PROGRAM ON
SOLAR ANALYTICS
(5 DAYS WORKSHOP ON BIG DATA ANALYTICS AND DATA SCIENCE (AI/ML) IN CREATING PLANT EFFICIENCY FOR SOLAR SYSTEM)

PROGRAM DATE:
Upcoming Program: 23rd MARCH- 27th MARCH, 2020

VENUE:
NISE CAMPUS, GURUGRAM

LAST DATE TO APPLY: 20th MAR, 2020

Training Fee per participant Rs. 25,000 + 18% GST
Accommodation Facility available at Rs 600 + 18% GST (Double Occupancy, Charges to be paid separately)
National Institute of Solar Energy (NISE), an autonomous center of excellence of Ministry of New and Renewable Energy, Government of India, is conducting national skill development programs to meet the needs and upgrade the technical expertise of solar professionals.

ABOUT US

Pragya Solar, is a social startup in solar with the vision to bring solar adoption awareness in India aligned with National Solar Mission principles. Pragya Solar has conducted Entrepreneurial development workshop for 250 individuals and 1500 students across the nation of which 25 individuals are standing on their own feet. Pragya Solar is represented by profession from IIT/NIT & Harvard University Alumni. Pragya is a step towards innovation & transformation with niche offering aimed at nation development thru skill enhancement and opportunity creation.
LEARNING OBJECTIVE

- How to Gain intelligence on plant data and analyze the output with descriptive modelling to understand the current operation.

- Understand the parameters which contribute to the variable generation and diagnostics analytics on assessing their impacts.

- Explore the methods of Statistical analysis to analyze the data quality from different sources and making it ready for exploratory and inferential analysis.

- Understand the basics of plant sustainability with predictive modelling to assess solar plant output, solar cell efficiencies and degradation, inverter outputs and cables/joints impacts.

- How to achieve the optimization at the plant level and parameters contributing to same.
ABOUT PROGRAM

Solar Sector is growing at a tremendous pace with government aiming to achieve 100GW target till 2022. This initiative has seen government directive on solar adoption as grounds up, roof top system across longitude and latitude of India. Solar system works with solar radiation, which create impact on the output energy depending on the quality radiation, cloud cover, ambient temperature, and module technology. Today there is need of knowledge of weather forecasting / solar generation forecasting as it helps the utility professionals with long terms analysis on solar energy generation, O&M, with its relevance and impact on the grid stability, load balancing, addressing peak power demands, and creation of power portfolio within utility power purchase basket on renewable energy. Energy Audit of Solar plant is the key objective looked upon for already installed facilities when they are looked upon their quality generation.

Like other energy operations SOLAR too generate BIGDATA (radiations, plant parameters etc.) which need to be studied for effective operation as large utility power output impacts power evacuation and grid balancing perspective for state as well as central utility.
SOLAR ANALYTICS is aimed at developing CoE (Centre of Excellence) on analytics for organization as well as developing skills for managing the same. The program encompass the combination of solar domain with the technology like Internet of things (IOT), Machine Learning, predictive modelling, forecasting, optimization which has to be understood by utility/solar plant engineers and decision makers to carve differentiator for their utility operations in resolving day to day problems. For private sector solar generators, analytics in today's scenario is used by organizations in creating a competitive edge, wherein market share is getting limited and margins are shrinking with each passing day as well as address long term perspective of operational efficiency, Energy Audit, Financial return on investment. In today's scenario, organizations are preferring to onboard professional who are prepared in taking responsibility at business with less project deployment expenses/learning. This program would help professional/organization carve a difference for themselves at workplace and help establish a foundation of deep analytics for organization they are part of.
TARGET AUDIENCE

- Graduates
- Engineers
- Management Consultants
- Consulting firms
- Solar Entrepreneurs
- Public Sector Undertaking Officials
- Solar Developers & EPC Contractors
- Senior Energy Department Officials of Govt. of India
- Engineers from Power DISCOMS

PROGRAM DETAILS

Training Fee per participant Rs. 25,000 + 18% GST
Accommodation Facility available at Rs 600 + 18% GST (Double Occupancy, Charges to be paid separately)

(Batch Strength will be limited to 25. Lunch, Tea will be provided during all five days.

There is no TA/DA provided for the participants)

For Registration, Click here: https://training.nise.res.in/

For further queries contact: Mr Sumit Gupta (9560329740), sumit.gupta@pragyasolar.in
Mr Dushyant Dwivedi (9999698456), dushyant@nise.res.in
PARTICIPATING ORGANISATION

- China Lighting Power Company Ltd.
- Tata Power Trading Company Ltd.
- MSL Electricals and Electronics Pvt. Ltd.
- Amrita School of Engineering Kerala
- Saini Power Transactor
- National Institute of Wind Energy
- Trina Solar Ltd.
- State Engineering College Arunachal Pradesh
- Food Corporation of India
- Victor Green Energy
- Chennai Metro Rail Corporation
- ACME Cleantech Solution Pvt. Ltd.
- Adani Solar Power
- SB Energy
- Amplus Solar
- Power System Operation Corporation (POSOCO)
Award of Certificate to
Biswajit Dutta
(Gurugram)
for successfully completing the
5 days Skill Development Program on Solar Analytics
Organized By
National Institute of Solar Energy
(An Autonomous Institute of Ministry of New and Renewable Energy, Govt. of India)
Gurugram, Haryana-122003, India
(17th December - 21st December, 2018)

Dr. Chandan Banerjee
Dy. Director General, NISE

Dr. Arun K. Tripathi
Director General, NISE
PROGRAM SCHEDULE

DAY 1: Introduction to Analytics and Solar Data Management, IOT, followed by a visit to Solar Installation in NISE premises.


DAY 3: Statistical Modelling of Solar Data and Solar Data Management Practical (Role of ML & AI explored)

DAY 4: Solar Advanced Analytics - Correlation, Regression Modelling, Relation between Solar Radiation, Temperature, environment factors, etc.

DAY 5: Solar Advanced Analytics - Time Series Predictive Modelling, AI on Solar cell (Image Analytics).

Program Closure and Certificate Distribution

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ABOUT TRAINERS

Sumit Gupta brings in 23 years of rich diverse industry experience focussed on strategic direction to organizations in role of management Consultant. He has worked in industry verticals of Energy & Utilities bringing value of Business Analytics coupled with Strategic turnaround of business proposition. Sumit has worked with organization like ATKearney, PwC, in his earlier role. Currently Sumit guide two start up ie Assetplus consulting and Pragya Solar in their transformational journey as Founder and CEO. Sumit holds BE from (NIT, Rourkela) MBA from (IMT Ghaziabad), and Advanced Management in Strategy & Leadership from Harvard University.

Ratna Gupta brings in over 20 years of rich experience in field of Information technology. She has been associated with Enterprise Resource Planning system for over a decade for different organization in planning their optimal resource utilization. She has been associated with Assetplus Consulting as Co-Founder, a start-up, focusing on end to end offering for Analytics clients i.e. Consulting, Services and Continued management. Ratna has been associated with RAMCO SYSTEM, MICROSOFT, INFOSYS in the past. She holds B.Tech, MBA and PhD (Financial Derivative) all from BIT Mesra Ranchi. She specializes in Econometric.

Navin Kumar brings in over 13 years of industry experience spanning over area of Predictive Modelling, Data Mining, Machine Learning Big Data and Business Analytics in various domains like Public Sector, Banking, CPG, Retail, Telecom and IPR. He has been associated with Assetplus Consulting, a start-up, focusing on end to end offering for Analytics clients i.e. Consulting, Services and Continued management. Navin has been associated with TCS in the past. He holds B.Tech with Post Graduation in Management (FMS, Delhi).
FREQUENTLY ASKED QUESTIONS

What is the eligibility criteria for its enrollment (like Qualification, Work experience etc.)

This program is ideal for people who have been working in solar industry and have exposure to data and have had challenges in managing the same to give a meaningful insight to the business they are part of, for themselves as well as for their clients. An excellent opportunity to practically understand how your business data can help in your growth by working beyond the spread sheets with application of decision science in your business environment. Background in any would be useful Engineering/Science/Economics/Statistics/Finance/Management/Information Technology.

I am a profession with good number of years of Industry Experience. How will this workshop benefit me in running my business or managing my client

The program is designed in a manner wherein concepts are explained through practical sessions on tools. You are encourage to bring your data and work around the tool and take some meaningful insight back to your workplace in form of your learning and understanding the way the learning can be applied in your business environment.

Do I need to carry my personal laptop for doing the practical sessions

Kindly bring in your laptop as you would need to install the software on which you would be working. Alternatively once you confirm your program participation, we may also send you the link from where you can download the software in advance which would save time to do more of practical session in the class. The laptop configuration, can be minimum 2 GB RAM, 1.5 Gega Hz speed, with I 3 or above and any OS.

Whom to contact for more information regarding technical session plan

You can write an e-mail to Mr Sumit Gupta (9560329740) between 10 am - 6 pm (all days) on, sumit.gupta@pragyasolar.in.

What tool(s) would be used for the workshop and how to get the same

The tools that would be used shall be given to participation on registration.

What certificate is given at the end of the program

The program certificate is towards participation and learning on the REAL time project which will have unique identifier.