

AI & DS

VOLUME 1

Do things at your
own pace.
Life's not a race.

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A B O U T T H I S M A G A Z I N E

From this magazines you can able to know about 'How AI has developed from past to recent days?' and here in this magazines we have included 'how AI is being used in various domains and fields such as Agricultural fields,etc.,'. "AI will be a part of our future, It is inevitable" asserts Sundar Pitchai (CEO-GOOGLE).

Our Department Artificial Intelligence and Data Science is a new programme in our Institution but still our students had shown their Involvements in Sports, Inter-College Competitions, Attending and winning prizes in the Symposium Conducted by Other Colleges. Our Students Ms.Koushika, Ms.Subhadra Devi participated in the Basket ball and Table tennis Competitions and won the prizes and Our student Mr.Soorya participated and won prize in the Basket ball competitions.

Not only in sports and other activities , "Donate Blood and be the reason for a smile on Someone's Life", as per the quote Our Students had shown their social responsibilities by donating blood in the blood donation camp which held at Velammal Medical College. This is just a beginning and more to go, Our Department had organized and has to organize several Seminars and Webinars related to our domain.

T.R.Santhosh kumar



HEAD OF DEPT

Dr.S.Sasikala
Professor & HoD

"A stunning
compilation of
graphic art!"

— THE CENTER CRITICS

EDITORIAL CHIEF

Dr.T.Grace Shalini
Assistant Professor

STUDENT EDITORIAL MEMBERS

A compilation of
post-modern
graphic design

B.R.PRASANNA

23AD54

T.HARINI

23AD05

M.SANDEEP

23AD55

S.MOHAMED SUBAIR

23AD50

NOVEMBER'23

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OUR VISION

To emerge and sustain as academic excellence in Artificial Intelligence and Data Science to produce ethical professionals through innovative research and education.



MISSION

01

To promote industry ready graduates by acquiring intelligent data analytical skills.

02

To empower the graduates towards research and application-oriented knowledge for higher studies.

03

To equip the graduates with entrepreneurship skills to serve the needs of society.

NEWS ON AI&DS

MARK ZUCKERBERG: AI WILL BE BUILT INTO ALL OF META'S PRODUCTS:

Meta CEO Mark Zuckerberg revealed the company's AI investments during an internal meeting, including new products like chatbots for Messenger and WhatsApp, and Instagram features. Despite facing financial struggles and an identity crisis, Zuckerberg emphasized the importance of democratising access to AI and hoped users could develop AI programs independently. He reassured employees that both AI and the metaverse would remain key areas of focus.



OPENAI INTRODUCES FINE-TUNING FOR GPT-3.5 TURBO AND GPT-4:

OpenAI has announced the ability to fine-tune its powerful language models, including both GPT-3.5 Turbo and GPT-4.

The fine-tuning allows developers to tailor the models to their specific use cases and deploy these custom models at scale. This move aims to bridge the gap between AI capabilities and real-world applications, heralding a new era of highly-specialised AI interactions.

With early tests yielding impressive results, a fine-tuned version of GPT-3.5 Turbo has demonstrated the ability to not only match but even surpass the capabilities of the base GPT-4 for certain narrow tasks.

All data sent in and out of the fine-tuning API remains the property of the customer, ensuring that sensitive information remains secure and is not used to train other models.



Amazon invests \$4B in Anthropic to boost AI capabilities: Amazon invests \$4B in Anthropic to boost AI capabilities:

Amazon has invested up to \$4 billion in Anthropic, an AI startup known for its Claude chatbot. The investment is part of Amazon's strategic move to strengthen its AI presence. Anthropic will use AWS's Trainium chips to develop future foundation models, allowing organizations to deploy Anthropic's AI systems alongside AWS's cloud technology. The initial investment is \$1.25 billion.



IBM Research unveils breakthrough analog AI chip for efficient deep learning:

IBM Research has developed an analog AI chip that outperforms traditional digital systems in performing complex computations for deep neural networks. This innovative chip uses analog AI principles, storing synaptic weights using nanoscale resistive memory devices, demonstrating superior compute efficiency.



White House secures safety commitments from eight more AI companies:

The Biden-Harris Administration has secured voluntary safety commitments from eight AI companies, focusing on safety, security, and trust. The commitments align with global initiatives and are part of an Executive Order and bipartisan legislation.



Innovative AI Companies



DeepMind's AlphaFold AI tool predicts protein structure, unlocking greater understanding of life's functions. In 2022, it added over 200 million new proteins to its database, contributing to metaproteomics and proving speedy matrix multiplication.



Abnormal Security

ABNORMAL SECURITY, A UNICORN WITH A \$210 MILLION SERIES C AND \$4 BILLION VALUATION, USES AI TO DETECT AND PREVENT EMAIL-BASED CYBERATTACKS. WITH CLIENTS INCLUDING XEROX, GROUPON, AND ROYAL CARIBBEAN GROUP, ABNORMAL'S OPPORTUNITIES ARE EXPECTED TO GROW AS EMAIL ATTACKS COST COMPANIES \$43 BILLION BETWEEN 2016 AND 2021.

The logo for Builder.ai, featuring the word "Builder.ai" in a bold, purple, sans-serif font on a white background.

Builder.ai

BUILDER.AI, A NO-CODE APP DEVELOPMENT PLATFORM, USES ARTIFICIAL INTELLIGENCE TO CREATE SOFTWARE FASTER AND CHEAPER THAN HUMAN TEAMS, WITH A \$100 MILLION SERIES C FUNDING ROUND.



ROBUST INTELLIGENCE

ROBUST INTELLIGENCE, A BAY AREA COMPANY, HELPS ORGANIZATIONS VALIDATE AI MODELS AND DATA, IDENTIFYING ANOMALOUS BEHAVIORS AND WEAKNESSES. THEIR AI FIREWALL SOFTWARE HELPS DETECT ANOMALIES IN REAL TIME, PREVENTING BAD DATA FROM ENTERING PRODUCTION MODELS AND MITIGATING AI RISKS.

Innovators

Andrew Yan-Tak Ng



My favourite Innovator is Andrew Yan-Tak Ng. Andrew Yan-Tak Ng is a British – American computer scientist and technology entrepreneur focusing on machine learning and artificial intelligence. Ng was a co-founder and head of Google brain and was the former Chief scientist at Baidu. Ng's academic career is marked by groundbreaking research in machine learning and AI. He is known for his work on deep learning, which is a subset of machine learning focused on neural networks with multiple layers. One of Andrew Ng's most significant contributions to education and technology was the co-founding of Coursera in 2012. Coursera is an online platform that offers a vast array of courses, including numerous free and paid courses on topics ranging from computer science to humanities.

His machine learning course on Coursera, in particular, gained immense popularity and helped learners worldwide grasp the fundamentals of AI and machine learning. His dedication to democratizing AI education has empowered countless individuals to pursue careers in Artificial intelligence. As an educator, researcher and entrepreneur, Ng's work continues to shape the AI landscape, leaving a lasting legacy that will impact the industries for years to come.



-- U.Madhumathi
23AD15

Pranav Rajpurkar

He is an Assistant Professor at Harvard University in the Department of Biomedical Informatics. I lead a research lab that focuses on advancing medical artificial intelligence, particularly in the field of medical image interpretation. Recognizing the immense potential of AI in minimizing errors, reducing delays, and improving accessibility, our mission is to develop AI models capable of matching the proficiency of top-tier medical doctors. To realize this goal, our group is at the forefront of pioneering the development of Generalist Medical AI systems that can closely resemble doctors in their ability to reason through a wide range of medical tasks, incorporate multiple data modalities, and communicate in natural language. have published more than 70 academic papers which have received over 22K citations, including in Nature, NEJM, and Nature Medicine. My work has been covered by media outlets including NPR,



Recent AI Technologies

AI IN MILITARY

The Indian Army revealed game-changing artificial intelligence innovations, revolutionizing modern warfare strategies. The spotlight was on the Multi-utility Legged Equipment (MULE), an autonomous load-bearing robot. With a 12 kg payload capacity It has been developed for the Indian Army and was showcased at the North Tech Symposium 2023 in Jammu.



1. AUTONOMOUS SYSTEM: AI-powered drones and robots are used for surveillance, reconnaissance, and even combat operations. They can operate independently or be remotely controlled.

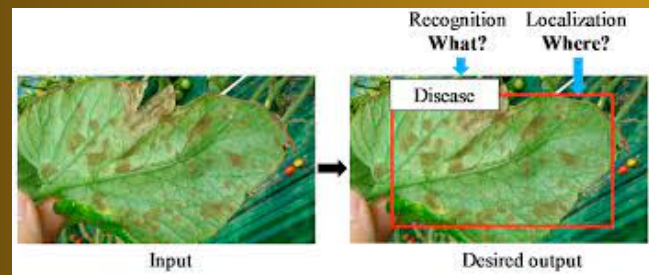
2. PREDICTIVE ANALYSIS: AI is used to analyze large volumes of data to identify potential threats, predict enemy movements, and assess the security situation.

3. CYBERSECURITY: AI helps in detecting and preventing cyberattacks, as well as improving the security of military networks and systems.

4. COMMUNICATION AND TRANSLATION : AI-powered translation and communication tools help bridge language barriers and facilitate communication with allies or locals.

-- S.Jeyasri
23AD38

AI IN AGRICULTURE



1. INSECT AND PLANT DISEASE DETECTION:

FARMERS CAN USE AI-POWERED SYSTEMS TO DETECT INSECTS AND PLANT DISEASES MORE QUICKLY THAN HUMANS. FOR EXAMPLE, AN AI-POWERED SYSTEM COULD DETECT AN INFESTATION OF APHIDS ON A CROP OF STRAWBERRIES, SEND THE DATA BACK TO THE FARMER'S MOBILE PHONE, AND THEN SUGGEST WHAT ACTION SHOULD BE TAKEN NEXT.

2. SOIL MONITORING:

INTEGRATING SENSORS AND AI SYSTEMS ENABLES FARMERS TO ACCURATELY MONITOR HOW MUCH WATER AND NUTRIENTS ARE AVAILABLE IN SOIL. FOR EXAMPLE, THE AI SYSTEM MIGHT IDENTIFY AREAS OF THE FIELD WHERE THE SOIL IS TOO DRY OR TOO MOIST AND PROVIDE RECOMMENDATIONS ON WHEN AND HOW MUCH WATER TO APPLY TO OPTIMIZE CROP GROWTH.



3. CHATBOTS FOR FARMERS:

CHATBOTS CAN BE USED AS AN INTERFACE BETWEEN FARMERS AND THEIR CUSTOMERS OR DISTRIBUTORS. FARMERS CAN USE THESE CONVERSATIONAL AGENTS TO ANSWER QUESTIONS ABOUT PRODUCTS OR SERVICES OFFERED, ORDER SUPPLIES, AND CHECK INVENTORY LEVELS. CHATBOTS ARE ALSO USEFUL FOR MANAGING DATABASES OF INFORMATION ABOUT CROPS AND SOIL CONDITIONS.



- K.Charu pavadaarini
23AD04

Achievements

& Events

of

our

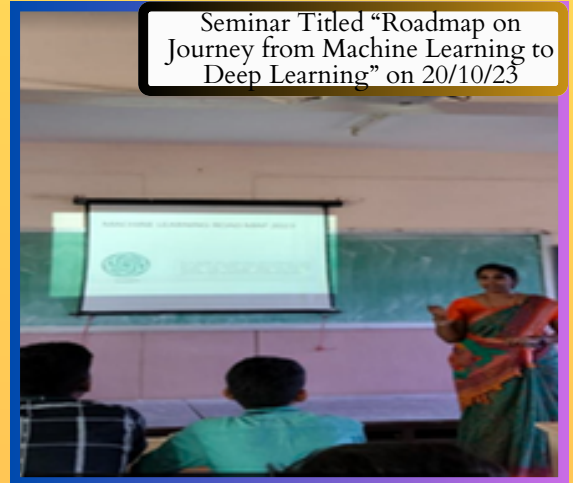
department

Department Activities (August 2023 – November 2023)

SEMINAR on "A New Paradigm of AI and ML Application Development" on 22/09/23



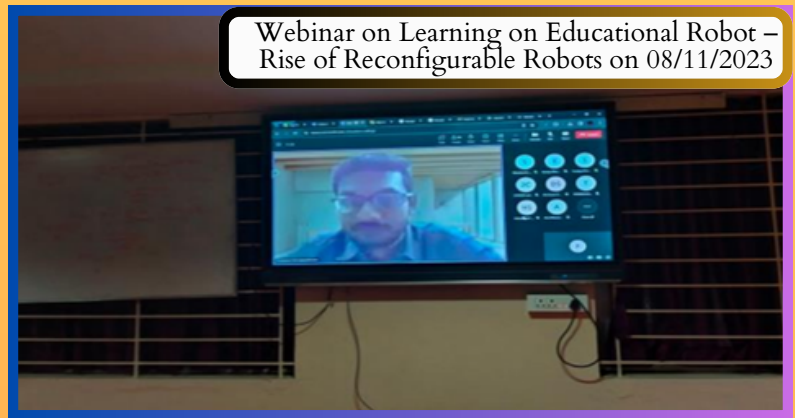
Seminar Titled "Roadmap on Journey from Machine Learning to Deep Learning" on 20/10/23



Webinar on Forum for "chatGPT" on 6/10/23



Webinar on Learning on Educational Robot – Rise of Reconfigurable Robots on 08/11/2023



Tech talk on Machine Learning and Deep learning Boot Camp on 17/11/2023 & 18/11/2023





MARIA PHILIP FUTURE LEADERS DEBATE

Krishna kumar B
Preetha R
Santhosh kumar T R
Kaviya R
Mohamed subair S
Harini T

EXTEMPORE

Aravinth. K
Santhosh kumar. T. R
Krishna kumar. B
Mohamed subair. S
Preetha. R
Kaviya. R
Koushika. R
Hari balaji. V
Prasanna B R



Aravinth. K
Krishna kumar.B
BRAINLY CATCHER EVENT



IAT-1



T R SANTHOSH KUMAR



R PREETHA



K SYED SUMAYA

IAT-2



U MADHUMATHI



R PREETHA



T R SANTHOSH KUMAR



K SYED SUMAYA



K S SHIVA HARINI



S SWETHA

IAT-3



T R SANTHOSH KUMAR



R.PREETHA



K SYED SUMAYA

Sports



T. Soorya
Basketball men
Team Got Silver
Medal (Runner-Up)
for Anna university
Zone-16 Basketball
Tournament
organized by Syed
Ammal Engineering
College at
25.09.2023

R. Koushika
N. Subhadra devi

Our college Basketball
women team got Second
place in basketball Zone
16 tournament organised
by VCET at 22.09.2023



R. Koushika

Our college Table Tennis
Women Team Got
Bronze Medal for Anna
university Zone-16 Table
Tennis Tournament
organized K.L.N. College
Engineering Madurai at
06.10.2023



DEPARTMENT OF

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Thank you

Hariprasad	23AD37
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Mathesh	23AD48
Mohamed anasmalik	23AD49
Jeswath	23AD44
Shanmugaraajan	23AD60



**Blood
Donation**

ACTUALLY IMPROVES HEALTH

Donors



**Donate blood and be the reason for
a Smile on someone's face**



THE End

Next soon...