# **Announcement**

# **Certification Program on**

# **Machine Learning and Artificial Intelligence**

(Online)

Program Director: G Murali Rao, Indian Statistical Institute, Hyderabad

#### Introduction:

The importance of Data Science, Machine Learning, Artificial Intelligence, Business analytics etc. in the present day has grown multi-fold due to their phenomenal power to offer optimal futuristic solutions to large complex problems. The desire as well as the need for acquiring these skills at present by professionals in every walk of life is unprecedented and never seen before. Professionals with these skills are most sought after now a days and they are enjoying their job & having a highly rewarding career. Indian Statistical Institute, Hyderabad is planning to offer an Online Certification Course on Machine Learning and Artificial Intelligence to the interested and eligible professionals/individuals.

No of Enrolments: Maximum 30.

<u>Schedule</u> To be announced (The program is on hold due to some exigency)

<u>Methodology</u>: Self-learning and Assignments (as normal classroom/hands-on sessions are not possible) are going to be the two key drivers in addition to the online learning. Finally, the project work will provide the practical demonstration of the learnt skills at the end.

#### **Brief Details of the program**

Online classes, Self-Learning, Assignments and a final Project work will the FOUR fundamental modes of learning.

- 1. Python and R will the primary tools (Minitab will be used sparingly to save computational time)
- 2. The curriculum (in brief)
  - Introduction to Data Science, BA, ML & AI
  - Statistical Methods for DS, BA, ML & AI
  - Introduction to Supervised & Unsupervised Learning Methods
  - Resampling Methods, Bootstrapping, Validation Techniques
  - Machine Learning Methods: Ordinary Least Squares, Non-Linear Models, Logistic/Discriminant Models, KNN, Decision Trees, Ensemble techniques (Boosting, Random Forest), Naïve Bayes, SVM, Artificial Neural Networks etc.
  - PCA, Cluster Analysis
  - Time Series & Forecasting Models
  - Reinforced Learning, Deep learning, TensorFlow, Keras, CNN
  - Artificial Intelligence.
- 4. It will be a weekend program (3 to 4 hours per day) maximum 6 to 8 hours per week.
- 5. Maximum duration 4 Months (roughly 100 hrs of online classes)
- 6. **Certification Criteria**:

- a. 100% attendance(online)
- b. Submission of all assignments
- c. Submission of the Final Project Work
- d. Minimum 70% Marks (overall)(Marks scored in 4 online exams, assignments and Project work)
- 7. Online classes will be offered on a suitable online classroom platform (Google Meet, Microsoft Teams etc.)
- 8. Every participant needs to join through an appropriate computing system like desktop/laptop to enable them to simultaneously work on datasets using R/Python/Minitab.
- 9. Published Books, Open Source online books/literature/datasets, handouts/presentation material etc. will be the program reference material. There will <a href="NOT">NOT</a> be any exclusive (program specific) lecture material or course material for distribution.
- 10. There will **NOT** be any provision for providing audio/video recording of the lectures/sessions nor permission to record the lectures.
- 11. There will **NOT** be any provision for specific additional online sessions (for doubts clarifications, guidance, hand-holding etc.) other than those scheduled as a part of the program.
- 12. The program is **NOT** designed to teach Python, R, Minitab etc. but use them as analytics tools. The participants need to develop skills in these tools on their own before/during the program.

Who Can apply:

Professionals/Individuals, preferably working in the areas of data science, analytics, quality etc. with minimum Degree/Diploma level qualification having adequate knowledge/interest in Mathematics/Statistics.

Faculty:

Senior faculty members of Indian Statistical Institute and Invited sessions by the senior industry professionals having expertise in DS/BA/ML/AI.

Registration Process: Interested persons need to send their brief resume IMMEDIATELY to

# baisihyd@gmail.com

The registration process will be **CLOSED** once all the seats are filled.

**Selection:** The selection will be based on first come first served basis and also suitability/eligibility.

Selected candidates will be intimated through mail for making the payment of the fee.

Course Fee: Rs. 40,000 + 18% GST (Rs. 47,200/-). Fee need to paid online (NEFT mode)

The fee need to be paid in full and fee once paid will not be returned.

(Details of online payment will be communicated to the selected candidates only)

Note: Due to Covid-19 pandemic restrictions/guidelines/precautions there will <u>not</u> be any in-person interactions before/during/after the program at the Institute. The program is envisaged completely on an online (virtual) mode.

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