Institute of Actuaries of India

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central, Plot no R-1, Sector 40, Near Seawoods Railway Station, Navi Mumbai- 400706
☎ + 91 22 62433333 🖷 + 91 22 62433322

ANNOUNCEMENT

DATA SCIENCE: RE-DEFINING FUTURE VALUE OF ACTUARIES WEBINAR SERIES 2023

I. ABOUT THE PROGRAM

It has been quite some time that, **Data Science** became a key word in the contour of all professions with Machine learning and Artificial Intelligence as important sub-products. While actuaries traditionally involved in decision making on the basis of Mathematical logics and Statistical inferences, advancement of data science is expected to capture most of the actuarial domain with an impact of multiple disciplines like Mathematics, Statistics, Computer science, information science, Machine learning and Artificial intelligence.

The **Data Science** and its advancement is going to decide the future values of actuarial profession to a large extent. The Machine learning and Python trainings conducted by the Institute have lifted the confidence and value of many actuarial members who will be in the forefront of re-defining the role of actuaries in finance and risk management. Since Python is largely used in data science as a programming language, a 7.5 hours Python training is also included in this **70 hours** training. Those who have already attended both Python and Machine learning webinar series recently conducted by the Institute may find this program as the next level of advanced learning.

Why Actuaries to learn Data Science?

The question as to how fast actuaries to catch up various disciplines of data science to be answered sooner than later for maintaining the unique space and role of actuaries in the market. An actuary with specialisation in data science to remain as an actuary for future;

II. PROGRAM SCHEDULE:

Webinars will start on **2nd January 2023** which will be spread over **35 sessions** of 2 hours each duration. Participants are expected to work on assignments on a regular basis to maintain the continuity of learning and practice.

The program schedule is available in **ANNEXURE-I**

Recorded videos of all webinars will be made available in the member's login page until 31 March 2023. However, it is highly recommended to attend all LIVE sessions without fail for optimum learning out of the program.

III. REGISTRATION:

Registration fee

- ✓ **For Students** : Rupees Six thousand (**₹6,000.00**) only (18% GST extra)
- ✓ **For Associate & Fellow members** : Rupees Eight thousand (**₹8,000.00**) only (18% GST extra)
- ✓ **For Non-members** : Rupees Ten thousand (**₹10,000.00**) only (18% GST extra)

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- ✓ **Bulk registrations** from Employers will be accepted with a minimum registration count of 25, where both members and non-members can together register with a lump sum payment of Rupees Two lakhs (**₹200,000.00)** only (18% GST extra)

- ✓ **Registration menu**   : Login to IAI >>Training program>>**Data Science**
- ✓ **Registration opens**   : On 11 November 2022 6.00PM.
- ✓ **Registration closes**   : On 30 December 2022 6.00PM.

IV. FACULTY

Mr. Vamsidhar Ambatipudi, PGDM (IIMI), FIAI, CERA, FRM, PRM, Associate Professor, BITS Pilani

V. COVERAGES :

- ✓ Python
- ✓ Machine Learning
- ✓ Data Visualization
- ✓ Pandas
- ✓ Introduction to Deep Learning
- ✓ Predictive Modelling
- ✓ Math and Stat Principles
- ✓ Time Series Analysis
- ✓ Data Analysis
- ✓ Solutions to Business Problems
- ✓ Introduction to Natural Language processing

VI. CONTACT :

Point of contact for all related queries: Mr. Ravindra Mastekar at: **022 62433348 or ravindra@actuariesindia.org**

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Program Schedule

2nd January 2023 to 9th March 2023, Time 7.00pm to 9.00 pm

Sr.No	Date	Days	Time	Topic
			DATA SCIENCE : Program Schedule	
1	02-01-2023	Monday	7.00 pm to 9.00 pm	Introduction to Data Science and Python
2	04-01-2023	Wednesday	7.00 pm to 9.00 pm	Numpy Basic
3	06-01-2023	Friday	7.00 pm to 9.00 pm	Numpy advanced
4	09-01-2023	Monday	7.00 pm to 9.00 pm	Pandas for data manipulation
5	11-01-2023	Wednesday	7.00 pm to 9.00 pm	Essential Math for Data Science
6	13-01-2023	Friday	7.00 pm to 9.00 pm	Data visualization using Matplotlib and Seaborn
7	16-01-2023	Monday	7.00 pm to 9.00 pm	Descriptive Statistics
8	18-01-2023	Wednesday	7.00 pm to 9.00 pm	Inferential Statistics
9	20-01-2023	Friday	7.00 pm to 9.00 pm	Introduction to Machine Learning with essential terminology
10	21-01-2023	Saturday	7.00 pm to 9.00 pm	Linear Regression
11	23-01-2023	Monday	7.00 pm to 9.00 pm	Exploratory Data Analysis
12	25-01-2023	Wednesday	7.00 pm to 9.00 pm	Data Cleaning
13	27-01-2023	Friday	7.00 pm to 9.00 pm	Data Preprocessing
14	28-01-2023	Saturday	7.00 pm to 9.00 pm	Advanced Linear Regression
15	30-01-2023	Monday	7.00 pm to 9.00 pm	Feature Engineering
16	01-02-2023	Wednesday	7.00 pm to 9.00 pm	Feature Selection
17	03-02-2023	Friday	7.00 pm to 9.00 pm	Logistic Regression
18	06-02-2023	Monday	7.00 pm to 9.00 pm	Naive Bayes and KNN
19	08-02-2023	Wednesday	7.00 pm to 9.00 pm	Decision Trees
20	10-02-2023	Friday	7.00 pm to 9.00 pm	Ensembling and Random Forests
21	11-02-2023	Saturday	7.00 pm to 9.00 pm	Gradient Boosting
22	13-02-2023	Monday	7.00 pm to 9.00 pm	Challenges in ML
23	15-02-2023	Wednesday	7.00 pm to 9.00 pm	Clustering
24	17-02-2023	Friday	7.00 pm to 9.00 pm	Dimension Reduction
25	18-02-2023	Saturday	7.00 pm to 9.00 pm	Time Series 1
26	20-02-2023	Monday	7.00 pm to 9.00 pm	Time Series 2
27	22-02-2023	Wednesday	7.00 pm to 9.00 pm	Natural Language Processing 1
28	24-02-2023	Friday	7.00 pm to 9.00 pm	Natural Language Processing 2
29	25-02-2023	Saturday	7.00 pm to 9.00 pm	Introduction to recommender systems
30	27-02-2023	Monday	7.00 pm to 9.00 pm	Support Vector Machines
31	01-03-2023	Wednesday	7.00 pm to 9.00 pm	Artificial Neural Networks
32	03-03-2023	Friday	7.00 pm to 9.00 pm	Introduction to Deep Learning 1
33	04-03-2023	Saturday	7.00 pm to 9.00 pm	Web scraping
34	07-03-2023	Monday	7.00 pm to 9.00 pm	Working with Databases
35	09-03-2023	Wednesday	7.00 pm to 9.00 pm	Data Science Ethics and way forward