PITHAPUR RAJAH'S GOVERNMENT COLLEGE (A), KAKINADA

Department of Computer Science

Invited Lecturer by Dr K Srinivas

Professor & HOD, Department of CSE, BVCIT, Amalapuram

On

Artificial Intelligence

Date & Time: 16th July 2024, at 3:30 PM

Venue: Computer Lab-1

PITHAPUR RAJAH'S GOVERNMENT COLLEGE (A), KAKINADA

Department of Computer Science

Invited Lecturer by **Dr K Srinivas,** Professor & HOD, Department of CSE, BVCIT, Amalapuram

Circular

15-07-2024

This is to inform all students of 2nd B.Sc. Artificial Intelligence and Internet of Things programmes that the Department of Computer Science has organized a special guest lecture on the rapidly evolving field of **Artificial Intelligence**. This insightful session is scheduled to be held online on **Tuesday, 16th July 2024, at 3:30 PM** in **Computer Lab-I** in celebration of **Artificial Intelligence Appreciation Day**.

We are honored to welcome **Dr. K. Srinivas**, Professor and HoD, Department of CSE, BVCIT, Amalapuram, who will share his expertise and knowledge on this transformative technology.

All students are encouraged to attend and take full advantage of this opportunity to enhance their understanding of this crucial field in the digital age.

15/7/24

Lecturer incharge,

Department of computer science.

Lecturer In-Charge
Dept. of Computer Science
P.R. Govt. College (A)
KAKINADA-533001

P R GOVT COLLEGE (A) KAKINADA

Department of Computer Science

ACTIVITY : Guest Lecture on “Artificial Intelligence”

GUEST : Lecture delivered by Dr. K Srinivas Professor & HOD, Department of CSE, BVCIT, Amalapuram

CONDUCTED BY : Department of Computer Science

DATE : 16-07-2024

Photo of the Activity

INTRODUCTION TO ARTIFICIAL INTELLIGENCE

BY

Dr K Srinivas

Professor & HOD, Department of CSE,

Bonam Venkata Chalamayya Institute of Technology and Science, Amalapuram

27 August 2024

What is Artificial Intelligence

- **Artificial Intelligent (AI) refers to intelligent machines that can mimic human cognitive functions like learning and problem-solving.**
- Artificial Intelligence (AI) is rapidly transforming our world. It's not science fiction anymore;
- AI is here and impacting everything from how we shop to how doctors diagnose diseases.

Core Goal of Artifical Intelligence (AI)

- Emulate human intelligence in machines. This can involve tasks like:
- **Reasoning:** Analyze information and draw logical conclusions.
- **Learning:** Acquire new knowledge and skills from data.
- **Problem-solving:** Identify and solve problems in a goal-oriented way.
- **Decision-making:** Evaluate options and make choices based on available information.

How Does AI Work?

- Artificial intelligence (AI) enables machines to learn from data and recognize patterns in it, to perform tasks more efficiently and effectively. AI works in five steps:
- **Input:** Data is collected from various sources. This data is then sorted into categories.
- **Processing:** The AI sorts and deciphers the data using patterns it has been programmed to learn until it recognizes similar patterns in the data.
- **Outcomes:** The AI can then use those patterns to predict outcomes.
- **Adjustments:** If the data sets are considered a "fail," AI learns from that mistake, and the process is repeated again under different conditions.
- **Assessments:** In this way, AI is constantly learning and improving.

Types of AI (Artificial Intelligence)

- **Narrow AI (Weak AI):** This form of AI is designed and trained for specific tasks or domains, such as speech recognition, image classification, or recommendation systems. Narrow AI excels within defined parameters but lacks general human-like intelligence.
- **General AI (Strong AI):** General AI aims to exhibit human-like intelligence and cognitive abilities across a wide range of tasks. This form of AI is hypothetical and remains a long-term goal of AI research.
- **Machine Learning:** Machine learning is a subset of AI that focuses on enabling machines to learn from data and improve their performance without being explicitly programmed. It includes techniques like supervised learning, unsupervised learning, and reinforcement learning.

Types of AI (Artificial Intelligence) ....

- **Natural Language Processing (NLP):** NLP enables machines to understand, interpret, and generate human language. Applications range from chatbots and translation services to sentiment analysis and text summarization.
- **Computer Vision:** Computer vision enables machines to interpret and understand visual information from the world. It is used in image and video recognition, object detection, autonomous vehicles, and medical image analysis.

Types of AI (Artificial Intelligence) ....

- **Robotics:** Robotics combines AI with mechanical engineering to create machines (robots) that can perform physical tasks autonomously or semi-autonomously. Applications include industrial automation, healthcare assistance, and exploration in hazardous environments.
- **Expert Systems:** Expert systems are AI systems designed to emulate the decision-making ability of a human expert in a specific domain. They use knowledge bases and inference engines to provide advice or solve problems within their area of expertise.

Uses of Artificial Intelligence

- Artificial Intelligence has many practical applications across various industries and domains, including:
- **1. Healthcare**

  AI is used for medical diagnosis by analyzing medical images like X-rays and MRIs to identify diseases. For instance, AI systems are being developed to detect skin cancer from images with high accuracy.
- **2. Finance**

  AI helps in credit scoring by analyzing a borrower's financial history and other data to predict their creditworthiness. This helps banks decide whether to approve a loan and at what interest rate.

Uses of Artificial Intelligence ...

- **3. Retail**

  AI is used for product recommendations by analyzing your past purchases and browsing behavior to suggest products you might be interested in. For example, Amazon uses AI to recommend products to customers on their website.

- **4. Manufacturing**

  AI helps in quality control by inspecting products for defects. AI systems can be trained to identify even very small defects that human inspectors might miss.

Uses of Artificial Intelligence...

- **5. Transportation**

  AI is used for autonomous vehicles by developing self-driving cars that can navigate roads without human input. Companies like Waymo and Tesla are developing self-driving car technology.

- **6. Customer service**

  AI-powered chatbots are used to answer customer questions and provide support. For instance, many banks use chatbots to answer customer questions about their accounts and transactions.

Uses of Artificial Intelligence...

- **7. Security**
- AI is used for facial recognition by identifying people from images or videos. This technology is used for security purposes, such as identifying criminals or unauthorized individuals.
- **8. Marketing**
- AI is used for targeted advertising by showing ads to people who are most likely to be interested in the product or service being advertised. For example, social media companies use AI to target ads to users based on their interests and demographics

Uses of Artificial Intelligence...

- **9. Education**
- AI is used for personalized learning by tailoring educational content to the individual needs of each student. For example, AI-powered tutoring systems can provide students with personalized instruction and feedback.

Why is AI Important?

- The need for Artificial Intelligence (AI) stems from our desire to improve efficiency, solve complex problems, and make better decisions.
- Here's a breakdown of the importance of AI across various aspects:
- **1. Increased Efficiency and Productivity**
- AI automates repetitive tasks, freeing up human time and resources for more strategic endeavors.
- Imagine AI-powered robots handling assembly lines in factories or chatbots managing customer service inquiries, allowing human employees to focus on innovation or complex problem-solving.

Why is AI Important?....

- **2. Enhanced Decision-Making**

  AI can analyze vast amounts of data to identify patterns and trends that humans might miss.
- This allows for data-driven decision making in various fields like finance, healthcare, and marketing. For instance, AI can analyze financial data to predict market trends or patient medical data to suggest personalized treatment plans.
- **3. Innovation and Progress**
- AI can accelerate scientific discovery and technological advancements.
- AI-powered research tools can analyze complex scientific data, simulate experiments, and identify promising areas for further exploration.

Why is AI Important?...

- **4. Improved Quality of Life**
- AI has the potential to revolutionize various sectors, leading to a better quality of life.
- Examples include self-driving cars improving transportation safety and AI-powered prosthetics enhancing mobility for those with disabilities.
- **5. Addressing Global Challenges**
- AI can be a powerful tool for tackling global challenges like climate change and resource management.
- AI can optimize energy use, predict weather patterns, and analyze environmental data to support sustainable practices.

Technologies Based on Artificial Intelligence

- Machine Learning:A subfield of AI that uses algorithms to enable systems to learn from data and make predictions or decisions without being explicitly programmed.
- **Natural Language Processing (NLP):** A branch of AI that focuses on enabling computers to understand, interpret, and generate human language.
- **Computer Vision:** A field of AI that deals with the processing and analysis of visual information using computer algorithms.
- **Robotics**: AI-powered robots and automation systems that can perform tasks in manufacturing, healthcare, retail, and other industries.
- **Neural Networks:** A type of machine learning algorithm modeled after the structure and function of the human brain.
- **Expert Systems:** AI systems that mimic the decision-making ability of a human expert in a specific field.
- **Chatbots:** AI-powered virtual assistants that can interact with users through text-based or voice-based interfaces.

CONCLUSION

- Artificial intelligence (AI) is revolutionizing our world. AI automates tasks, improves decision-making through data analysis, and fuels scientific advancements. From healthcare and finance to transportation and education, AI has the potential to significantly enhance our quality of life.
- However, responsible development is critical. AI can lead to job displacement and raise ethical concerns about bias in algorithms and privacy issues. Open communication and collaboration among researchers, developers, policymakers, and the public are essential. By harnessing AI's power for good and focusing on human well-being, we can ensure AI benefits all of humanity.

References

- What is Artificial Intelligence - AI Definition, Types, Working - GeeksforGeeks

ConnectAIRE-2023

Academia, Industry, and Research Networking Conclave

Vijayawada Chapter

Application Form for Self Nomination-ConnectAIREAwards

Paste your photo	**Name**	Dr Katikireddy Srinivas
	Gender	Male
	Aadhaar Number	434024583045
	Designation	Professor & HOD
	Department	Computer Science & Engineering.
	Institution/Organization with Full Address	Bonam Venkata Chalamayya Institute of Technology & Science,Bhatlapalem,Amalapuarm,Dr B R Ambedkar Konaseema District,Andhrapradesh:533201
	Qualification	B. Tech (CSIT), M Tech (CS), Ph.D., in CSE.
	DOB	16-03-1979
	DOJ	29-08-2003
	Experience	20 Years
	Mobile Number	9652946668
	Email	Srinivas.katikireddy@gmail.com, ks.bvts@bvcgroup.in
	Full Indian Postal Address to send the Award and certificates	Dr K Srinivas, Professor & HOD, Department of CSE, BVCITS,Bhatlapalem,Amalapuram-533201 Mobile:9652946668

No. of Research Project On-going	Nil	**Citation index for the last five years**	18
No. of Research Project Completed	Nil	**No. of Books Published**	01
Total cost of the Research Project in USD/INR	Nil	**No. of Patent**	03
No. of Journals Published	16	**Name of Awards Received**	Nil
No. of Conference Publication/Presentation	06	**No. of Research scholar**	Nil
Cumulative impact factor of the last five years	5	**No. Invited Speaker/ Resource person**	10
h-index from Scopus for the Assessment period	3	**No. of Research Conference/workshop Organized**	5
No. of Consultancy Projects	Nil	**No. of Funded Programmes Organized**	Nil
Member of Professional Bodies:	LMCSI,LMISTE		
Google scholar link	https://scholar.google.co.in/citations?user=uNv0Xl0AAAAJ&hl=en		
Scopus link	https://www.scopus.com/authid/detail.uri?authorId=57205543277.		
Linkedin link	https://www.linkedin.com/in/dr-srinivas-katikireddy-19861820/?originalSubdomain=in.		
Researchgate link			
Personal website link			
Areas of Research	Data Science, Machine Learning.		
Award Category	• Best Researcher Award • Best Editor • Best Reviewer		

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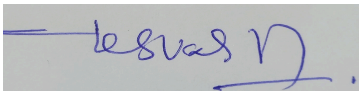
	• Best Academician Award • Distinguished Scientist Award • Young Scientist Award • Lifetime Achievement Award • Women Researcher Award • Award related to industry

Self Declaration

I authenticate that to the best of my knowledge, the information given in this form is correct and complete. At any time I am found to have concealed any material information, my application shall be liable to be summarily terminated without notice. I have read the terms and conditions and other policies of the **ConnectAIRE – 2023** , and agree to stand the same. I agree to **ConnectAIRE – 2023** to process the data submitted in this application form, or any other data that the Foundation may obtain from me for any purposes connected with **ConnectAIRE – 2023** for any other legitimate reason.

The filled applications along with duly completed curriculum vitae, Passport size photograph, Scan copy of the degree Certificate, Scan copy of the Working ID and related documents should be sent via email to: connectaire@gmail.com



Date :15/9/2023 **Place : Amalapuram** **Scanned Signature of Applicant**

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Decision	Reason	Signature of authorities
Selected/Rejected		

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Vijayawada Chapter

TOPIC Name : Artificial Intelligence

Date : 16/07/2024

Activity/Event: Artificial Intelligence Appreciation Day

Name of the person : Dr. K. Srinivas.

S.NO	Roll.NO	Name of the Student	Signature of the Student
1	232Iot 17	V.S.A. Sankar	
2	232IoT07	M.B.V.G.S. AYYAPPA	M.Ayyappa
3.	232IoT32	K. Naga Bala Krishna	K.N.B.K
4.	232AI11	N. Vijay Abraham	
5.	232IoT11	S. Sai Samaraj4	
4.	232IoT13	N. Surya	N. Surya
5.	232IOT22	A. kishore	A. kish
6.	232IoT27	p. Mani	
7.	232IOT09	G. Jaya Bhaskara	
8.	232IOT35	G. vinay babu	G. vinaybabu
9.	232AI03	G. Hemanth Subhash	G. H. subhash
10.	232IOTO8.	B. MOHAN.	B. Mohan
11	232IOT33	V. venkatesh	V. venkatesh.
12	232IOT25	K. uday Bhavani	K. uday B.
13	232IOT31	M. Sathish.	M. Sathish.
14.	232IoTO1	B Anand satya sai	B. Anand satyasai
15.	232IoT36	P. V.V. Satya narayana	P. V.V.S.N.
16.	232IOT19	A. DASU	A. Dasu
17.	232IOT39	V. Mahesh sai Durga	V. mahesh sai Durga
18.	232IoT24	O. Bhuvanesh	O. Bhuvanesh
19.	232IOT20	S. Vijay Kumar	S.V. Kumar
20.	232IoT29	I. Manikanta	I. Manikanta

21	232IOT23	T.S. Sujith Kumar	T.S. Sbj
22	232IOT34	B. Ramana babu	B. Ramanan babu.
23	232IOT14	P. Raghavendra babu	P. Raghvendra
24	232IOT04	G. Daniel	G. Daniel
25	232IOT21	P. Pavan kumar	P. Pavan kumar
26	232AI22	P. Saimani Kanta	P. Sai Manikanta.
27	232AI37	M. Lavanya Sri	M. Lavanya Sri
28	232AI27	V. Veera Sai Kumari	V. V. S. Kumari.
29	232AI26	S. Neelima	S. Neelima
30	232IOT30	V. Sirisha	V. Sirisha.
31	232IOT18	P. Vijaya durga devi	P. Vijaya durga devi
32	232AI18	M Lavanya	M. Lavanya
33	232AI38	D. Neeraja	D. Neeraja
34	232AI07	D. Devi	D. Devi
35	232AI19	A. Hasini	A. Hasini
36	232AI30	N. Durga devi	N. Durga Devi
37	232AI08	I. Siva parvathi	I. Siva Parvathi
38	232AI39	Sk. Vali Alisha Begam	Sk. V. A. Begam
39	232IOT06	D. vijaya Durga	~~D. Vija~~.
40	232IOT37	N. Veera Naga lakshmi	N. V. N. Lakshmi
41	232IOT26	V. Subhashini	V. Subhashini.
42	232IOT12	K. Asritha Lakshmi	~~K. Asritha~~ Lakshmi
43	232IOT10	Ch. Raja Rajeswari	Ch. RR.
44	232AI33	P. Vasavi	P. Vasavi
45	232AI05	P. Kanchana	P. Kanchana
46	232AI13	M. Ramyasri	M. Ramya
47	232AI01	K. chakraveni	K. chakra