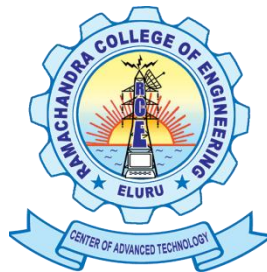


A Report on
Faculty Development Programme
on
“Artificial Intelligence (AI), Machine Learning (ML) and
Deep Learning (DL)”

Organized by



Ramachandra College of Engineering, Eluru

from

20th January 2020 to 01st February 2020



RAMACHANDRA
COLLEGE OF ENGINEERING
(Approved by AICTE, New Delhi, Affiliated to JNTUK: Kakinada)
NH-5 Bypass Road, Vatluru (V), ELURU – 534 007, A. P.





सत्यमेव जयते

Department of Science & Technology
Govt. of India

**DST-ICPS Sponsored
Two Week
Faculty Development Programme
On
“Artificial Intelligence (AI), Machine Learning (ML) and
Deep Learning (DL)”**

20th January 2020 to 01st February 2020



Organized by

Department of **EEE**



**RAMACHANDRA
COLLEGE OF ENGINEERING**

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NH-5 Bypass Road, Vatluru (V), ELURU – 534 007, A. P.



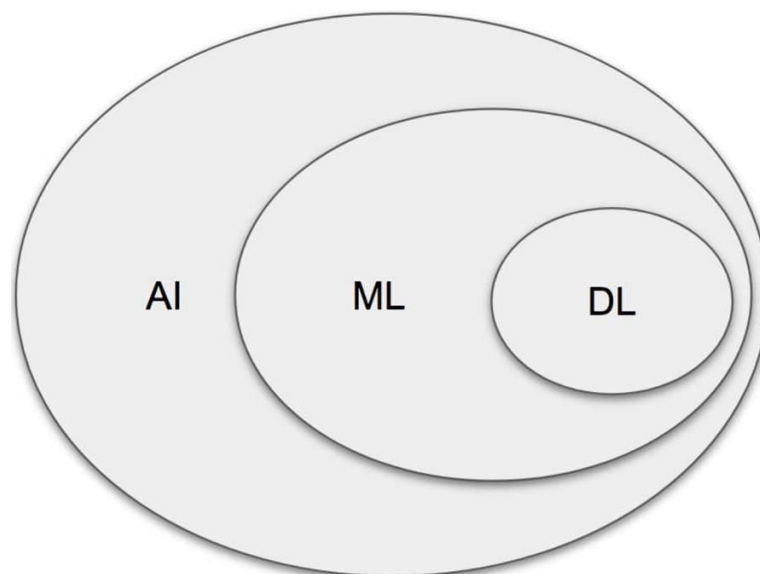
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REPORT

This faculty development program (FDP) is devoted to fundamental theories, recent developments and research outcomes addressing the related theoretical and practical aspects of Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) algorithms.

- **Artificial Intelligence (AI)** - the broad discipline of creating intelligent machines
- **Machine Learning (ML)** - refers to systems that can learn from experience
- **Deep Learning (DL)** - refers to systems that learn from experience on large data sets

Artificial intelligence (AI) is the overarching discipline that covers anything related to making machines smart. Whether it's a robot, a refrigerator, a car, or a software application, if you are making them smart, then it's AI. Machine Learning (ML) is commonly used alongside AI but they are not the same thing. ML is a subset of AI. ML refers to systems that can learn by themselves. Systems those get smarter and smarter over time without human intervention. Deep Learning (DL) is ML but applied to large data sets. Most AI work now involves ML because intelligent behavior requires considerable knowledge, and learning is the easiest way to get that knowledge. The image below captures the relationship between AI, ML, and DL.



DST-ICPS Sponsored Two Week Faculty Development Programme On “Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) ” was hosted by Ramachandra College of Engineering, Eluru organized by Department of Electrical and Electronics Engineering from 20th January 2020 to 01st February 2020.

Objective of Program

The objective of the FDP is to contribute to

- Define “Artificial Intelligence” (AI), “Machine Learning” (ML), and “Deep Learning” (DL)
- Explain how DL helps solve classical ML limitations.
- Differentiate modern AI from prior AI.
- Relate sample applications of AI.

Day 1. 20.01.2020

Welcome & Registration: (9am-9:30am)

At Block-A portico as per the given schedule registration committee started spot registrations. Total number of registrations was 46. Here, the registration kit is distributed for all the participants and registration committee here collected the registration forms and supporting documents.



Receiving Chief Guests Dr. Shiv Dutt Joshi, IIT Delhi & Dr. M. Sydulu, NIT Warangal



Distribution of FDP kits to Participants by Guests at registration

Inauguration: (9.30am-11:00am)

Inauguration ceremony was started by delivering the agenda and objective of the FDP followed by inviting dignitaries on to the dais. The session started with welcoming of Dr. J Ranga, Co-ordinator of FDP followed by Dr. S. Jayalakshmi, Convener of FDP followed by Dr. Dola Sanjay S, Principal of RCE followed by Guest of Honor Sri K Venu Gopal Secretary & Correspondent of RCE followed by Chief Guest Prof M.Sydulu, Dept of EEE, NIT Warangal, Prof Shiv Dutt Joshi IIT Delhi.

I deem it as a privilege to invite Dr J Ranga, Co-ordinator of FDP onto the dais. Thank you sir



Honoring Dr J ranga, Co-ordinator with Floral Bouquet

Now I take the privilege of inviting Dr S Jayalkshmi, Convener of FDP on to the dais.



Presentation of Floral bouquet to Dr S Jayalakshmi, Convener of FDP

Now I take the privilege of inviting Dr Dola Sanjay S, Principal of RCE on to the dais.



Presentation of Floral bouquet to Dr Dola Sanjay S, principal of RCE

Now let us invite the guest of honor of today's function, Sri K Venu Gopal garu, Secretary and Correspondent of RCE on to the dais.



Presentation of Floral bouquet to Sri K VenuGopal, Secretary & Correspondent RCE

Sir inspite of his hard schedule has consented to be a part of this program. Thank you sir.

I extend the invitation to Today's Chief guest Dr M Sydulu, NIT Warangal on to the dais. Thank you sir.



Honoring Dr M Sydulu, Chief Guest with floral bouquet

Now, it is my turn to invite another Chief guest Dr Shiv Dutt Joshi, IIT Delhi on to the dais. Thank you sir.



Presentation of Floral bouquet to Dr Shiv Dutt Joshi, IIT Delhi, Chief Guest

Now, I request all the dignitaries on the dais to proceed for the prayer song and lighting of the lamp.



Prayer song



Lamp Lighting

Now, we shall invite the COORDINATOR, Dr J Ranga to present the brief report of today's FDP. We hope that the audience rightly acknowledges your efforts which reflect the quality of this FDP. Thank you sir.



Speech by Dr J Ranga, Co-Ordinator, FDP

Now, I would like to invite our beloved Head of the Department Dr S Jayalakshmi to present a brief profile of the department and her speech.



Speech by Dr S Jayalashmi, Convener of FDP



Speech by Dr Dola Sanjay S Principal RCE



Speech by Sr K Venugopal Secretary & Correspondent RCE



Speech by Dr M Sydulu, NIT Warangal, Chief Guest



Speech by Dr Shiv Dutt Joshi, IIT Delhi, Chief Guest



Group Photo

----- TEA BREAK -----

Session 2- Meta Heuristic Search Techniques (11.15:-12:45pm)

The Resource person have discussed about the importance of Meta Heuristic Search Techniques in machine learning and Artificial intelligence in today's life. Under this concept definition, importance & applications of Meta Heuristic Search Techniques in machine learning and Artificial intelligence are discussed.



Delivering Lecture by Dr. M.Saidulu, Professor, NIT Warangal

Session 3- Optimization concepts and Machine learning - (1:30pm-3:00pm)

An overview of Optimization concepts and Machine learning is given by Dr. M. N Rao, Professor, Dept of CSE, RCE. Sir has explained Meaning, objectives, motivation of Optimization concepts and Machine learning.



Session 4- Uninformed Search techniques and their applications (3:15-4:45pm)

A session is given by Dr. Shiv Dutt Joshi, Professor, IIT Delhi on Uninformed Search techniques and their applications.



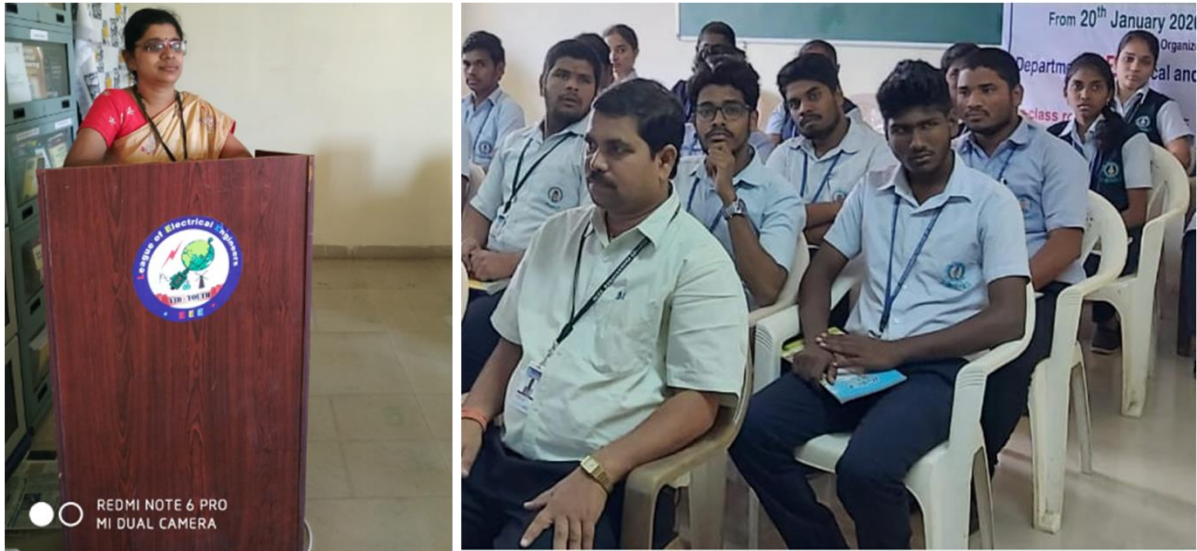
Lecture by Dr Shiv Dutt Joshi, Professor EEE, IIT Delhi

Sir has discussed about Criteria on good research, problems encountered by researchers in India and types of researches also.

Day 2. 21.01.2020

Session1: Heuristic Search Strategies and optimization concepts-I (9:30Am-11:00pm)

A Session is taken by Dr. S Jayalakshmi, Professor, RCE on Heuristic Search Strategies and optimization concepts.



Lecture by Dr S Jayalakshmi, Professor & HoD EEE, RCE.

Session2: Introduction to Artificial Intelligence (AI) and Deep Learning (DL) (11:15-12:45pm)

A Session is taken by Dr.G V N K V Subba Rao, Professor, KMIT Hyderabad. The topics discussed are biological inspiration, artificial neurons and neural networks and Applications. Learning Principle for artificial neural networks, perceptron application, multi perceptron are discussed.



Lecture by Dr G V N K V Subba Rao, Professor, KMIT, Hyderabad

Session 3- Deep Learning Models of feed forward networks (1:30pm-3:00pm)

A session is given by Dr. J Ranga, Professor, Dept of EEE, RCE. Classification techniques like feature extraction, Gaussian base classification, chi-square, Anova are discussed in the session.



Lecture by Dr J Ranga Professor EEE RCE

Session4- Heuristic Search Strategies and optimization concepts-II (3:15-4:45pm)

Another session is given by Dr. S.Jayalakshmi, Professor & HoD, Dept of EEE, RCE.



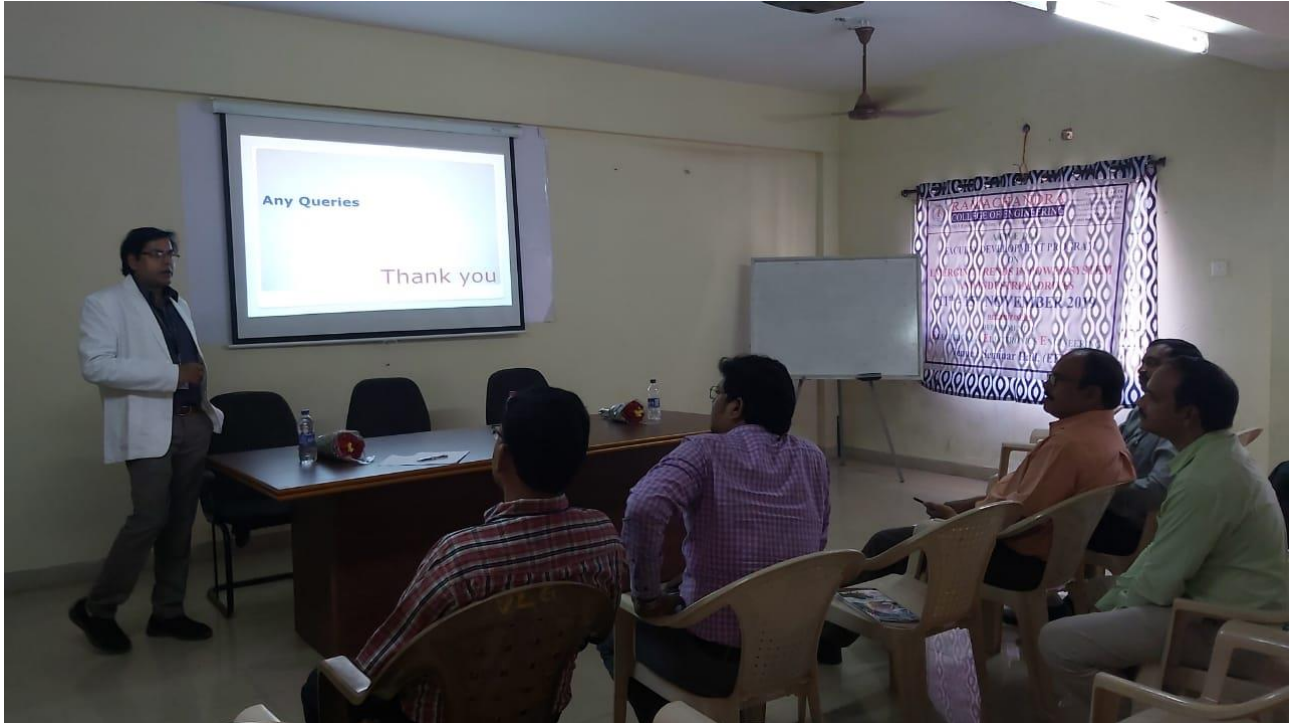
Lecture by Dr S Jayalakshmi, Professor EEE RCE

She has explained the implementation and classification of Heuristic Search Strategies and optimization techniques.

Day 3. 22.01.2020

Session1- Informed Search Techniques and their Applications (09:30 am – 11.00am)

A session is taken Dr. A Davvedu Raju, Professor, CSE, RCE. Informed Search Techniques and their Applications are discussed.



Lecture by Dr A Daveedu Raju, Professor CSE RCE

Session 2: Informed search algorithms and types (11:15-12:45pm)

A session is taken Dr. V Suryanarayana, professor & HoD CSE RCE. Sir has explained about the Informed search algorithms and types of open source frameworks & tools available for data science and analytics.



Lecture by Dr V Suryanarayana, Professor & HoD CSE RCE

Session 3- Blind Search vs. Informed Search and their features (1:30pm-3:00pm)

A session is taken Dr. Shameena Begum, Professor, CSE, RCE. Conceptual understanding of Blind Search vs. Informed Search and their applications to solve traditional searching problems were discussed.



Lecture by Dr Shameena Begum, Professor CSE RCE

Session4- Search techniques in AI (3:15-4:45pm)

A session is taken Dr. M Nagabhushan Rao, Professor, CSE, RCE. How to Search unique datasets, unique datasets and problems, Random Forest approach, are discussed.



Lecture by Dr M N Rao, Professor CSE RCE

Day 4. 23.01.2020

Session1- Artificial Intelligence: foundations of computational agents (9.30am-11.00am)

A session is taken by Dr. K R Vadivelu, Professor EEE RCE on Introduction to Artificial Intelligence: foundations of computational agents.



Lecture by Dr K R Vadivelu, Professor EEE RCE

Session 2 - Heuristic Search Techniques and their types (11.15am-12.45pm)

A session is taken by Dr. J Ranga, Professor, EEE RCE. He addressed the audience with various types of heuristic techniques and their models to optimize a problem to solve an objective function.



Lecture by Dr J Ranga, Professor EEE RCE

Session 3 - Informed search Methods with case studies (1.30pm-3.00pm)

A session is taken by Dr. B S Satish, Professor, ECE RCE on Informed search Methods with case studies. Sir has given introduction to analytics, introduction to Python platform for data analysis, introduction to supervised machine learning algorithms.



Lecture by Dr B S Satish, Professor ECE RCE

Session 4- Search Techniques for Artificial Intelligence (3.15pm-4.45pm)

Session is primarily devoted to concept building on Search Techniques for Artificial Intelligence and supervised and unsupervised machine learning delivered by Mr S Subramanya Sarma, Associate Professor, EEE RCE



Lecture by Mr S Subramanya Sarma, Associate Professor EEE RCE

Day 5. 24.01.2020

Two sessions is taken by Dr. Dola Sanjay S, Principal , RCE

Session 1: Heuristic Search Techniques & Hill Climbing in AI (9.30am -11.00am)

The speaker has discussed about Heuristic Search Techniques & Hill Climbing in AI and unsupervised machine learning algorithms in solving real time problems. In contrast to traditional supervised machine learning algorithms, how these algorithms attempts to classify data without having first been trained with labeled data. Once the algorithm has been run and the groups are defined, any new data can be easily assigned to the most relevant group.



Lecture by Dr Dola Sanjay S, Principal RCE

Session 2: Informed Search Techniques In Artificial Intelligence (11.15am-12.45pm) In the second session conceptual analysis of Informed Search Techniques In Artificial Intelligence for choosing the right number of clusters procedure is addressed.



Lecture by Dr Dola Sanjay S, Principal RCE

Session 3: Difference between informed and uninformed search techniques (1.30pm -3.00pm)

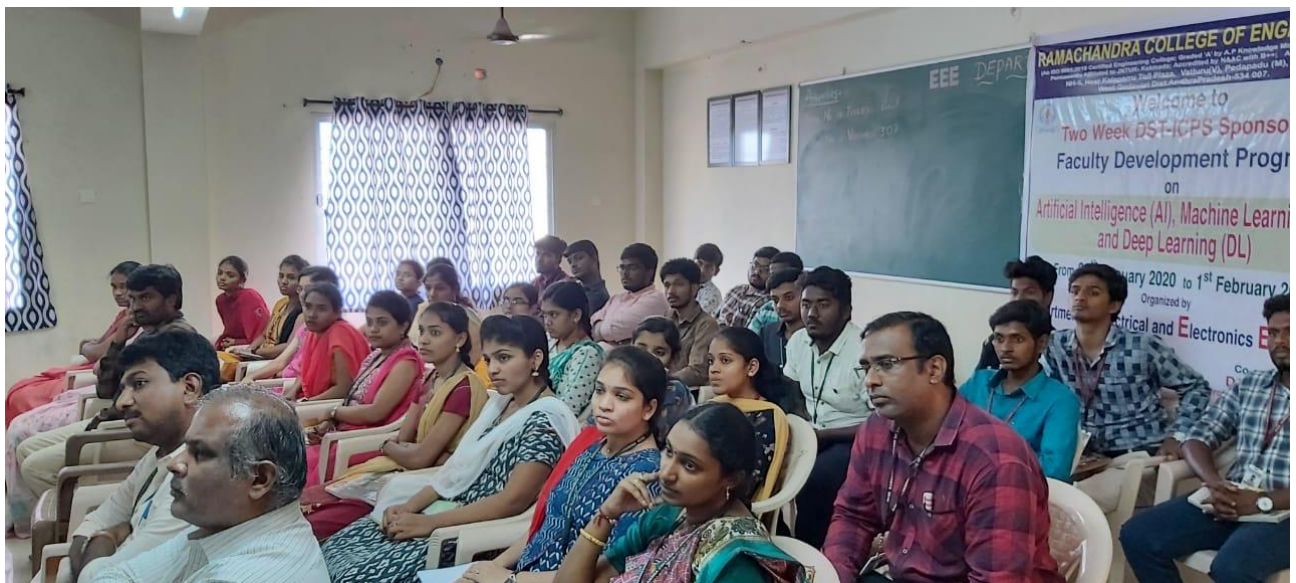
A session is taken Dr. A Davvedu Raju, Professor, CSE, RCE and addressed about the Difference between informed and uninformed search techniques in data mining.



Lecture by Dr A Daveedu Raju, Professor CSE RCE

Session 4: A* Search Algorithm in AI applications (3.15pm-4.45pm)

In this session Dr V Suryanarayana Professor & HoD CSE RCE explained about A* Search Algorithm in AI applications and process to build classification models and evaluation of performance.



Day 6. 25.01.2020

Session 1: Search Techniques for Artificial Intelligence (9.30am - 11.00am)

Session is lead by Mr N G Sudheendra, Expert of AI, ML and DL. The speaker has discussed what classification, Decision tree learning with case studies. Machine Learning technique decision tree, Binary classification and multi class classification, decision tree terminologies, calculation of entropy, information gain and of the data set.



Lecture by Mr N G Sudheendra Bangalore

Session 2: Optimization concepts and Machine learning (11.15am-12.45pm)

Seesion deliverd by Dr S Sivanagaraju, Professor, EEE, JNTUK, Kakinada. Sir explained what are Optimization concepts and Machine learning and their applications to decision tree with a clear definition, Decision Trees Terminologies, pruning, branching, parent / child node, splitting, root node, leaf node.



Lecture by Dr S Sivanagaraju Professor EEE JNTUK Kakinada

Session 3: Deep Learning Models of feed forward networks (1.30pm -3.00pm)

A session is taken by Dr. A Pandian on deep Learning using Statistical Analytics with R Tools. Python Tools for deep Learning. Sir explained why R is one of the major languages for data science.



Lecture by Dr A Pandian, Professor KLU Vijayawada

Session 4: Deep Learning Models of feed forward networks (3.15pm-4.45pm)

A session is taken by Mr. S Subramanya Sarma Associate professor EEE RCE on Deep Learning Models of feed forward networks. It is a free machine learning library for Python. It features various algorithms like support vector machine, random forests, and k-neighbours, and it also supports Python numerical and scientific libraries like NumPy and SciPy.



Day 7. 27.01.2020

Three sessions are taken by Dr. Gaurav Kumar, Managing Director, Magma Research & Consultancy, haryana

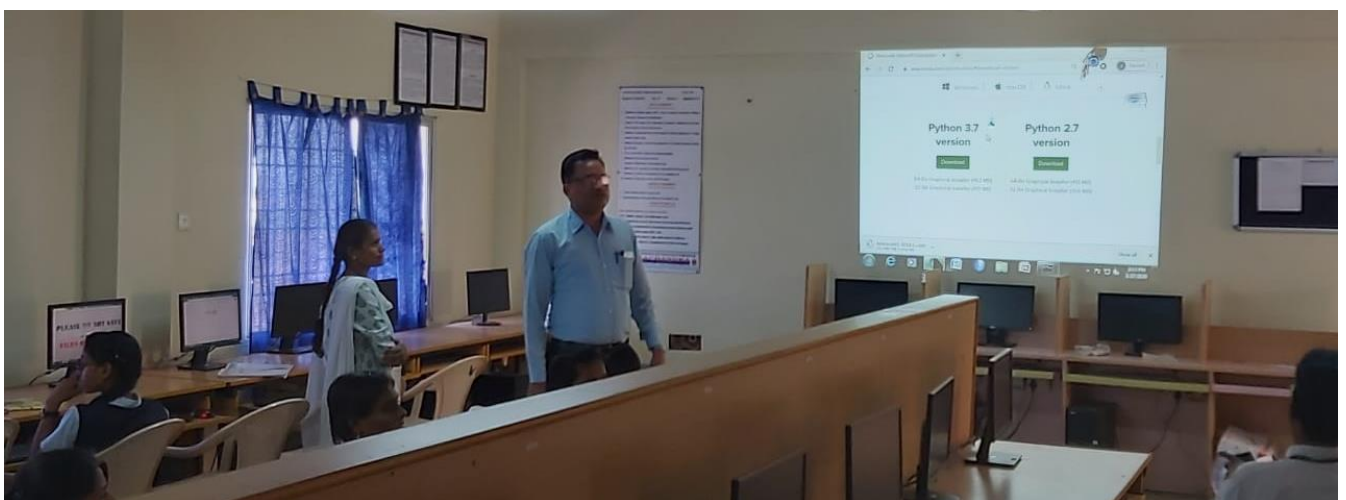
Session 1: Challenges and Research Domains in A.I., Searching Techniques (9.30am-11.00am)

Implementation of Machine / Deep Learning using different tools like keras tensorflow pytorch numpy scipy openCV is explained using Cloud. In this session we Configuration: GPU Based Remote System is explained.



Session 2: Working with Anaconda Platform, Implementation of Searching Algorithms in Python

Because of rapid advancements, massive amounts of talent and resources are dedicated to accelerating the growth of the technologies. in this session list of 8 best open source AI technologies are shown to take machine learning projects to the next level. in these few are explained



Hands on Session addressed by Dr Gaurav Kumar, Expert

Session 3: Bayesian Networks Using Python, Implementation and Practical Sessions, Case Studies (1.30pm – 3.00 pm)

In deep learning, a convolution neural network (CNN, or ConvNet) is a class of deep neural networks, is explained. It is most commonly applied to analyzing visual imagery. They are also known as shift invariant or space invariant artificial neural networks (SIANN), based on their shared-weights architecture and translation invariance characteristics.



Session 4: Reinforcement Learning and Implementation (3.15pm-4.45pm)

A session is taken by Dr. Shameena Begum, Prof, CSE RCE on Reinforcement Learning and Implementation. In this session she has given a deep explanation on Keras, TensorFlow and PyTorch.



Lecture and hands on session by Dr Shameena Begum, RCE

Day 8. 28.01.2020

Three Sessions are addressed by Dr Gaurav Kumar, Expert & Managing Director, Magma Research & Consultancy on Implementation of ML on Cloud. BigML, Neptune and others

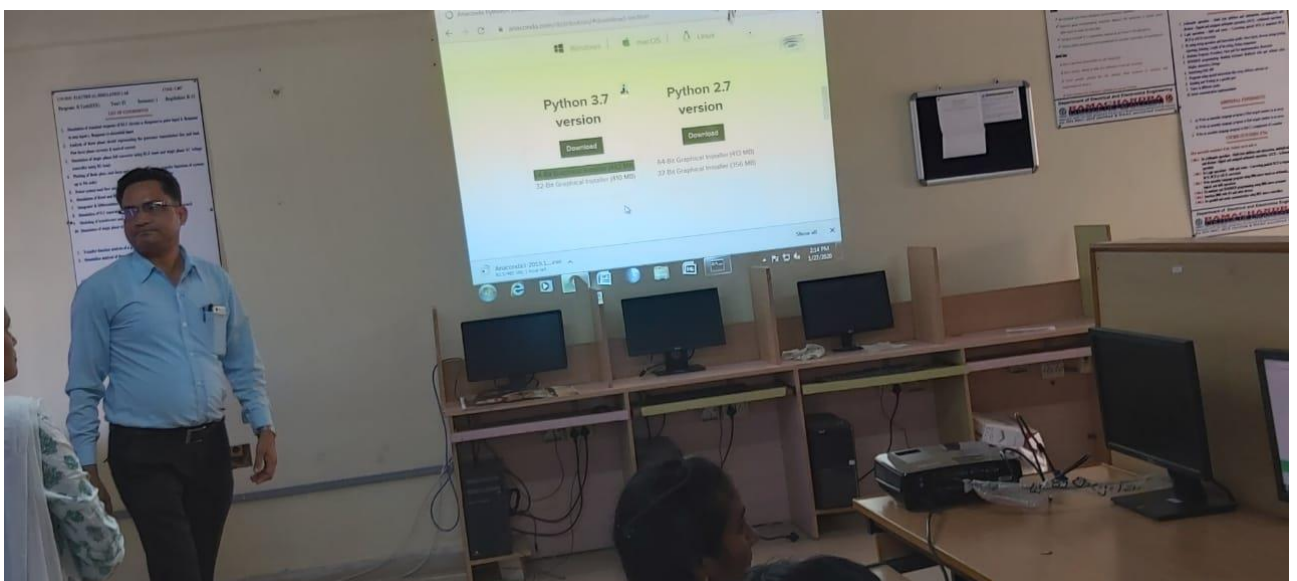
Session 1: Machine Learning and Research Dimensions, Supervised and Unsupervised Learning (9.30am-11.00am)

In this session machine learning and transfer functions in keras are shown. Linear and Nonlinear Activation Function is shown. Different images having encoding in spatial domain instead of Frequency domain.



Session 2: Working with WEKA, Implementation of Machine Learning Algorithms in WEKA (11.15am-12.45pm)

WEKA offers converters to convert the files and Databases and windows databases, Sparse ARFF files, Generating random datasets are discussed. How to download unique datasets, unique datasets and problems, Random Forest approach, are discussed.



Session 3: Sentiment Data Analytics in WEKA (01.30pm-3.00pm)

In this session sir has explained about computer vision applications and given different examples like SDA: Sentiment data Analytics.



Session 4 : Using Scikit-Learn for Machine Learning in Python (3.15pm-4.45pm)

A session is taken by Dr K R vadivelu, Prof. in Dept of EEE, RCE on Using Scikit-Learn for Machine Learning in Python.



Day 9. 29.01.2020

Four sessions were addressed by Dr Gaurav kumar, Expert & Managing Director, Magma Research & Consultancy on Implementation of ML on Cloud. BigML, Neptune and others

Session 1: Natural Language Processing and Research Aspects, Sentiment Analytics (9.30am-11.00am)

In deep learning, a convolution neural network (CNN, or ConvNet) is a class of deep neural networks, is explained. It is most commonly applied to analyzing visual imagery. They are also known as shift invariant or space invariant artificial neural networks (SIANN), based on their shared-weights architecture and translation invariance characteristics.

Sir explained that the applications in image and video recognition, recommender systems, image classification, medical image analysis, and natural language processing. CNNs are regularized versions of multilayer perceptrons. Multilayer perceptrons usually mean fully connected networks, that is, each neuron in one layer is connected to all neurons in the next layer.

The "fully-connectedness" of these networks makes them prone to overfitting data. Typical ways of regularization include adding some form of magnitude measurement of weights to the loss function. However, CNNs take a different approach towards regularization: they take advantage of the hierarchical pattern in data and assemble more complex patterns using smaller and simpler patterns. Therefore, on the scale of connectedness and complexity, CNNs are on the lower extreme. Sir explained the definition, design, convolution way, pooling, full connected and receptive fields in CNN Architecture.



Session 2: Sentiment Analysis and Text Mining using Python (11.15am-12.45pm)



Session 3: Using NLTK for Data Analytics and Predictions (1.30pm-3.00pm)

Initially released in 2007, scikit-learn is an open source library developed for machine learning. This traditional framework is written in Python and features several machine learning models including classification, regression, clustering, and dimensionality reduction. Scikit-learn is designed on three other open source projects—Matplotlib, NumPy, and SciPy—and it focuses on data mining and data analysis.

Initially released in 2016, the Microsoft Cognitive Toolkit (previously referred to as CNTK), is an AI solution that can empower you to take your machine learning projects to the next level. Microsoft says that the open source framework is capable of "training deep learning algorithms to function like the human brain". Some of the vital features of the Microsoft Cognitive Toolkit include highly optimized components capable of handling data from Python, C++, or BrainScript, ability to provide efficient resource usage, ease of integration with Microsoft Azure, and interoperation with NumPy.

Session 4: Implementation and Research Perspectives (3.15pm-4.45pm)



Day 10. 30.01.2020

Four sessions were addressed by Dr Gaurav kumar, Expert & Managing Director, Magma Research & Consultancy on Implementation of ML on Cloud. BigML, Neptune and others

Session 1: Computer Vision using Artificial Intelligence (9.30am-11.00am)



Session 2: Working with Open CV (11.15am-12.45pm)

On Working with OpenCv for Machine Learning in Computer Vision, Machine Learning using Hihj performance Julia Tools. Implementation of Machine / Deep Learning using different tools like keras tensorflow, pytorch numpy scipy openCV is explained using Cloud. In this session we Configuration: GPU Based Remote System is explained.



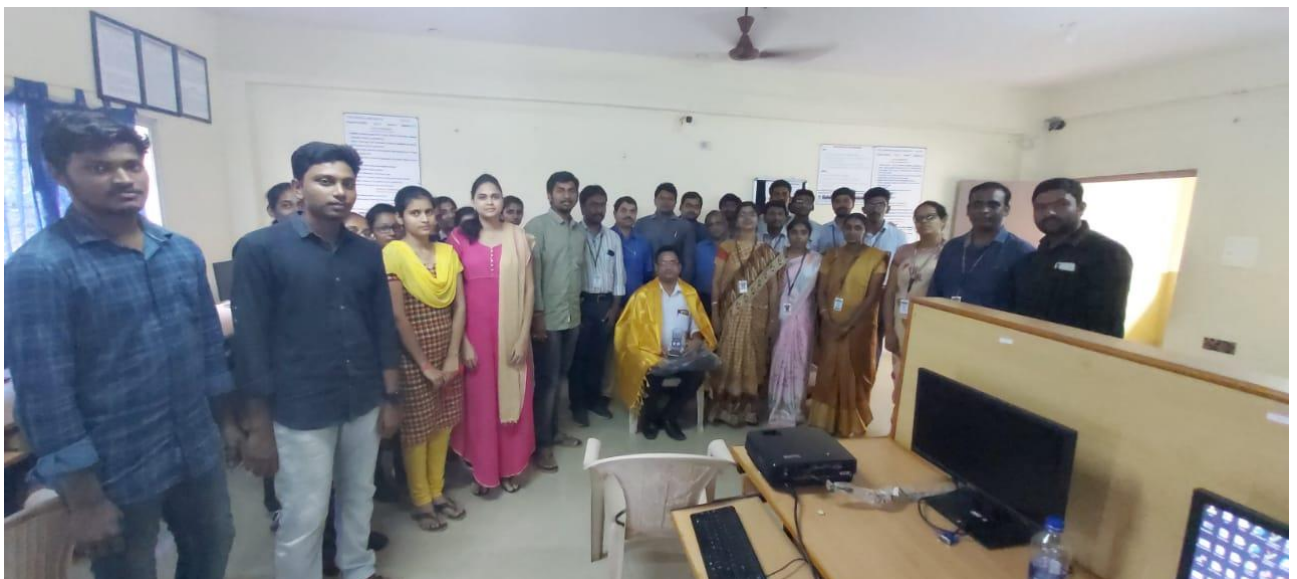
Session 3: Deep Learning and Implementations (1.30pm-3.00pm)



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Initially released in 2016, the Microsoft Cognitive Toolkit (previously referred to as CNTK), is an AI solution that can empower you to take your machine learning projects to the next level. Microsoft says that the open source framework is capable of "training deep learning algorithms to function like the human brain". Some of the vital features of the Microsoft Cognitive Toolkit include highly optimized components capable of handling data from Python, C++, or BrainScript, ability to provide efficient resource usage, ease of integration with Microsoft Azure, and interoperability with NumPy.

Session 4: Implementations with Assorted Perspectives on Models (3.15pm-4.45pm)



Day 11. 31.01.2020

Session 1: Informed Search Techniques In Artificial Intelligence (9.30am-11.00am)

A session is taken by Dr. R Ashok Kumar Professor EEE Annamalai University Chidambaram on Informed Search Techniques In Artificial Intelligence.



Session 2: Implementation of Reinforcement Learning (11.15am-12.45pm)

A session is taken by Dr. K Asokan Professor EEE Annamalai University Chidambaram on Informed Search Techniques In Artificial Intelligence.



Main points in Reinforcement learning –

Input: The input should be an initial state from which the model will start

Output: There are many possible output as there are variety of solution to a particular problem

Training: The training is based upon the input, the model will return a state and the user will decide to reward or punish the model based on its output.

The model keeps continues to learn. The best solution is decided based on the maximum reward. Sir explained Difference between Reinforcement learning and Supervised learning.

Session 3: Artificial Intelligence: foundations of computational agents (1.30pm-3.00pm)

A session is taken by Dr. R Ashok Kumar Professor EEE Annamalai University Chidambaram on Artificial Intelligence: foundations of computational agents.



Session 4: Deep Learning Implementation with Models (3.15pm-4.45pm)

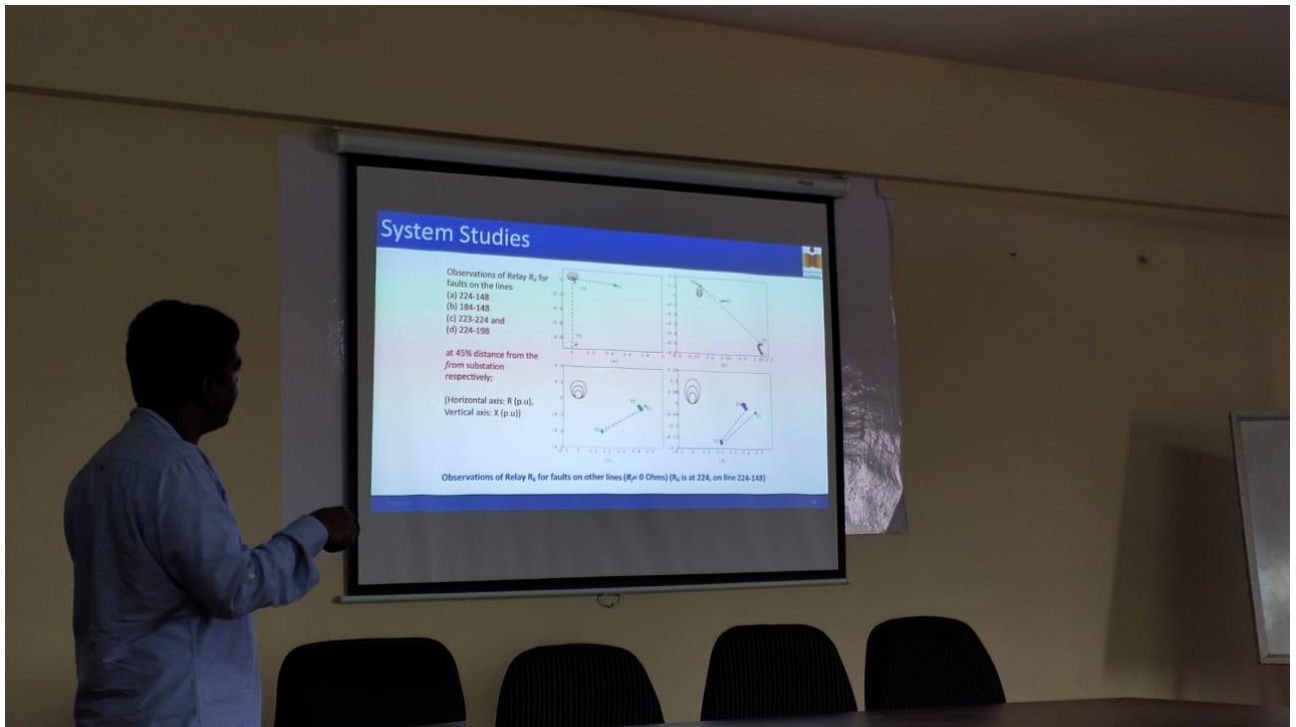
A session is taken by Dr. K Asokan Professor EEE Annamalai University Chidambaram on Informed Search Techniques In Artificial Intelligence.



Day 12. 01.02.2020

Session 1: Optimization concepts and Machine learning (9.30am-11.00am)

A session is taken by Dr. B Ravi Kumar Professor EEE IIT Hyderabad on Optimization concepts and Machine learning.



Session 2: Heuristic Search Strategies and optimization concepts (11.15am-12.45pm)

A session is taken by Mr. R Durga Rao Assistant Professor EEE JNTUH Manthani on Heuristic Search Strategies and optimization concepts.



Session 3: Artificial Intelligence: foundations of computational agents (1.30pm-3.00pm)

A session is taken by Dr. K N Sujatha Professor EEE JNTUH Hyderabad on Artificial Intelligence: foundations of computational agents.



Session 4: Valedictory:

This FDP by name “Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL)” is very special to the department as it is the first DST sponsored 2-week FDP achieved by Dr J Ranga who is the principal investigator. EEE department of RCE, Eluru is delighted to conduct this 2 Week Faculty Development Program for the benefit of research aspirants and enthusiastic academicians. We, sincerely hope that this FDP will reach the expectations in achieving its innate objective.





Felicitation to Dr J Ranga, Co-ordinator of FDP



Felicitation to Dr S Jayalakshmi, Convener of FDP



Felicitation to Dr Dola Sanjay S Principal RCE



Felicitation to Dr B Ravi Kumar, Professor IIT Hyderabad, Chief Guest Validictory



Felicitation to Mr R Durga RAO, JNTUH Manthani



Felicitation to Dr K N Sujatha, Professor JNTUH Hyderabad, Guest of Honor Validictory

Feedback from participants:



Feedback from Mr S N V Bramareswara Rao, Participant



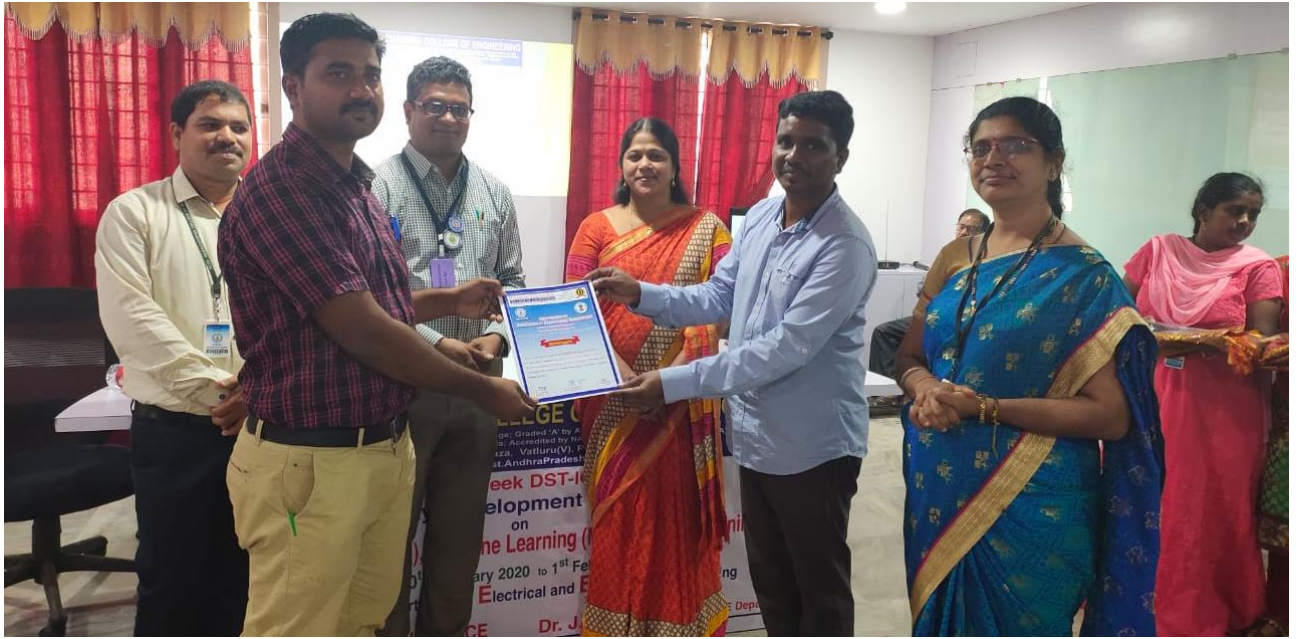
Feedback from Mr K Rajesh Babu, Participant

Assessment of Feedback:

Participants expressed that “The major focus of this FDP is to upgrade the teaching, training and research skills of scholars, teachers- especially those faculty who have not had an opportunity to acquaint themselves with recent developments in teaching and research methods. This type of programs enables participants to develop competency in general education as well as in research and pedagogy. The arrangements and hospitality are good. Planning and co-ordination are satisfactory.”

Certificate Distribution to Participants







Outcome of Program

This FDP covered the basic concepts of Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) algorithm that helps us to build and apply prediction functions with an emphasis on practical applications. This FDP technically competent in the basics and the fundamental concepts of Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) such as:

- Understand components of a Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) algorithm.
- Apply modern learning tools to build and evaluate predictors.
- How Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) uses computer algorithms to search for patterns in data.
- How Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) helps to solve optimization problems.

Major Course Contents delivered are:

- Introduction to Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL)
- Artificial Neural Networks
- Heuristic Search Strategies and optimization concepts
- Bayesian Learning
- Deep Learning types
- Search Techniques for Artificial Intelligence
- Difference between informed and uninformed search techniques
- Reinforcement Learning Implementation
- Deployment of Machine Learning and Deep Learning Models
- Sentiment Data Analytics in WEKA
- Deep Learning and Implementations
- Using NLTK for Data Analytics and Predictions
- Working with Anaconda Platform, Implementation of Searching Algorithms in Python

Hands on session on the above topics are provided.

Press & Publicity



జ్యోతి ప్రజ్వలన చేస్తున్న ప్రొఫెసర్ శివదత్త జోషి

రామచంద్ర ఇంజనీరింగ్ కళాశాలలో

ప్యాకట్టి డవలప్ మెంట్ కార్యక్రమం

పెదపాడు, జనవరి 20 : సాంకేతిక అంశాలపై బోధన విద్యార్థులను నూతన ఆవిష్కరణల దిశగా ముందుకు తీసుకెళ్లేందుకు ఎంతగానో ఉపయోగపడుతుందని ఢిల్లీ ఐ.ఐ.టి.కి చెందిన ప్రొఫెసర్ డాక్టరు శివదత్త జోషి తెలిపారు. పెదపాడు మండలం వట్లూరులోని రామచంద్ర ఇంజనీరింగ్ కళాశాలలో రెండు వారాల పాటు జరిగే ప్యాకట్టి డవలప్ మెంట్ కార్యక్రమాన్ని సోమవారం ఆయన ప్రారంభించారు. వరంగల్ ఎన్.ఐ.టి. ప్రొఫెసర్ డాక్టరు ఎం.సైదులు మాట్లాడుతూ ఇటువంటి శిక్షణ కార్యక్రమాల్లో పాల్గొనడం ద్వారా బోధనలో మంచి నైపుణ్యాలను సాధించవచ్చన్నారు.. కార్యక్రమంలో వివిధ విభాగాల హెచ్.ఎం.డిలు, ప్యాకట్టిలు పాల్గొంటారన్నారు.

ఆంధ్రజ్యోతి

Tue, 21 January 2020

<https://epaper.andhraajyothy.com/c/4>



ఆధునిక పద్ధతుల్లో బోధించాలి

ఏలూరు విద్యావిభాగం, న్యూస్ టుడే:

అధ్యాపకులు ఆధునిక బోధన పద్ధతులను అలవరచుకోవాలని ఢిల్లీ ఐఐటీ ఆచార్యుడు డాక్టర్ శివదత్త జోషి చెప్పారు. స్థానిక రామచంద్ర ఇంజనీరింగ్ కళాశాలలో అధ్యాపకులకు ప్రత్యేక శిక్షణ శిబిరాన్ని సోమవారం ప్రారంభించారు. ఈ సందర్భంగా ముఖ్య అతిథిగా విచ్చేసిన శివదత్త జోషి మాట్లాడుతూ నేటి ఆధునిక కాలంలో సాంకేతిక పరిజ్ఞానం రోజురోజుకూ విస్తృతం అవుతోందని తెలిపారు. దాన్ని ఎప్పటికప్పుడు అధ్యాపకులు అందించుకోవాలని సూచించారు. వరంగల్ నిట్ ఆచార్యుడు డాక్టర్ ఎం.సైదులు మాట్లాడుతూ విద్యార్థులు పాఠ్యాంశాల ద్వారా నేర్చుకునే విజ్ఞానంతో నూతన ఆవిష్కరణలను



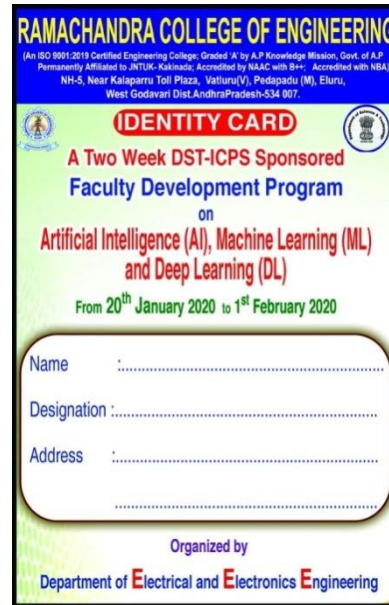
మాట్లాడుతున్న శివదత్త జోషి

రూపొందించే దిశగా పయనింపజేయాల్సిన గురుతర బాధ్యత అధ్యాపకులపై ఉందన్నారు. ఈ సందర్భంగా నూతన బోధన పద్ధతులపై అవగాహన కల్పించారు. కళాశాల కార్యదర్శి కె.వేణుగోపాల్, ప్రధానాచార్యుడు డి.సంజయ్, పలు విభాగాల అధిపతులు పాల్గొన్నారు.

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