Moodlakatte Institute of Technology
(A Unit of Moodlakatte Nagarathna Bhujanga Shetty Trust (R.))
(Approved by AICTE, New Delhi & Affiliated to V T U , Belagavi)
Moodlakatte - 576 217, Kundapura Taluk, Udupi District, Karnataka

First International Conference on Artificial Intelligence and Machine Learning and Data Science (ICAMDS-2024)

ORGANIZED ON

17th and 18th September 2024

VENUE

MITK Auditorium

PARTICIPANTS

150

TABLE OF CONTENTS

Sl. No	Name of the Events	Page No
DAY 01:17/09/2024		
1.	Inauguration	**1**
2.	Key note talk: Artificial Intelligence for Fish Behavior Recognition may Unlock Fishing Gear Selectivity	**1-10**
3.	Robotic automation using AI&ML for medical applications	**10-11**
4.	Applications of Generative AI and ML in Dentistry	**10-11**
DAY 02:18/09/2024		
5.	Emerging Trends of AIML in Embedded System	**11-12**
6.	Machine learning based Product- A Case Study	**11-12**
7.	Offline paper presentation	**13-14**
8.	Application of AI and ML in daily life include assistants and social media content curation	**14-15**

Chief Patron

Shri Siddartha J. Shetty — Chairman, MoodlaKatte Institute of Technology, Kundapura, Karnataka.

Patrons

Dr. Abdul Kareem — Principal, MIT, Kundapura

Prof. Melwin D'Souza — Vice Principal, MIT, Kundapura

PREAMBLE

The First International Conference on Artificial Intelligence, Machine Learning, and Data Science (ICAMDS-2024), organized by Moodlakatte Institute of Technology on September 17th and 18th, will bring together researchers, academicians, and professionals to discuss cutting-edge advancements in AI, ML, and Data Science. The event will showcase the latest developments in AI algorithms, machine learning techniques, and data-driven solutions, with a focus on their applications in industries like healthcare, finance, and education. ICAMDS-2024 aims to promote collaboration and knowledge sharing while addressing key challenges, ethical considerations, and the future of these transformative fields.

REPORT

INAUGRATION

The Inauguration of the First International Conference on Artificial Intelligence, Machine Learning, and Data Science (ICAMDS-2024) was held at the Moodlakatte Institute of Technology, Kundapura, featuring esteemed guests. The chief guest for the event was Dr. Purushottam G B, Senior Scientist, ICAR Govt of India, Karwar. The Conference Chair and Head of the AIML department Dr.Indravijay Singh , Dr. Abdul Kareem, the Principal of MITK. The ceremony began the traditional lighting of the lamp and a prayer, symbolizing the commencement of an event dedicated to advancing knowledge and collaboration in AI, machine learning, and data science. The ceremony hosted by Ms. Meghana ALML student and Dr. Indravijay Singh gave insightful Opening remarks about the Conference. The chief guest Dr. Purushottama G B, detailed how AI technologies can revolutionize the fisheries sector by optimizing fish farming practices through predictive analytics, improving sustainability with real-time monitoring systems, and enhancing resource management by analysing data on fish populations and environmental conditions. Dr. Purushottam also highlighted successful case studies where AI has been implemented to increase yields and reduce waste, showcasing the potential for innovation in the industry. Following him, the Principal, Dr. Abdul Kareem, addressed the audience, emphasizing the importance of AI in today's rapidly evolving technological landscape. He discussed how AI can drive innovation, improve decision-making processes, and enhance productivity across industries. Dr. Kareem encouraged participants to embrace AI as a tool for addressing global challenges and advancing research and education. The event concluded with a heartfelt vote of thanks delivered by Ms. Fatima Tahsir, an ECE student, who expressed gratitude to all the speakers, organizers, and attendees for their contributions and participation in making the conference a success.

Inauguration

ಮೂಡ್ಲಕಟ್ಟೆ: ಡೇಟಾ ಸೈನ್ಸ್ ಅಂತಾರಾಷ್ಟ್ರೀಯ ಸಮ್ಮೇಳನ

ವಿಕ ಸುದ್ದಿಲೋಕ ಕುಂದಾಪುರ

ಇಲ್ಲಿನ ಮೂಡ್ಲಕಟ್ಟೆ ಇನ್‌ಸ್ಟ್ಯೂಟ್ ಆಫ್ ಟೆಕ್ನಾಲಜಿ (ಎಂಐಟಿಕೆ) ತನ್ನ ಮೊದಲ ಅಂತಾರಾಷ್ಟ್ರೀಯ ಸಮ್ಮೇಳನ ವನ್ನು ಕೃತಕ ಬುದ್ಧಿಮತ್ತೆ, ಯಂತ್ರ ಕಲಿಕೆ ಮತ್ತು ದತ್ತಾಂಶ ವಿಜ್ಞಾನದ ಕುರಿತು ಹೈಬ್ರಿಡ್ ವಿಧಾನದಲ್ಲಿ ಆಯೋಜಿಸಿದ್ದು, ಸಂಸ್ಥೆಯ ಇತಿಹಾಸದಲ್ಲಿ ಮಹತ್ವದ ಮೈಲಿಗಲ್ಲನ್ನು ಸಾಧಿಸಿದೆ. ಕಾರ್ಯಕ್ರಮವನ್ನು ಮಂಗಳೂರು ಗ್ಯಾರು ಉದ್ಘಾಟಿಸಿದರು.

ಎಐಎಂಎಲ್ ವಿಭಾಗ ಮುಖ್ಯಸ್ಥರು, ಸಮ್ಮೇಳನದ ಅಧ್ಯಕ್ಷ ಡಾ.ಇಂದ್ರವಿಜಯ್ ಸಿಂಗ್ ಮಾತನಾಡಿ, ಎಐ ಮತ್ತು ಎಂಎಲ್ ದೈನಂದಿನ ಜೀವನಕ್ಕೆ ಹೇಗೆ ಅವಿಭಾಜ್ಯವಾಗುತ್ತಿವೆ ಎಂಬುದನ್ನು ತಿಳಿಸಿದರು. ಮೀನುಗಾರಿಕೆಯಲ್ಲಿ ಎಐ ಮತ್ತು ಎಂ ಎಲ್ ಹೇಗೆ ಉಪಯೋಗಿಸಬಹುದು ಎಂಬುದನ್ನು ಚರ್ಚಿಸುವುದು ಸಮ್ಮೇಳನದ ಗುರಿ ಎಂದರಲ್ಲದೆ ಈ ಸಮ್ಮೇಳನದಲ್ಲಿ ಹಲವಾರು ರಾಷ್ಟ್ರೀಯ, ಅಂತಾರಾಷ್ಟ್ರೀಯ ಪ್ರತಿನಿಧಿಗಳಿಂದ ಅತ್ಯುತ್ತಮ ಲೇಖನಗಳು ಮಂಡಿಸಲ್ಪಡುತ್ತಿವೆ ಎಂದರು.

ಕಾರವಾರದ ಕೇಂದ್ರೀಯ ಸಾಗರ ಮೀನುಗಾರಿಕಾ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆಯ ಐಸಿಎಆರ್‌ನ ಹಿರಿಯ ವಿಜ್ಞಾನಿ ಡಾ. ಪುರುಷೋತ್ತಮ ಜಿ.ಬಿ. ಅವರು ಮಾತನಾಡಿ, ನಾನಾ ಕ್ಷೇತ್ರಗಳಲ್ಲಿ ಎಐ ಮತ್ತು ಎಂ ಎಲ್‌ನಲ್ಲಿ ಆದ ಇತ್ತೀಚಿನ ಆವಿಷ್ಕಾರಗಳು ಮತ್ತು ಪ್ರಗತಿಗಳನ್ನು ಚರ್ಚಿಸಿದರು. ಮೀನುಗಾರಿಕೆಯಲ್ಲಿ ಪರಿ ಚಯಿಸಲಾದ ಎಐಎಂಎಲ್ ಉಪ ಯೋಗದ ಬಗ್ಗೆ ಅವರು ವಿವರಿಸಿದರು

ಎಂಐಟಿಕೆ ಪ್ರಿನ್ಸಿಪಾಲ್ ಡಾ. ಅಬ್ದುಲ್ ಕರೀಂ ಮಾತನಾಡಿ, ವೇಗವಾಗಿ ಅಭಿವೃದ್ಧಿ ಹೊಂದುತ್ತಿರುವ ಮಾರುಕಟ್ಟೆ ಬೇಡಿಕೆಗಳು ಮತ್ತು ಈ ಬೆಳವಣಿಗೆಗಳಿಗೆ ಸರಿ ಹೊಂದುವಂತೆ ಶೈಕ್ಷಣಿಕ ಪಠ್ಯಕ್ರಮವನ್ನು ನವೀಕರಿಸುವಲ್ಲಿನ ಸವಾಲುಗಳ ಬಗ್ಗೆ ತಿಳಿಸಿ ಎಂಜಿನಿಯರ್‌ಗಳು ಮತ್ತು ಮೀನುಗಾರಿಕಾ ವಲಯದ ನಡುವಿನ ಸಹಯೋಗದ ಮಹತ್ವ ವಿವರಿಸಿದರು.

ಪ್ರಾಧ್ಯಾಪಕಿ ಸುಷ್ಮಾ ಶೆಟ್ಟಿ ಅತಿಥಿಗಳನ್ನು ಪರಿಚಯಿಸಿದರು. ವಿದ್ಯಾರ್ಥಿನಿ ಮೇಘನಾ ಕಾರ್ಯಕ್ರಮ ನಿರ್ವಹಿಸಿದರು. ವಿದ್ಯಾರ್ಥಿನಿ ಫಾತಿಮಾ ವಂದಿಸಿದರು.

ವಿಜಯಕರ್ನಾಟಕ 18/9/2024

Session 1: Artificial Intelligence for Fish Behavior Recognition may Unlock Fishing Gear Selectivity.

Resource Person Details: Dr. Purushottama G. B is a Senior Scientist at ICAR, Government of India, in Karwar. He completed his Bachelor of Fishery Science (BFSC) in 2002 at the University of Agricultural Sciences, Bangalore, and earned his Master of Fishery Science (MFSC) in 2004 from the Central Institute of Fisheries Education, Mumbai. He obtained his Ph.D. in Veterinary Animal and Fisheries Science from the University of Bidar, Karnataka, in 2009. Dr. Purushottama has successfully completed three projects, received several central awards, and published 72 research papers, with a citation count of 222, an h-index of 7, and an I-10index of 3.

Session Summary: In his insightful session, Dr. Purushottam G B delved into the transformative potential of artificial intelligence (AI) in the field of fisheries, specifically focusing on fish behavior recognition and its implications for fishing gear selectivity. He began by emphasizing the challenges faced by the fishing industry, including overfishing and bycatch, which pose significant threats to marine ecosystems. Dr. Purushottam introduced AI technologies, particularly machine learning and computer vision, as powerful tools for analyzing and interpreting complex fish behaviors. He explained how these technologies can be applied to real-time monitoring of fish populations, allowing for the identification of species-specific movements and behaviors. By utilizing underwater cameras and sensors, AI algorithms can process large amounts of visual data to detect patterns in fish behavior that are often invisible to the human eye.

One of the key highlights of his presentation was the concept of fishing gear selectivity. Dr. Purushottam discussed how AI can help design more efficient and environmentally friendly fishing gear that targets specific species while minimizing bycatch. By understanding the behavior of different fish species, fishermen can adjust their gear and techniques to optimize catch rates, ensuring that non-target species are not unintentionally captured.

Dr. Purushottam concluded his session by highlighting the importance of interdisciplinary collaboration among researchers, technologists, and fisheries management stakeholders to fully realize the potential of AI in fisheries. He encouraged ongoing research and innovation to further develop AI applications that support sustainable resource management and conservation efforts.

Session 02: Robotic automation using AI&ML for medical applications. Resource Person

Details: Soumya Kanti Manna

Principal Lecturer in Design Engineering, Canterbury Christ Church University
Verified email at canterbury.ac.uk -

Session Summary: In the talk on "Robotic Automation Using AI & ML for Medical Applications," the speaker examined how robotic systems powered by artificial intelligence (AI) and machine learning (ML) are transforming healthcare. They highlighted the significant impact of surgical robots, such as the da Vinci Surgical System, which enable surgeons to perform minimally invasive procedures with enhanced precision and accuracy. The discussion also covered the role of robots in patient care, demonstrating their ability to assist in rehabilitation and monitor vital signs, ultimately improving patient outcomes. Furthermore, the speaker emphasized the application of AI and ML in diagnostic support, where algorithms analyze medical images to improve accuracy and minimize errors. The talk addressed the optimization of hospital workflows through robotic automation, leading to greater operational efficiency. Challenges such as high costs and ethical considerations related to patient data privacy were also discussed. The session concluded with insights into future trends, suggesting that continuous advancements in AI and robotics will further integrate these technologies into healthcare, enhancing patient experiences and outcomes.

Session 03: Applications of Generative AI and ML in Dentistry.

Resource Person Details: Prof. Shashikant Patil

Session Summary: In the session on "Applications of Generative AI and ML in Dentistry," the resource person explored the transformative impact of artificial intelligence (AI) and machine learning (ML) on dental practice and patient care. They highlighted how generative AI can analyse extensive patient data, including medical histories and imaging, to develop personalized treatment plans tailored to individual needs, thus enhancing treatment effectiveness. The session emphasized the role of AI in analysing dental images, such as X-rays and 3D scans, where ML algorithms detect patterns and anomalies, aiding in the early diagnosis of conditions like cavities and periodontal disease. The speaker also discussed the creation of virtual simulations of dental procedures, which help both practitioners and patients visualize potential outcomes, improving communication and treatment acceptance. Additionally, the use of generative AI and ML in streamlining administrative processes—such as appointment scheduling and billing—was covered, allowing dental staff to focus more on patient care. The potential of predictive analytics to forecast future dental health trends was highlighted, enabling proactive management of patient issues. Ethical considerations, including data privacy and the importance of maintaining a human touch in patient interactions, were also addressed. The session concluded with insights into future trends, suggesting that ongoing advancements in generative AI and ML will further integrate these technologies into dentistry, enhancing diagnostic accuracy and patient experiences.

Session 04: Emerging Trends of AIML in Embedded System

Resource Person Details: Dr. Bhanwar Laal Bishnoi is the Director of Research at L&T and a senior member of IEEE, boasting over 35 patents and 27 years of experience in research and development within the electronics field. His expertise spans new technology introduction and

product design development, with extensive research in areas such as protection relays, electronic energy meters, smart energy metering solutions, and solar microinverters. In recognition of his contributions, he received the Industrial Management Award from G-Energy in 2009. Additionally, Dr. Bishnoi is a dedicated mentor who has guided and coached highly experienced teams in embedded electronic design and development.

Session Summary: In the session on "Emerging Trends of AI/ML in Embedded Systems," Dr. Bishnoi explored the significant advancements in the integration of artificial intelligence (AI) and machine learning (ML) within embedded systems. He began by defining embedded systems and emphasizing their critical roles in various applications, from consumer electronics to industrial automation. A key focus was on the trend of embedding AI/ML algorithms directly into devices, enabling local data processing that enhances responsiveness, reduces latency, and improves data security. The discussion included the importance of edge computing, where data is processed closer to the source for real-time analytics and decision-making, particularly in applications like autonomous vehicles and smart manufacturing. The speaker also highlighted how AI/ML enhances data processing capabilities, allowing embedded systems to analyze vast amounts of data from sensors for intelligent decision-making and predictive maintenance. Additionally, the intersection of AI/ML with the Internet of Things (IoT) was addressed, showcasing smarter automation and improved resource management in various sectors. Challenges such as resource constraints and the need for efficient algorithms were discussed, along with the emphasis on energy efficiency for battery-operated devices. The session concluded with insights into future trends, suggesting that ongoing advancements in AI/ML will continue to shape embedded systems, leading to more autonomous and intelligent devices through emerging technologies like neuromorphic computing and advanced sensor integration.

Session 05: Machine learning based Product- A Case Study

Resource Person Details: Mr. Abahay Phansekar (Directotr , Ibilt)

Session Summary: This case study, provided by the resource person, outlines the process of developing a machine learning-based product aimed at addressing specific business challenges, such as improving customer satisfaction or enhancing operational efficiency. The development begins with identifying a clear problem that can be solved through machine learning. The next steps involve extensive data collection, followed by cleaning and preprocessing the data to ensure its quality. Machine learning models are then developed and trained using this data, with performance measured and iteratively refined to achieve optimal results. The resource person emphasizes the critical role of high-quality data and continuous model improvement. Once the model is validated, it is deployed into the product, delivering concrete business benefits like automation, predictive insights, or personalized solution.

Offline Paper Presentation:

Innovative Deep Learning Techniques for Predicting and Identifying Cardiovascular Diseases

Likhi swasthic
Moodlakatte Institute of Technology , Kundapura
Email: sibisebastian013@gmail.com

Abstract:

Cardiovascular diseases (CVDs) remain a global health challenge, necessitating advanced methods for early detection and risk assessment. This study explores the efficacy of deep learning and traditional machine learning models in predicting CVDs. We assess Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Multilayer Perceptrons (MLPs), and Long Short-Term Memory (LSTM) networks, alongside Logistic Regression (LR), Decision Tree (DT), Random Forest (RF), Support Vector Machine (SVM), Gaussian Naive Bayes (NB), and K-Nearest Neighbours (KNN).Our findings reveal that the RNN model achieves the highest accuracy at 99.51%, surpassing other models. CNNs and Random Forests also demonstrate robust performance, while the LSTM model shows comparatively lower accuracy. These results underscore the potential of deep learning techniques, particularly RNNs, in advancing CVD prediction accuracy. Integrating deep learning with traditional machine learning methods enhances predictive precision, crucial for improving

healthcare outcomes. By leveraging the strengths of CNNs for feature extraction from medical images and RNNs for sequence modeling of patient data, healthcare providers can achieve more accurate early detection and proactive management of CVDs. The robust performance of Random Forests further validates the efficacy of ensemble methods in handling complex medical datasets.This research contributes to the growing body of evidence supporting the integration of advanced deep learning approaches with traditional machine learning algorithms in medical diagnostics. Such advancements promise to transform cardiovascular healthcare by enabling timely interventions and personalized treatment strategies, ultimately reducing the global burden of CVD-related mortality and morbidity.

Predicting Brain Strokes Using Machine Learning and Artificial Neural Networks

Akshay Naik, Prajwal Naik, and Skanda Hebbar
Moodlekatte Institute of Technology , Kundapura, Karnatka

ABSTRACT

A brain stroke, also known as a cerebrovascular accident (CVA), is a critical medical condition characterized by the sudden interruption of blood flow to the brain, resulting in rapid loss of brain function. This disruption can occur due to ischemia, caused by blockage from a thrombus or embolus, or hemorrhage, stemming from the rupture of a blood vessel. Stroke incidence, a major contributor to global morbidity and mortality, is expected to increase with advancing age.

The pathophysiology of stroke involves complex mechanisms such as excitotoxicity, apoptosis, inflammation, and oxidative stress, which ultimately lead to neuronal damage and death. Clinical manifestations vary depending on the location of the brain affected and commonly include sudden unilateral weakness, speech difficulties, visual impairments, and impaired coordination.

Early diagnosis through neuroimaging techniques and prompt treatment are crucial in minimizing neurological damage and improving outcomes. Current treatments include thrombolysis, thrombectomy, and supportive care, while ongoing research explores neuroprotective strategies, stem cell therapy, and rehabilitation techniques.

Preventive measures play a crucial role in mitigating stroke risks and include managing hypertension, quitting smoking, and adopting healthier lifestyles. This abstract aims to outline the causes, pathogenesis, clinical features, and treatment modalities of cerebrovascular accidents, underscoring the importance of early detection and comprehensive patient management for improved prognosis.

Keywords: Machine learning, Logistic Regression, Random Forest, Artificial Neural Network

Sleep pattern analysis of Infants Using ML because of Cell phone utilization

Hema, Rashmi and Smita

Mit Kundrapura

Context: Exposure to electromagnetic fields (EMF) is recognized for its influence on regional cerebral blood flow during wakefulness and slow wave sleep. Proximity to cell phone towers and exposure to electronic devices in sleeping environments have shown to impact the sleep of infants and young children. **Objective:** This study aims to investigate the impact of cell phone tower radiation on infant sleep patterns. **Methods:** Data from a cohort of 34 newborns were analyzed. Of these, 15 were categorized as exposed (within 500m of a cell phone tower), while 19 were unexposed (beyond 500m). Infant sleep patterns were evaluated using the Infant Sleep Questionnaire (BIQS), while the level of radiation (LOR) was measured using the NARDASRM 3006 Field strength analyzer

Impact of Radiofrequency Electromagnetic Radiation (RFEMR) on Neuron-Specific Enolase (NSE) and Malondialdehyde (MDA) Levels in Humans

Keerthana, Kumari Shivaji , Anjali and Indra Vijay Singh
MIT Kundapura, Karnatka-India

Abstract: Radiofrequency electromagnetic radiation (RFEMR) from mobile phones is known to trigger a stress response, potentially impacting the hypothalamus. With the growing prevalence of mobile phones and their increased usage, both in terms of the number of users and the duration of use, it is important to examine how mobile phone RFEMR affects neuron-specific enolase (NSE) and malondialdehyde (MDA) levels. This study investigated these effects using twelve male Sprague-Dawley (SD) rats, aged 10-12 weeks and weighing 180-220 grams, sourced from registered laboratory breeders and housed under a 12-hour light/dark cycle with unrestricted access to food and RO water. The results demonstrated a significant increase in NSE and MDA levels in rats exposed to RFEMR, indicating that mobile phone RFEMR induces oxidative stress and oxidative damage in SD rats.

Keywords: Oxidative stress, oxidative damage, reactive oxygen species, neuronal cells, brain injury.

During presentatio

Creating AI frameworks for assessing and predicting post-flood recovery

Meghana V,Prathyusha, Sinchana, Vaishnavi,
Moodlekatte Institute of Technology , Kundapura, Karnatka-576201

ABSTRACT

Floods rank among the most catastrophic natural calamities, inflicting substantial human and economic losses, thereby demanding robust recovery approaches. This study introduces the construction of artificial intelligence frameworks designed for the assessment and prediction of post-flood recovery processes. Leveraging an extensive dataset encompassing precipitation records, river levels, soil moisture content, and other pertinent recovery-related factors, the research endeavors to forecast both flood events and the efficacy of subsequent recovery endeavors.

Central to this framework is the deployment of machine learning methodologies, specifically employing a Random Forest Classifier in conjunction with geospatial data. This integration enhances the precision of flood occurrence predictions and facilitates a nuanced understanding of recovery dynamics. The ultimate objective is to furnish disaster management authorities with a sophisticated toolset capable of optimizing resource distribution and refining recovery strategies.

By harnessing advanced AI capabilities, this framework not only anticipates flood occurrences but also evaluates the potential impact on affected regions. This proactive approach empowers decision-makers to prioritize preemptive measures and allocate resources effectively, thereby mitigating the adverse consequences of floods and expediting recovery processes for affected communities.

Assessment of Robotic Medicine and Computer-Enhanced

Surgery

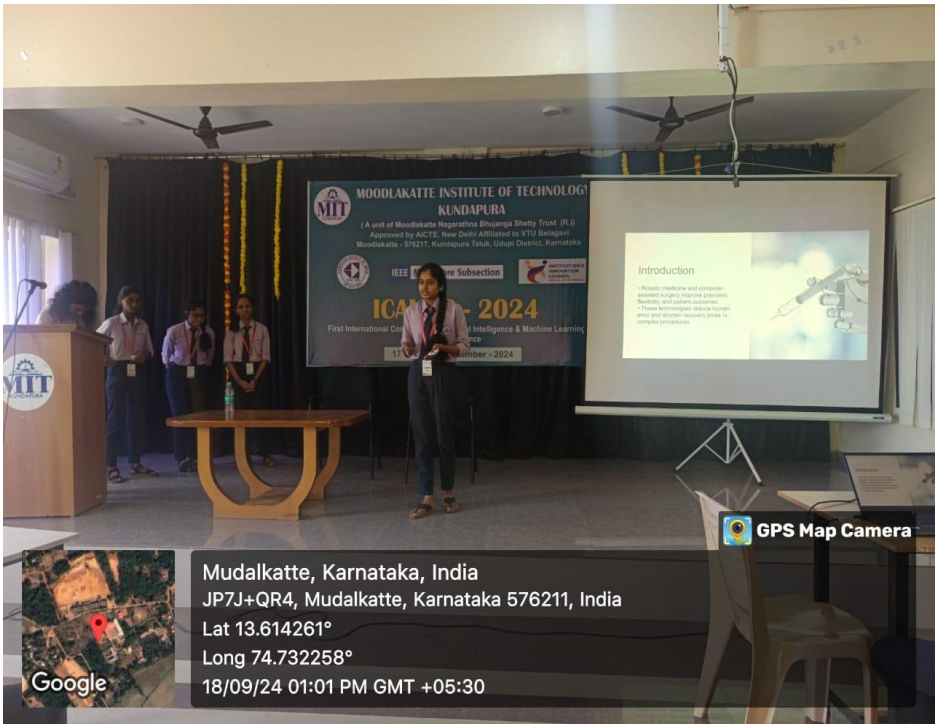
Shweta,.etall
MIT Kundapura, Karnatka , India
eMail: vijaysinghindra@gmail.com

Abstract: Medical robots and computer-assisted surgery signify a groundbreaking advancement in healthcare. These technologies include robotic systems and computer algorithms that support surgeons in carrying out complex procedures with improved precision, flexibility, and control. Combining robotics with surgical techniques seeks to reduce human error, shorten recovery times, and enhance patient outcomes. This blend of advanced robotics and surgical precision has the potential to transform medical procedures, making them safer and more efficient.

Advancement of Medical Robots

The development of medical robots has progressed dramatically over recent decades, evolving from basic machines to advanced systems. In the early 1980s, the Puma 560, one of the first robotic surgical tools, demonstrated the potential of robotics in precision surgery during a neurosurgical biopsy. This period marked the start of robotic assistance in surgery, though its capabilities were limited.

The 1990s saw a major leap with the introduction of the da Vinci Surgical System, which enhanced dexterity and offered three-dimensional (3D) visualization, allowing for more precise minimally invasive procedures. By the early 2000s, robotic systems had advanced further with features like haptic feedback and better instrument articulation, broadening their use across various surgical fields



Weather forecasting using ML

Vivek Shetty, Jairaj . k , Karthik sheregar
July 2024

ABSTRACT
The technique of prediction is a part of statistical modelling which is being increasingly applied in various domains due to the added advantage of its capacity to turn tide. The function of forecasting is to speculate on the coming values of certain variables that travel with time using its previous values. Timing Forecasts are developed through the compilation of models and techniques that can be employed to squeeze out a good forecast. This research has been conducted through a systematic mapping study and systematic literature review. Typically, in time series forecasting, linear time series methods, such as ARIMA and LSTM are usually used due to the accuracy of the models. The aim of this research is to examine time series forecasting methods such as ARIMA, Prophet, and LSTM and their working time series forecasting methods. This paper also points to the directions different methods have used in the time series forecasting. Its objective is manifold, to bring into the locality more awareness of time series forecasting and its methods.
Key Words: Time Series models, ARIMA, LSTM, Prophet, Accuracy, Forecasting

Assessment of Neurodevelopment of children

Parveen and Abhishek
Moodlakatte Institute of Technology, Moodlakatte, , Kundapura, Karnatka , India[1]

Abstract: The participants had an average age of 5.2 months (SD = 3.9), with 51% male and 49% female. About 11% showed concerns in communication and gross motor skills, with higher percentages in the exposed group (13% vs. 8% for communication; 15% vs. 6% for gross motor skills). The exposed group also reported more concerns in fine motor skills (15% vs. 8%; p=0.34) and problem-solving (24% vs. 14%; p=0.26). The median household radiation level was 6.00 (IQR: 0.78, 18.9) mw/m². A negative correlation was observed between radiation levels and ASQ scores for communication (r= -0.22; p=0.04), with similar trends for gross motor skills and problem-solving. Additionally, a positive correlation indicated poorer ASQ-Social Emotional outcomes (r=0.18; p=0.14).

Session 06: Application of AI and ML in daily life include assistants and social

Dr. Amlan basu :

1. Ph.D. in Electronic and Electrical Engineering (Computer Vision & Deep Learning) at University of Starthclyde, Glasgow, Scotland, U.K. (December 2017 - June 2022)
2. Master of Technology (Integrated) in Electronics and Communication Engineering, ITM University, Gwalior, Madhya Pradesh, India. (2014-216) (Certificate no. 02525)
3. Bachelor of Technology (Honours) in Electronics and Communication Engineering, ITM University, Gwalior, Madhya Pradesh, India. (2011-2015) (Certificate no. 02525)
4. Chartered Engineer (India), granted by Institution of Engineers (India). (2016) (AM1702133)
5. Associate Member of Institution of Engineers (India). (2016) (Membership no. AM170213-3)
6. Associate Member of Institution of Electronics and Telecommunication Engineers (India). (2017) (Membership no. AM-500656)
7. Member of The Institution of Engineering and Technology (U.K.). (2017) (Membership no. 1100577551)

8. Member of Institute of Electrical and Electronics Engineers (U.S.A.). (2017) (Membership no. 94255601)
9. Life Member of The Indian Science Congress Association (India). (2017) (Membership no. L32125)
10. Licentiate Member of Institution of Valuers (India). (Membership no. L-26713)

Session Summary: The resource person has told the significance of Artificial Intelligence (AI) and Machine Learning (ML) in our daily lives, especially through virtual assistants and social media content curation. AI-powered virtual assistants like Siri, Alexa, and Google Assistant utilize ML to understand voice commands, adapt to user preferences, and improve over time. They assist with tasks such as setting reminders, retrieving information, and controlling smart home devices.

Meanwhile, social media platforms like Facebook, Instagram, and TikTok employ AI and ML algorithms to enhance user experiences. These algorithms analyse behaviour, preferences, and interactions to personalize content, recommend posts, and deliver targeted ads based on user activity. Together, AI and ML significantly enhance convenience, efficiency, and personalization in our digital interactions.

Conclusion: The conference wrapped up with a strong call to action for collaboration among stakeholders to promote the ethical and responsible development and deployment of AI, ensuring it benefits society as a whole. Leading AI researchers shared their perspectives on the latest advancements and their implications across various sectors.

- Presentations covered topics such as machine learning, natural language processing, computer vision, and robotics.
- Case studies highlighted successful AI implementations in different industries.
- Thought leaders engaged in discussions about ethical concerns in AI, including bias, accountability, and transparency.
- There were conversations about the regulatory landscape and the importance of responsible AI development.
- Hands-on sessions equipped participants with practical skills related to AI tools and frameworks.
- Key topics included data science, model training, and AI applications in business.

- Attendees actively participated in discussions, fostering collaboration between academia and industry.
- Insights were shared on emerging technologies like generative AI, autonomous systems, and AI's role in healthcare.
- Predictions about the future of AI and its societal impact were also explored.

ORGANIZING COMMITTEE:

1. Dr. Indra Vijay Singh (Conference Chair)
2. Prof. Gagan B (Dept of AI& ML)
3. Prof. Karthikeyan (Dept of AI & ML)
4. Prof. Manoj Kumar (Dept of CSE)
5. Prof. Smitha Shree(Dept of CSE)
6. Prof. Balnageswar (Dept of (ECE)
7. Prof. Divya K (Dept. of ECE)
8. Prof. Farana Imran (Dept of CSE)

Head of the Department
Department of AI & ML
M.I.T. Kundapura-576 217

Prepared by:

Prof. Sushma Shedthi

Signature of HoD

Dr.. Indra Vijay Singh

Principal
Dr. Abdul Kareem

Principal
Moodlakatte Institute of Technology
Moodlakatte, Kundapura - 576217
Udupi Dist, Karnataka

First International Conference on Artificial Intelligence & Machine Learning and Data Science (ICAMDS-2024)

16th and 17th September 2024

Registration Form

Name (Block Letter): ……..
Designation: ……
Organization: ……..
Mailing Address:
……
……
……
Mobile number:
Email:

I wish to present paper/poster/participate in the **"ICAMDS-2024"** during 16th and 17th September 2024

Title of the Paper:

Author(s):

Details of the registration fees, if submitted by SBI Collect):

Amount: ……..

Reference No…… Date: ……

Category of Registration

☐ Industry ☐ Academician

☐ Research Scholar / Student

Place:
Date:

Signature of the Applicant

Signature of HOD/Principal with seal

Chief Patron

Shri Siddartha J. Shetty	Chairman, MoodlaKatte Institute of Technology, Kundapura , Karnatka.

Patrons

Dr. Abdul Kareem	Principal, MIT, Kundapura
Prof. Melwin D'Souza	Vice Principal, MIT, Kundapura

Technical Advisory Committee Members

Prof (Dr.) KG Narayan Khedkar, Ex Dean Planning , IIT Bombay	Mr. Pradeep Rathi, Vice President, Member National Execom., CSI Bombay Section.
Prof. R Shegaonkar Ex professor IIT Bombay, Ex VC Pune University	Dr. Selia Shahnaz, Professor, BTU, Bangladesh, IEEE Women Div Asia Head.
Dr. Mo. Sarosh Umar, Professor & Ex. Chairman of CSE, AMU, Aligarh.	Dr. Permod Tewari, IIT Patna.
Dr. Satyanarayana Bheesette, Ex Scientist, TIFR	Prof. James Windmill, University of Strathclyde|, UK.
	Prof. Musfira Jilani ,PNU,Riyadh
	Dr. Ravi Yadav, Israel Institute of Technology. Israel.
	Dr. Ranjeet Singh Tomar ITM University , Gwalior.
Prof. Vinit Kotak, IEEE Bombay Section , Vice-Chair	Dr. Vivek Mishra , Alliance University Bengaluru

Organizing Committee

Student Committee

1. Ms. Meghana
2. Ms. Sweta
3. Mr. Aditya S. Meti
4. Mr. Lavanya U
5. Ms. Keerthana Patel
5. Kumari Shivaji
6. Mr.Sarad Acharya

Key Note Speakers:

1. Prof. Shashikant Patil (ATLAS skill University Mumbai)
2. Dr. Raj Mani Suckla (Anglia Ruskin University, Cambridge, UK)
3. Dr. ArchanaB. Patankar (ThandomaL Sahni College of Engg, Mumbai)
4. Dr. Saumaya Kanti Mana, (Canterbury Christ Church University, UK)
5. Mr. Abhay Phansekar (Technical Director iBilt Technologies, Mumbai)
6. Dr. Amlan Basu (Postdoctral Fellow, University of Strathclyde, UK)
7. Dr. Leishi Zhang, Reader, Canterbury Christ Church University, UK)

16th and 17th September 2024

Moodlakatte Institute of Technology
Moodlakatte,
Near Railway Station Kundapura - 576217,
Karnataka, INDIA.

Organized
by
Dept. of Artificial Intelligence & Machine Learning and Data Science

Conference Chair

Dr. Indra Vijay Singh
Head, Department of AI&ML and Data Science
eMail: indravijay@mitkundapura.com
+91-9082581870

About the Institute

Established in the year 2004, under the leadership of the philanthropic, technocrat Late I M Jayaram Shetty and the iconic MNBS Trust, MITK has reached out to the rural communities as a symbol of hope for availing technical education. It became a beacon of light for those young minds who were economically less advantaged, but were still nursing big dreams of pursuing professional engineering degrees and becoming competent entrepreneur, technocrats or employees. MITK also offers Post Graduate Management courses for technical as well as humanities graduates. Established in 2008, MITK offers regular two years Post Graduate Degree in Management Studies (MBA – Master of Business Administration). This department comes under the administrative jurisdiction of Moodlakatte Institute of Technology. The Institution is affiliated to Visveswaraya Technological University, Belagavi and is approved by AICTE, New Delhi.

About the Conference

This conference on Artificial Intelligence, Machine Learning, and Data Science will center around the theme of "Advances in Deep Learning and Neural Networks," with a primary goal of fostering engagement, empowerment, and the generation of innovative ideas. The focus will be on leveraging these technologies to advance intelligent healthcare systems.

Participants can anticipate gaining insights from prominent experts in the field, forging connections with peers and industry leaders, and delving into the cutting-edge research and advancements in Deep Learning and Neural Networks. These technologies hold tremendous promise in revolutionizing healthcare delivery and enhancing patient outcomes.

The conference aims to provide a unique platform where attendees can not only expand their knowledge but also contribute to the ongoing discourse that shapes the future of healthcare through artificial intelligence and machine learning applications.

Conference Themes

Unpublished Contributions in the following research areas but not limited to the list given below are invited from prospective authors:

- Robotics and process Automation
- Virtual Agents
- Artificial Intelligence
- Manufacturing Intelligence and informatics
- AI & ML in Medical applications
- Finite element analysis
- Big-Data Analytics for Smart Manufacturing
- Cloud Computing , Cyber security
- Machine –to-Machine Communication Standard for Smart Industry
- Internet of Things
- Embedded Systems
- Deep Learning and Machine Learning
- Bayesian Networks and Heuristics
- Overfitting and Underfitting
- Transfer Learning and Ensemble Learning
- Recurrent Neural Networks (RNN)
- Convolutional Neural Networks (CNN)
- Parametric and Non parametric data analysis
- Bayes Theorem, CLT Theorem analysis.
- Metaanalysis

Import Call for Papers

Original contributions related to the above-mentioned themes are invited from industries, academicians, researchers, and practicing engineers. Papers will be selected either for paper presentation or for poster presentation based on the quality of paper submitted by the author, **before submission plagiarism must be checked.** Manuscripts found to be plagiarized, during any stage of review, shall not be included in the conference. The Abstract and full-length paper should be submitted through EasyChair and link is **https://easychair.org/conferences/?conf=industry40.** The paper template is given at **http://bit.ly/2VsKpdG.** The **guidelines for paper submission and uploading of paper** are available at **http://bit.ly/2uPhSmV**. You have to **register for the conference online** at **http://bit.ly/2IgQPJ8** by paying respective fees at SBI Collect. The conference brochure can be downloaded from the institute website: http://mgmmumbai.ac.in/mgmcet/ **Selected papers will be included in conference proceeding. Extended version of some good quality of presented papers will be invited to submit in reputed journals (under process).**

Exhibition

Exhibition of state-of-the-art equipment's also planned .Interested participant from Industry, Academics and Research organization may contact the advisory committee members for details

Registration Fees

Type of Registration	Non Professional body Member	Professional Body Member
Delegates from Industries/ Utilities/R&D organizations	Rs. 2000/-	1500/-
Delegates from academic institutions	Rs. 750/-	1000/-
Research Scholars/ Student	Rs. 400/-	750/-

The registration fees is to be paid through **……**
Please follow the guidelines to use this option:-
1.Open the webpage-
2. **Check mark** read and accepted the terms and conditions and then click on **PROCEED**.

4.Select **Educational Institutions** as Type of Corporate/Institution from dropdown menu and then click on **GO**
5 **SUBMIT**
6. Select Payment Category as **Registration fees from student**
7. In next step, provide **details of payment** and in **remark please write Registration Fees** of -2019 then click on **SUBMIT** .On successful completion of registration fee payment, the Registration Form must be filled and submitted online. Further, the bank account transaction confirmation document must be mailed to indravijay@mitkundapura.com. with the subject as 'Registration -2024- <your name>' following this, an e-mail will be sent to confirm your registration.

Important Dates

Paper submission starts	**10-7-2024**
Last date for full paper submission	**20-08-2024**
Notification of acceptance	**25-08-2024**
Last date for registration	**30-08-2024**

Awards

Two best papers will be given award as: 1st prize. and 2nd prize