

IMPORTANT INFORMATION

Important Dates:

FREE REGISTRATION

Last date for Registration: **23rd August, 2020**

Notification of Selection : **23rd August, 2020**



Scan QR code/Registration Link:
<https://forms.gle/Gjyvsrotu8ypokYKA>
Limited seats are available, this STTP is purely on first come, first serve basis.

Venue: After registration, selected participants will get online session details through registered email.

E-Certificates will be provided for Participants

BENEFITS TO PARTICIPANTS

This STTP on Machine Learning for IOT Technology is an outstanding Technology Enhancement Program and expects National-Renowned academia & industry speakers and delivers the most recent techniques, strategies and the latest updates in Machine Learning Technology fields. Participants can acquire the knowledge of IoT devices through hands-on experience, benefit with an outstanding exposure to the technology incorporated in Machine Learning Technology and a stimulating opportunity to show case the new technology.

LEVEL OF PARTICIPANTS

Faculty working in AICTE approved Institutes and having a zeal to do rigorous research in the field of "Machine Learning with Python", Industry persons, Researchers etc.

RELEVANCE

Machine Learning (ML) and IoT play a significant role in the modern engineering and information processing systems. It is a rapidly growing field. Machine Learning is an essential part of pattern recognition, object detection and classification, clustering, data mining and speech recognition etc. In addition, IoT has important significance over machine learning in application of smart city. This STTP assesses the various machine learning methods in the process of eliminating human interventions wherever necessary and possible. Machine learning plays an essential role in IoT aspect for handling the huge amount of data generated by those machines. Machine learning is allowing us to learn the patterns by itself and take autonomous decisions without a new set of rules and regulations. Machine learning is a powerful tool that can take the IoT technologies a step forward in mitigating the myriad problems that arise from large deployments.



MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

Autonomous Institution, UGC, Govt. of India

Accredited by NBA & NAAC with 'A' Grade | NIRF Indian Ranking, Accepted by MHRD, Govt. of India
Approved by AICTE, Permanently Affiliated to JNTUH, Approved by AICTE, Maisamma, Secunderabad

ONE WEEK SHORT TERM TRAINING PROGRAMME ON
(Ref.No. 34-65/162/RIFD/STTP/Policy-1/2018-19)

OPTIMIZATION TECHNIQUES IN MACHINE LEARNING FOR WIRELESS & IOT APPLICATIONS

24th to 29th August, 2020



In Association with
SMART BRIDGE edTech Organization
Hyderabad



Sponsored by
All India Council for Technical Education (AICTE)

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Sri. Ch. Malla Reddy,
Hon'ble Minister, Govt. of Telangana State
Founder Chairman, MRGI

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Dr. Ch. Bhadra Reddy, President, MRGI

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Professor of ECE & Principal, MRECW

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IN ASSOCIATION WITH**



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MRGI AT A GLANCE

Situated away from raucous sounds of Hyderabad city, MRGI epitomizes technocracy at its best. Being one of the largest campuses in Telangana State, MRGI promises eventful student oriented learning. The founder chairman Sri.Ch.MallaReddy began the journey as an educationalist to form the bridge between society, industry and academics. He is an unassuming dynamic leader with a keen interest in changing trends of higher education and student's employability in India & abroad. The diverse and enormous growth of the group unravels his realistic vision to cater to the needs of students in all the areas of education. Education at MRGI brings all round and holistic development in students. Today MRGI has become a major learning centre with 35 institutions offering Engineering, Medical, Management, MCA and Pharmacy courses.

ABOUT MRECW

Malla Reddy Engineering College for Women - MRECW (Autonomous Institution, UGC, Govt. of India), established in 2008, is approved by AICTE, New Delhi and affiliated to JNT University, Hyderabad. The college has UGC Autonomous Status by Govt. of India, Accredited by NAAC with 'A' grade, Programmes Accredited by NBA, Ranked by NIRF Indian Ranking-2020 & 2018, accepted by MHRD, Govt. of India, ISO 9001:2015 certified, Permanently Affiliated to JNTUH, Z(A) & Z(B) Recognised by UGC, AAAA+ Rated in Top Engineering Colleges Survey 2019 by Digital Learning Magazine, AAA+ Rated by Careers 360 Magazine, Ranked Nationwide 95th by Outlook News Magazine, Ranked 3rd in 'Outstanding Engineering Colleges of Excellence' category by CSR, Top 100 National Ranking by Times News Magazine, 141 National Ranking by India Today Magazine, Platinum Rated by AICTE-CII Industry Linked Institutes Survey, recipient of "Best College of the Year-2019" from Education Matters, "College of the Year-2017 Award" from Silicon India Education, "Best Engineering College in Telangana & A.P. Award" from International Education Awards, Time Cyber Media Pvt. Ltd., "Education Leadership Award" from Dewang Mehta National Education Awards & "Engineering Educators Award" from University of Bradford, U.K. The College has established Robotics Centre of Excellence offering Training & Certification in Robotics.

The college offers B.Tech Programmes in CSE, CSE-AIGML, CSE-Data Science, CSE-Cyber Security, CSE-IOT, IT, ECE and EEE, M.Tech Programmes in Embedded Systems, Computer Science Engineering & MBA and has a strong vision of offering world class training to the promising engineers. 100% of the faculty members are ratified by JNTU Hyderabad. MRECW emphasizes on Application Oriented Teaching & Problem Based Solving. Since the establishment of the college, it is known for academic excellence. The College offers pre placement training program, e-learning, e-Training & e Assessment in collaboration with Time Institute, Training & Assessment through Code Tantra and Reference Globe, career connect and industry connect programs. During the Academic year 2019-20, 548/600 students are placed in reputed MNCs like CISCO, Accenture, HSBC, Apps Associates, Cap Gemini, IBM, NTT Data, Cognizant, Wipro, TCS, Infogain, CGI, CYIENT, Mphasis, Infosys, Amazon & Genpact, with 6 to 8 offer letters for many.

For the better prospects, the college offers training to students for Prestigious Certifications like Microsoft, CISCO, Oracle, Robotics and Robotics Process Automation Certifications through Microsoft Innovation Center, CISCO Networking Academy, Oracle Corporation, Robotics-Centre of Excellence, BOTLAB and Oxford Achievers Certification (in association with Oxford University Press, India), Business English Certification (in association with Cambridge University, London, U.K.), Pearson Certification (in association with Pearson MePro) through Center for Development of Communication Skills within the College Campus and also offers project based training programs for I, II, III & IV year students in their fields of interest. College initiates and organizes International and National Conferences in association with Scopus Indexed journals, Workshops and Refresher courses in the different Engineering disciplines to upgrade the knowledge of the faculty members. Teams of faculty members have filed 13 patents, received several awards, published more than 50 books, more than 500 SCI/Scopus Indexed publications and huge number of publications and presentations in reputed International/National journals and conferences.

The faculty of the institution have completed and are also undertaking many more Research and funding projects. MRECW is always in the forefront in organizing workshops on latest technologies like Robotics, IOT, Block Chain Technology, R-Programming, Cloud Computing, Python, Android, Cadence Tools, MATLAB and Multisim to fill the gap between the Industry and Academia. The college has established Institution Innovation Council under MHRD and is member of J-Hub under JNTUH. Through these, in association with Entrepreneurship Development Cell, the College organizes and promotes Hackathon programmes for which our students have been selected as Top innovators and their products selected as Top Innovative products. The College also has an actively functioning Technology Business Incubation Centre for handholding start ups till success. The College also organizes Personality Development Programmes in association with Vivekananda Institute of Human Excellence, Rama Krishna Math, Hyderabad. Students established IEEE, IETE, ISTE Student chapters and Technical Associations in each department under which they organize National and State Level Technical Symposia, Technical Quiz, Debate Competition, Group Discussion and Mock interviews etc. to improve their technical skills and soft skills. MRECW also organizes standard Events like Women's Day, Engineer's Day, Teacher's Day, Annual Day, Graduation Day, etc. Here is the place where we mould students into industry ready engineers by providing leadership development, mentoring in technical education and empowering our young women to be the architects of change in the world of technology. We also strive to inculcate human values, ethics, and respect for tradition along with lot of emphasis on decency, dignity and life skills to meet the challenges of the world.

ABOUT STTP

Internet of Things, or IoT in short, is the idea of making devices and objects smarter by linking them to the internet. Machine learning is about designing programs that can learn without being explicitly programmed. It is a branch of Artificial Intelligence in which we learn concepts/ patterns/hypotheses from data by using heuristic based algorithms. It enables to acquire the knowledge of IoT devices through hands on experience and learn to develop machine learning codes using python. This STTP introduces you to the amazing world of IoT and its fascinating applications.

Apart from gaining practical skills on the Internet of Things, ML is used to demonstrate how all the steps of a machine learning pipeline come together to solve a problem. This training familiarizes the delegates with current technologies and the recent algorithms.

SCHEDULE

Day 1: 24th August, 2020

Introduction to IoT Introduction to IBM Cloud Working With IBM IoT Platform

Day 2: 25th August, 2020

Introduction to Node-red Weather Monitoring application using Online sensor simulator Introduction to Internal simulator

Day-3: 26th August, 2020

Introduction to Machine Learning Working with Numpy and Pandas

Day-4: 27th August, 2020

Data Preprocessing

Day-5: 28th August, 2020

Algorithm Building and IBM Deployment

Day-6: 29th August, 2020

Health monitoring System using Node red, E-Quiz, Valedictory, Certificate Distribution

Time: Morning 10 am to 12 Noon

Afternoon 2 pm to 4 pm (Daily)

EXPECTED OUTCOMES

After completion of one-week STTP the participant will be able to

- Build a logistic regression model with meaningful variables and will also learn how to use this model to make predictions and how to present it and its performance.
- Specify performance evaluation metrics for characterizing a generic machine learning technology based on various analytical simulation methods.

RESOURCE PERSONS

The STTP course content will be delivered from a pool of resource persons on the subject from prestigious leading industries. Hands-on sessions are suitably designed to supplement discussions using suitable software.

Technologies and Tools Covered:

- IBM Cloud, Platform
- Python Programming & Hardware
- Sensor Interface
- Cloud Interface
- Data Upload and Implementation
- Data Preprocessing
- Algorithm building
- Case studies

