

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous Institution – UGC, Govt. of India)



CSIR SPONSORED TWO DAYS NATIONAL LEVEL WORKSHOP ON "MACHINE LEARNING FOR HUMAN-ROBOT COLLOBORATE AND ARTIFICIAL

MACHINE LEARNING FOR HUMAN-ROBOT COLLOBORATE AND ARTIFICIAL INTELLIGENCE AWARENESS" 22/11/2019 and 23/11/2019

Machine learning is a method of data analysis that automates analytical model building. A subset of artificial intelligence (AI), machine learning (ML) is the area of computational science that focuses on analyzing and interpreting patterns and structures in data to enable learning, reasoning, and decision making outside of human interaction.

The main importance of AI is that the autonomous robot could eventually have more proactive behaviors, planning their motion in complex unknown environments. These new capabilities keep safety as a primary issues and efficiency as secondary. To allow this new generation of robot research is being conducted on human detection, motion planning, sense reconstruction, intelligent behavior through task planning and compliant behavior using force control

Two days national level workshop on "machine learning for human-robot colloborate and artificial intelligence awareness" was conducted in MRCET campus for two days on 22/11/2019 and 23/11/2019 at MRCET auditorium. This workshop was inaugurated by Dr.VSK Reddy, Principal, MRCET, Mr Joy Mustafi, CEO, MUST Research, Dr.Murali Krishna, Dean of Academics, Prof. K Kailasa Rao, Director of CSE and Dean placements, Dr. D Sujatha, HOD, CSE, Dr. Gowri Ganesh, HOD,IT by lightning the lamp in a traditional manner.

Dr.VSK Reddy, Principal, MRCET, has welcomed the participants and appreciated CSE department for organizing the workshop by introducing new technologies. He also appreciated Dr. D Sujatha, HOD, CSE, for getting sponsorship from **Council of Scientific and Industrial Research (CSIR)**. Also he insisted faculty to adapt with newer technologies so that learning

capability will be higher and the method of transfer to students will be efficient. He thanked the chief guest for coming in spite of his busy schedule and also advised faculty members to grab the opportunity in a better way.

Dr.Murali Krishna, Dean of Academics, MRCET, has appreciated CSE department for taking initiation on all aspects and also for conducting such workshop on upcoming technologies. He also said about the significance of Machine learning &AI which was implemented in our society. Also he advised the faculty to make use this sophisticated opportunity.

Prof. K Kailasa Rao, Director of CSE and Dean placements, addressed the faculty and told the importance of Machine learning &AI in corporate life. He said about the opportunities and placements which are in high demand on current technologies. Also spoke about the Artificial Intelligence which acts as human and its programming skills. He suggested faculty to take part in this two days workshop.

Prof.Sanjeeva Reddy, Dean of International Studies & Director of ECE, MRCET, has mentioned about the automation and statistical analysis which was ruling the world. He spoke about the data science and its higher studies on abroad. Also he said about the opportunities on data science where Google is directly recruiting. **Dr.Srinivasa Rao, HOD, ECE,** has conveyed his best wishes to CSE department and told to actively participate in these two days workshop.

Dr. D Sujatha, HOD, CSE, formally addressed and welcomed the gathering. She gave a detail note on this two days workshop and thanked Dr.Nagendra Prabhu, Organizing Secretary, who got the sponsorship from CSIR. She also spoke about the Machine learning and AI with its applications and how it helps in research and also insists the participants to utilize the opportunity in gaining the knowledge on newer technology.

Mr Joy Mustafi, CEO, MUST Research, has delivered about the Applications of Artificial Intelligence and its applications. He also covers on Innovativeness, Problem Solving with Text and Numbers, Analytical Questions with Tables and Charts, Problem Solving with Vision, Connected Robot through Sensor and Voice Control, Market Impact, Social Impact, Sustainability and Inter-operability. He also played a video of an Robot which was developed in MUST academy.

Santhosh Vutukuri, Indian School of Business, has started with a clear difference of clustering and classification with examples. He also spoke about the analytics grammar, optimization problem in Machine learning, introduction on Data science and how it is managed, implemented on business field.

Gopi Krishna Nuti, Vice President, MUST Research, has delivered his lecture on computer vision with older problems and newer solutions. He also extended with Image segmentation, convolution neural network and depth perception.

Dr. Bapi Raju Surampudi, Professor, Cognitive Science Lab, IIIT Hyderabad, has spoke about Deep Learning and the Brain inspiration. He also told about the neural networks and how the data are trained as a data set along with the decision boundary perspective. Also he covered on deep learning followed by unit detector, hierarchical feature detector, Functional Magnetic Resonance Imaging (FMRI), Classification problem, Deep NN.

Dr.Aruna Malapati, BITS, CSE & IS, Hyderabad, had covered topic on ML & AI applications, Adaptation and Learning In Autonomous Robots, Tiends in Robotics Research Components of Typical Robots, Autonomous Intelligent Systems, Learning Approaches for Robot Systems Human-Robot Interfaces, Approaches to recommender systems

At the end of the workshop the participants had interactive session where they clarified their doubts on research areas and also gave good feedback about the topics taken for workshop. Finally on valedictory **Dr.VSK Reddy, Principal, MRCET, Dr.Murali Krishna, Dean of Academics, MRCET, Prof. K Kailasa Rao, Director of CSE and Dean placements**,

Dr. D Sujatha, HOD, CSE distributed certificates to all the participants and at the end

Dr. D Sujatha, HOD, CSE thank our principal and all the coordinators who made this workshop on grand success.



