz, L., Cohen, D., Steiner, N., & Cope, S. (2012). Evaluation of the mental health benefits of yoga in a secondary school: a preliminary randomized controlled trial. Journal of Behavioral Health Services & Research, 39(1), 80-90.
- [6] Pilkington, K., Kirkwood, G., Rampes, H., & Richardson, J. (2005). Yoga for depression: the research evidence. Journal of Affective Disorders, 89(1-3), 13-24.
- [7] Motti, V. G., & Caine, K. (2014). Human factors considerations in the design of wearable devices. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 58(1), 1820-1824.
- [8] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.
- [9] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2022), "An Analytical Perspective on Various Deep Learning Techniques for Deepfake Detection", 1st International Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA), 10th & Data Conference on Artificial Intelligence and Big Data Conferenc
- [10] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2022), "Revealing and Classification of Deepfakes Videos Images using a Customize Convolution Neural Network Model", International Conference on Machine Learning and Data Engineering (ICMLDE), 7th & September 2022, 2636-2652, Volume 218, PP. 2636-2652, https://doi.org/10.1016/j.procs.2023.01.237
- [11] Usha Kosarkar, Gopal Sakarkar (2023), "Unmasking Deep Fakes: Advancements, Challenges, and Ethical Considerations", 4th International Conference on Electrical and Electronics Engineering (ICEEE),19th & 20th August 2023, 978-981-99-8661-3, Volume 1115, PP. 249-262, https://doi.org/10.1007/978-981-99-8661-3\_19
- [12] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2021), "Deepfakes, a threat to society", International Journal of Scientific Research in Science and Technology (IJSRST), 13th October 2021, 2395-602X, Volume 9, Issue 6, PP. 1132-1140, https://ijsrst.com/IJSRST219682
- [13] Usha Kosarkar, Gopal Sakarkar (2024), "Design an efficient VARMA LSTM GRU model for identification of deep-fake images via dynamic window-based spatio-temporal analysis", International Journal of Multimedia Tools and Applications, 8th May 2024, https://doi.org/10.1007/s11042-024-19220-w
- [14] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2022), "An Analytical Perspective on Various Deep Learning Techniques for Deepfake Detection", *1st International Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA)*, 10<sup>th</sup> & 11<sup>th</sup> June 2022, 2456-3463, Volume 7, PP. 25-30, <a href="https://doi.org/10.46335/IJIES.2022.7.8.5">https://doi.org/10.46335/IJIES.2022.7.8.5</a>
- [15] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2022), "Revealing and Classification of Deepfakes Videos Images using a Customize Convolution Neural Network Model", *International Conference on Machine Learning and Data Engineering (ICMLDE)*, 7<sup>th</sup> & 8<sup>th</sup> September 2022, 2636-2652, Volume 218, PP. 2636-2652, <a href="https://doi.org/10.1016/j.procs.2023.01.237">https://doi.org/10.1016/j.procs.2023.01.237</a>
- [16] Usha Kosarkar, Gopal Sakarkar (2023), "Unmasking Deep Fakes: Advancements, Challenges, and Ethical Considerations", 4<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE),19<sup>th</sup> & 20<sup>th</sup> August 2023, 978-981-99-8661-3, Volume 1115, PP. 249-262, https://doi.org/10.1007/978-981-99-8661-3 19

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Special Issue On Advancements and Innovations in Computer Application: Pioneering Research for the Future Issue–I(VIII), Volume–XII

- [17] Usha Kosarkar, Gopal Sakarkar, Shilpa Gedam (2021), "Deepfakes, a threat to society", *International Journal of Scientific Research in Science and Technology (IJSRST)*, 13<sup>th</sup> October 2021, 2395-602X, Volume 9, Issue 6, PP. 1132-1140, https://ijsrst.com/IJSRST219682
- [18] Usha Kosarkar, Prachi Sasankar(2021), "A study for Face Recognition using techniques PCA and KNN", Journal of Computer Engineering (IOSR-JCE), 2278-0661,PP 2-5,
- [19] Usha Kosarkar, Gopal Sakarkar (2024), "Design an efficient VARMA LSTM GRU model for identification of deep-fake images via dynamic window-based spatio-temporal analysis", Journal of Multimedia Tools and Applications, 1380-7501, https://doi.org/10.1007/s11042-024-19220-w
- [20] Usha Kosarkar, Dipali Bhende, "Employing Artificial Intelligence Techniques in Mental Health Diagnostic Expert System", International Journal of Computer Engineering (IOSR-JCE),2278-0661, PP-40-45, https://www.iosrjournals.org/iosr-jce/papers/conf.15013/Volume%202/9.%2040-45.pdf?id=7557