



Malnad College of Engineering



AN AUTONOMOUS INSTITUTION AFFILIATED TO VTU, BELAGAVI

**DEPT. OF INFORMATION SCIENCE AND
ENGINEERING**

THE ISEA NEWSLETTER



*ACADEMIC YEAR 2023-24
APRIL '23-DECEMBER '23*

EDITORIAL BOARD

Sudarshan MG - 7th Sem

Arjun H L - 7th Sem

Mrs. Shruthi D.V - Asst Prof

Mrs. Sindhu K.S - Asst Prof

VISION OF THE DEPARTMENT

The department will be a premier center focusing on knowledge discrimination and generation to address the emerging needs of information technology in diverse fields.

MISSION OF THE DEPARTMENT

- 1.To make students competent to contribute towards the development of IT field
- 2.Promote learning and practice of latest tools and technologies among students and prepare them for diverse career options
- 3.Collaborate with industry and institutes of higher learning for Research and Development, innovations and continuing education
- 4.Developing capacity of teachers in terms of their teaching and research abilities
- 5.Develop software applications to solve engineering and societal problems

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will:

PEO1: be successful professionals in IT industry with good design, coding and testing skills,

capable of assimilating new information and solve new problems

PEO2: communicate proficiently and collaborate successfully with peers, colleagues and organizations

PEO3: be ethical and responsible members of the computing profession and society

PEO4: acquire necessary skills for research, higher studies, entrepreneurship and continued learning to adopt and create new applications

PROGRAM SPECIFIC OBJECTIVES (PSOS)

PSO1: Design and develop efficient information systems for organizational needs

PSO2: Ability to adopt software engineering principles and work with various standards of computing systems

FEATURED TECH

INTRODUCING APPLE VISION PRO: REVOLUTIONIZING ACCESSIBILITY

Sudarshan M G - 7th Sem



In a groundbreaking move, Apple has unveiled the Apple Vision Pro, a cutting-edge device designed to revolutionize accessibility for individuals with visual impairments. This powerful tool harnesses the latest advancements in AI and computer vision to provide an unprecedented level of independence and convenience.

Equipped with a high-resolution camera and sophisticated image recognition algorithms, the Apple Vision Pro can identify objects, text, and even faces in real-time, relaying this information audibly to the user through advanced speech synthesis. This means users can effortlessly navigate their surroundings, read menus, labels, or documents, and even recognize acquaintances without external assistance.

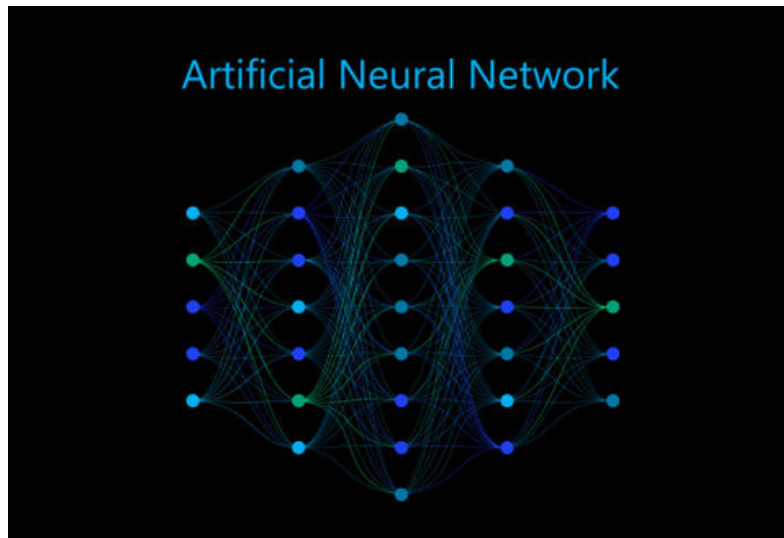
Moreover, the device integrates seamlessly with other Apple products, offering a unified experience for users across various devices. Its sleek and compact design ensures portability, allowing individuals to carry it effortlessly wherever they go.

With the Apple Vision Pro, Apple demonstrates its commitment to inclusivity and accessibility, empowering visually impaired individuals to lead more independent, enriched lives. This innovative device marks a significant step towards a more inclusive future.

FEATURED TECH

UNDERSTANDING CONVOLUTIONAL NEURAL NETWORKS (CNNs)

Ankitha T - 5th Sem



Convolutional Neural Networks (CNNs) have revolutionized the field of computer vision, enabling machines to perceive and interpret visual data like never before. CNNs are a class of deep learning models designed specifically for tasks involving images and videos.

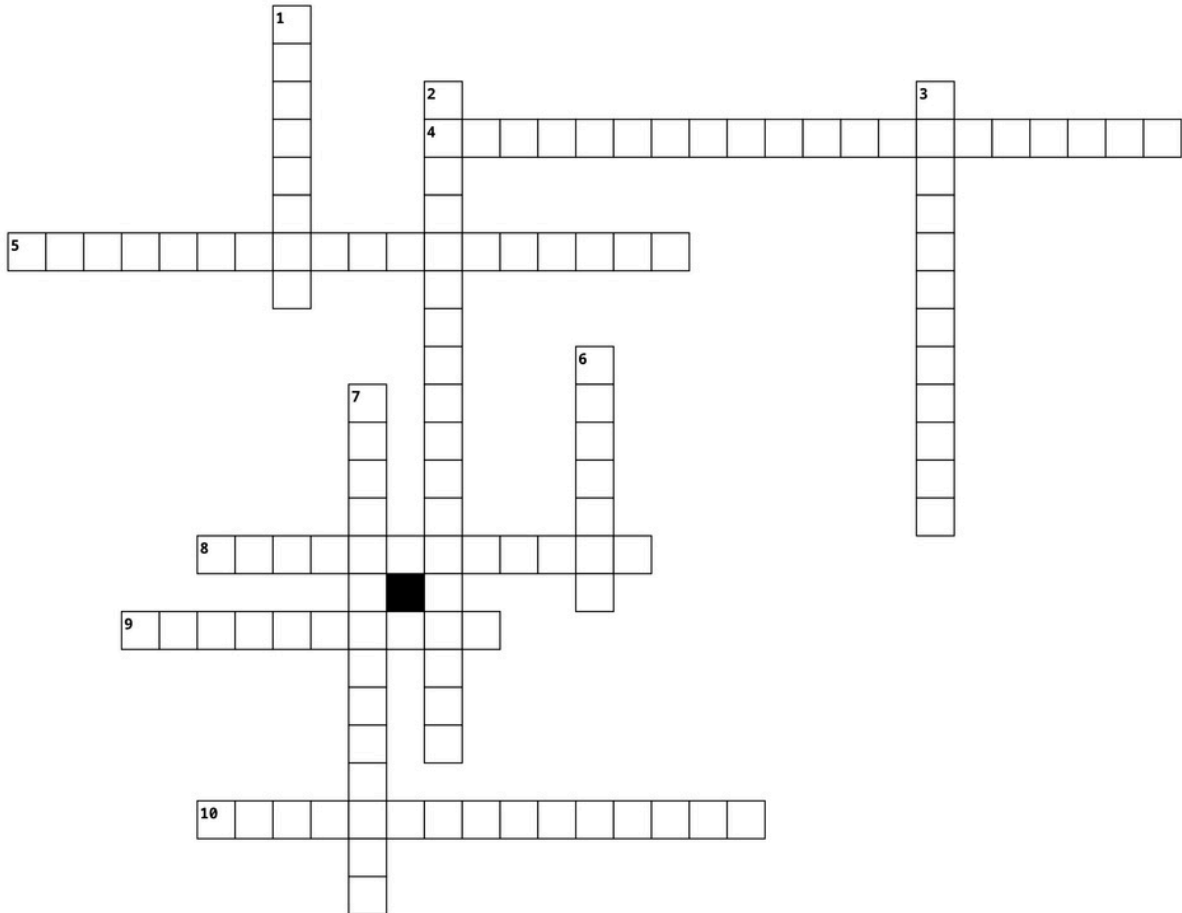
At their core, CNNs employ a unique architecture that facilitates feature extraction and pattern recognition. This is achieved through a series of convolutional layers, which apply filters to the input image, allowing the network to learn distinctive features like edges, textures, and shapes. As the information progresses through subsequent layers, higher-level features are extracted, enabling the network to recognize complex structures.

Pooling layers are interspersed between convolutional layers to downsample the spatial dimensions, reducing computational complexity while retaining important features. This process helps CNNs achieve translation invariance, meaning they can recognize patterns regardless of their position within an image.

Training a CNN involves optimizing its internal parameters using labeled datasets. Through a process called backpropagation, the network learns to adjust its weights and biases, gradually improving its ability to accurately classify or detect objects.

CNNs have found applications in a wide range of fields beyond computer vision, including natural language processing, speech recognition, and even drug discovery. Their adaptability and effectiveness in handling complex visual data make them a cornerstone of modern machine learning.

CROSSWORD



Across

4. A type of machine learning algorithm that is used to train a model on an unlabeled dataset. (6 letters)
5. A machine learning technique that can be used to classify data. (6 letters)
8. A machine learning technique that uses a neural network to learn from data. (11 letters)
9. A type of machine learning algorithm that can be used to identify patterns in data. (7 letters)
10. A field of computer science that gives computers the ability to learn without being explicitly programmed. (13 letters)

Down

1. A measure of how well a machine learning model performs on a test set. (6 letters)
2. A type of machine learning algorithm that is used to train a model on a labeled dataset. (6 letters)
3. A supervised learning algorithm that uses a tree-like structure to make predictions. (6 letters)
6. A type of machine learning algorithm that can be used to cluster data. (6 letters)
7. A technique used to prevent overfitting in machine learning models. (6 letters)






PREVIOUS CROSSWORD ANSWERS



FACULTY AS RESOURCE PERSON

Faculty Name	Talks
Dr. Chandrika J.	Session Chair for the AICTE sponsored 4th Annual International Conference on Data Science, Machine Learning and Blockchain Technology 2023 at Vidyavardhaka College of Engineering, Mysuru
Dr. Ananda Babu J	Delivered a talk on “Data science and its applications” on 7th October 2023 organized by department of ECE, JNNCE Shimoga ,Karnataka
Dr. Ananda Babu J	Session Chair in the 11th International Conference on Contemporary Engineering and Technology 2023"
Dr. Ananda Babu J	Delivered a talk on “Data Science in Day to day Life” on 9th September 2023 organized by Kalpataru Institute of Technology, Tiptur, Karnataka.
Dr. Ananda Babu J	Delivered a talk on "Fundamental of Data Science & Analytics " AICTE from 5th to 9th June 2023 organized by VTU Regional Centre, Bangalore, Karnataka
Dr. Balaji Prabhu B V	Featured as a Resource Person for the AICTE-VTU Joint Teachers Training Programme on 'Introduction to Python Programming & its Applications' from June 19th to 23rd, 2023,
Dr. Balaji Prabhu B V	Resource Person for AICTE-VTU Joint Teachers Training Programme on 'Fundamentals of Data Science and Analytics' from June 5th to 9th, 2023.

ASSOCIATION ACTIVITIES

Date	Title	RESOURCE PERSON	PHOTOS
16/09/2023	Artificial Intelligence in Cyber Security	<p>1. Dr. Usha B.R. Professor, Dept. of ISE, BMSIT Bengaluru</p> <p>2. Dr. Sangeetha K S Assistant Professor, Dept. Of ECE, JSS Academy of Technology Education Bengaluru</p>	 
19/10/2023 to 17/11/2023	Four weeks Summer Internship on Advance Java	Mr. Srishail JV Global Pvt. Lmt	 
22/11/2023	Orientation Day For 2023 admitted batch students	Prof. B B Neelkantappa Training and Placement Officer, MCE	 

ASSOCIATION ACTIVITIES

Date	Title	RESOURCE PERSON	PHOTOS
08/12/2023	Reinforcement Learning	Dr. P BalaKrishnan	
08/12/2023	B++ Trees and It's Applications	Ms. Manasa S Site Reliability Engineer, Oracle	
12/12/2023	Mobile Computing and It's Security	Dr. Mohana Kumara S Associate Professor MSRIT Bangalore	 
22/12/2023	AI Unleashed	Dr. KumarSwamy B V Enterprise Data and Data Analytics Architect Koch Industries	 

STUDENT PUBLICATIONS

#	Names	Paper Publication Title	Publication details
1	<ol style="list-style-type: none"> 1. Lavanya H R 2. Ms. H L Priyanka 3. Ms. K S Sindhu 4. Mahalakshmi E H 5. Kruthika V 	<p>Integrated approach for food donation system, Restaurant food demanding forecasting using machine learning and global food waste analysis.</p>	<p>International Research Journal of Modernization in Engineering technology and science</p> <p>DOI:10.56726/IRJME TS42802</p>
2	<ol style="list-style-type: none"> 1. Vinuthan A.T 2. Shree gandh C M 3. Ruthvik K 4. Likhith B B 	<p>AR Android Application for Education</p>	<p>International Journal of Scientific Research in Engineering and Management</p>
3	<ol style="list-style-type: none"> 1. AnasSarvar S 2. Mr. G K Sudarshan 3. Prajwal D B 4. Praveen 5. Rishabh Bhansali 6. Dr. AnandBabu J 7. Sathwik SP 8. Rajeevalochana BG 9. Suhas KK 	<p>Implementation of machine learning techniques to Mointor Mental Health</p>	<p>International Journal of Innovative Research in Coumpter and Communication Engineering</p> <p>ID:10.15680/IJIRCCE. 2023.1104030</p>
4	<ol style="list-style-type: none"> 1. Likhith B A 2. Sanvitha H S 3. Hemashree R L 4. Dr. M R Vinutha 5. Kruthik C K 	<p>Analysis on Malware Families classification and Detection using Machine Learning</p>	<p>International Research Journal of Modernization in Engineering technology and science</p>

STUDENT PUBLICATIONS

#	Names	Paper Publication Title	Publication details
5	<ol style="list-style-type: none"> 1. RajatKoorse 2. Dr. Chandrika J 3. ReeshuRanjan 4. Samhitha KS 5. Subhash KA 	Machine Learning Techniques on Road Accident Detection and Classification	International Research Journal of Modernization in Engineering technology and science
6	<ol style="list-style-type: none"> 1. Dr. Chandrika J 2. Akshay M A 3. Aniruddha G A 4. Pramoda M G 5. Vishwas S 	IOT based Solid Waste Management and Analysis Applying Machine Learning Techniques	Grenze International Journal Of Engineering and Technology, June Issue(SCOPUS) ID:01.GIJET.9.2.413
7	<ol style="list-style-type: none"> 1. Dr. B R Nanditha 2. Niharika G H 3. Apoorva B A 4. NehaGopi 5. Nidhi K S 	Prediction of fetus weight in high risk preganancies	International Research Journal of Modernization in Engineering technology and science DOI:10.56726/IRJME TS33154
8	<ol style="list-style-type: none"> 1. Dr. Chandrika J 2. Ashutosh 3. SouravSuman 4. AisiriRaj 	Vehicle number plate Recognition System	International Journal of Innovative Research in Coumpter and Communication Engineering DOI:10.15680/IJIRCC E.2023.1104147

STUDENT PUBLICATIONS

#	Names	Paper Publication Title	Publication details
9	1. Dr. B R Nanditha 2. Tribhuvan H G 3. Rahul U 4. SaiLekhana 5. Dhanya L Narayan	Security Authentication System	International Research Journal of Modernization in Engineering Technology and Science e-ISSN:2582-5208
10	1. Anushree R 2. Ms. Shruthi D V 3. Afrin 4. Sanjana H J 5. Pragathi R	Handwritten Text Recognition	International Research Journal of Modernization in Engineering technology and science e-ISSN:2582-5208
11	1. Suman R 2. Mr. Sudarshan G K 3. Nikitha C S	Student Informative Chatbot System	International Journal of Scientific Research in Engineering and Management
12	1. Shashank B V	Smart Voting System using Biometric	International Journal of Innovative Research in Cumpther and Communication Engineering DOI: 10.15680/IJIRCCE.2023.11010013

AWARD OF PH.D DEGREE TO RESEARCH SCHOLARS OF ISE DEPARTMENT

#	Name	Thesis Title	Guide	PhD Awarded Month & Year
1	Ms.Vinutha M R	Development of methodologies for pattern extraction from health care data for lever disease detection	Dr Chandrika J	April -2023
2	Mr.Thirthe Gowda	Machine learning based approach for detection analysis and classification of tobacco plant	Dr Chandrika J	June-2023
3	Mr. Shrisha H S	Design and Analysis of replacement strategies for content store in named data Networks	Dr. B Uma	May-2023
4	Mr.Pradeep V	Fuzzy and Neural network based Hands free Computing using Computer Vision	Dr. Ananda Babu J	May-2023

NBA VISIT DETAILS

NBA VISIT ON 27th
to 29th October 2023

NBA EXPERTS:

Dr. Bhilare D.S

Dr. Balasundaram .S



PLACEMENT DETAILS

Student Name	USN	Company
Sandeepa T N	4MC20IS045	Happiest Minds
Prarthana K	4MC20IS036	Happiest Minds
Samarth H M	4MC20IS043	Happiest Minds
Arjun H L	4MC20IS009	Happiest Minds
Rakshitha H A	4MC20IS040	Mercedes Benz
Krithi K N	4MC20IS024	Mercedes Benz
Lahari B S	4MC20IS025	Tata Elxsi
P S Amrutha Lakshmi	4MC20IS034	Tata Elxsi
Mohammed Abubakar	4MC20IS026	Tata Elxsi
Sudarshan M G	4MC20IS052	Tata Elxsi
Sathvik Rao	4MC20IS046	Tata Elxsi
Hruthik G R	4MC20IS017	Tata Elxsi
Shreya Gowda N R	4MC20IS049	OFX Trade
Hruthiksha V	4MC20IS018	OFX Trade
Namitha D	4MC20IS029	OFX Trade
Spoorthi C N	4MC20IS051	OFX Trade
Nisarga M P	4MC20IS030	OFX Trade
Kishor J K	4MC20IS023	OFX Trade
Vidya Y C	4MC20IS059	OFX Trade

INTERNSHIP DETAILS

Name	USN	Company Name	Duration	Stipend
Nithish Sagar D	4MC20ISO32	Avinya industrial and logistics park	3 Months	25000
A NADA FAZAL	4MC20IS001	SURAJ & CO	2 Months	16000
Sathvik Rao	4MC20ISO46	IISc	3 Months	-

STUDENTS' ACHIEVEMENTS

Name	USN	Prize	Event	Venue
Yashwanth R	4MC20ISO62	First	MERIISE - Weekly Challenge	Malnad College of Engineering,Has san.
Rohith H R	4MC21ISO88	Third	Aavishkar Manthan	Malnad College of Engineering,Has san.
Bharath M	4MC21ISO21	Second	Infusion internal smart India Hackathon	Malnad College of Engineering,Has san.