ANNOUNCEMENT OF FREE WEBINAR FOR IAI STUDENT MEMBERS

Unlocking the Power of Metrics in Machine Learning: Precision, Recall, F1 Score, and More

Dear Student Members,

We are excited to announce a special **FREE WEBINAR** tailored specifically for students interested in exploring the fascinating world of machine learning. Whether you're already familiar with the topic or looking to delve into it for the first time, this session promises to provide valuable insights and guidance to support your learning journey.

Key Details:

- **Format: Interactive webinar**
- **Date: 18th May 2024**
- **Timings: 11.30 am – 1.30 pm (duration – 2 hours)**
- **Registration Link – CLICK HERE**

Agenda:

1. **Introduction to Machine Learning** (10 minutes)
   o Overview of machine learning concepts.
   o Types of machine learning algorithms (supervised, unsupervised, reinforcement learning).
   o Applications of Machine learning
   o Deep Dive into Supervised learning
   o Comparison of Regression and Classification
2. **Transition to Binary Classification** (5 minutes)
   o Explanation of binary classification in machine learning.
   o Examples of binary classification tasks (e.g., spam detection, disease diagnosis).
3. **Performance Metrics for Binary Classifiers** (40 minutes)
   o Introduction to performance metrics (accuracy, precision, recall, F1 score, ROC curve).
   o Explanation of confusion matrix and its components (TP, TN, FP, FN).
   o Detailed discussion on precision, recall, and their trade-offs.
   o Understanding the F1 score as a harmonic mean of precision and recall.
   o Exploring the ROC curve and its significance in evaluating classifier performance.
   o Interpretation of area under the ROC curve (AUC) and its implications.
   o Importance of evaluation metrics in machine learning.
4. **Real-World Applications and Case Studies** (40 minutes)
   o Application of performance metrics in real-world scenarios.
   o Case studies highlighting the use of metrics to optimise classifier performance.
5. **Conclusion and Q&A** (15 minutes)
   o Recap of key concepts covered in the session.
   o Open floor for questions, discussions, and further exploration of topics

We assure you that the session will be immensely enriching and informative, so don't miss out on this valuable opportunity; mark your calendars and join us on **18 May 2024.**

We look forward to your participation!

Best Regards,
Institute of Actuaries of India