



Report
Online Workshop
on
"Application of Automated Machine Learning in Electrical Industry"
Organised by
Department of Electrical & Electronics Engineering
Date: 24.05.2023
Time: 3.00 PM to 5.00 PM
Venue: Simulation Lab

Organized in association with: Institution Innovation Council & Entrepreneurship Development Cell

Submitted by: Ms. Revathy Gopinath, Assistant Professor, Dept. of EEE

Attendance: 37 participants

The programme is started at 3:00 PM with a welcome address to all the audience by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle. The resource person was **Mr. A M Govind Kumar, Director of SeaportAi, Chennai, Tamilnadu.**

The resource person started the session by extending his hearty thanks to the participants, organising members, HoD, Principal and Management of MITS Madanapalle for giving him opportunity to share his knowledge and experience in "Machine Learning".

The topic the resource person covered is Introduction to Machine Learning and its application in electrical industry. The audience was made aware of the following through his presentation.

- Industry 4.0
- Application of AI in electrical industry
- Industrial Analytics – From preventive to predictive maintenance
- What is Automated Machine Learning
- Evolution of IT industry
- What is PowerBi
- Data Visualization using PowerBi
- How PowerBi dashboard can be used for energy sector

The session was concluded followed by a vote of thanks, given by Ms. Revathy Gopinath, Assistant Professor, Electrical and Electronics Engineering Department, MITS, Madanapalle.



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Photos:

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(UGC-AUTONOMOUS INSTITUTION) www.mils.ac.in
Madanapalle-517325, Annamayya Dist., Andhra Pradesh

Online Workshop on "Application of Automated Machine Learning in Electrical Industry"

In association with IIC & ED

Resource Person
Mr. A M Govind Kumar
Director of SeaportAi
Chennai, Tamilnadu

DATE
24/05/23
Session Start
3.00 PM - 5.00 PM

Chief Patron
Dr. N. Vijaya Bhaskar Choudary
Secretary & Correspondent

Patron
Mrs. N. Keerthi
Executive Director

Program Chair
Dr. C. Yuvraj
Principal

Convener
Dr. A.V Pavan Kumar
Professor, HOD EEE

Coordinator
Ms. Revathy Gopinath
Assistant Professor, Department of EEE

Venue : Seminar Hall B

Applications of AI in Electrical Industry

HOW ELECTRICITY GETS TO HOUSES?

POWER PLANT 1, TRANSFORMER 2, TRANSMISSION 3, TRANSFORMER 4, DISTRIBUTION 5, HOME 6

1.Shunro

Applications of AI in Electrical Industry

Load Forecasting & Balancing

Industry 4.0

19th Century, Beginning of 20th Century, Early 20th, Today

Industrial Analytics – From Preventive to Predictive Maintenance
Making you ready for Industry 4.0

Control, Electricity Generation

Industrial Analytics – From Preventive to Predictive Maintenance
Making you ready for Industry 4.0

Y hat (written \hat{y}) is the predicted value of the dependent variable in a regression equation.

What is Auto ML?

Evolution of IT Industry

Code Heavy → Low Code → No Code

Automation is Everywhere!

AI → INTELLIGENCE TO SOLVER
ML → ANALYZES PATTERNS IN DATA & TAKES ACTION

INSTRUC. ON

Industrial Analytics – From Preventive to Predictive Maintenance
Making you ready for Industry 4.0

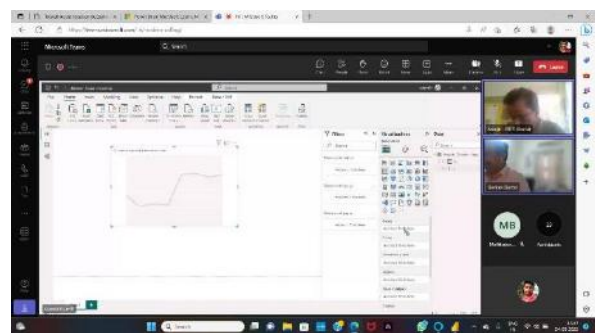
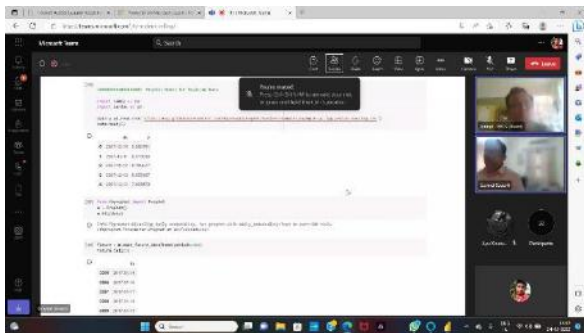
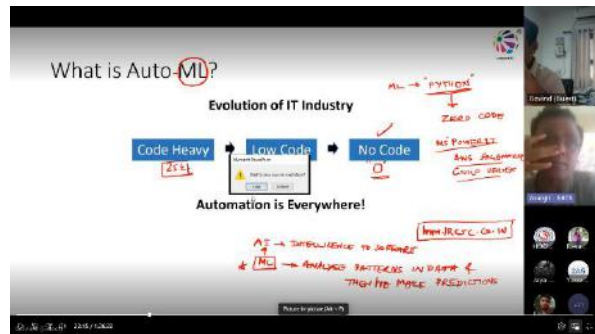
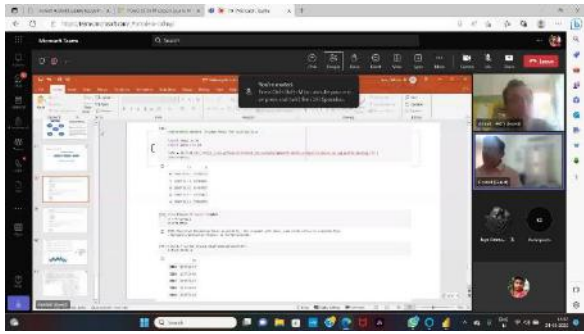
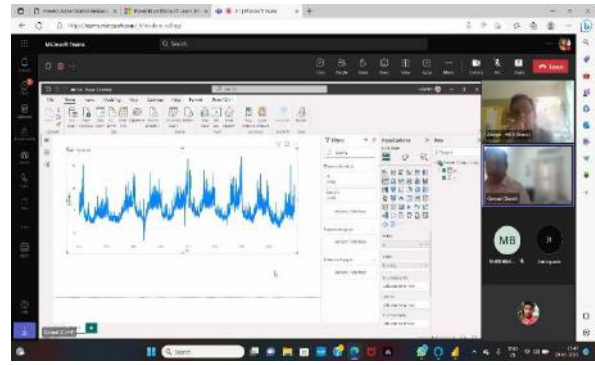
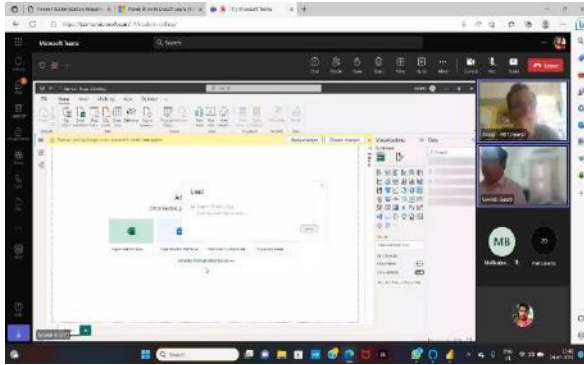
Opportunity

- Reduce instances of downtime by as much as 2/3rd in the first year of implementing predictive maintenance solution
- Can work independent of and in tandem with your existing techniques like NDT (Non Destructive Techniques) & SPC (Statistical Process Control)
- This tool can be easily operated by anyone using a simple interface and don't require special skills
- Very useful for companies that don't have historical failure information or have very limited failure information



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Revathy

Signature of the Coordinator

Pavul

Signature of HoD, EEE