

## St. Xavier's College (Autonomous), Kolkata

NAAC ACCREDITED A++ • Ranked 4th in NIRF 2021 under "College" category College of Excellence • ISO 9001:2015 Certified • College with a Special Heritage Status

Department of Education

Date : 28th June 2022 Time : 10:00 AM Onwards. Streamed Online : ▶

#### INTERNATIONAL WEBINAR ON

Data Mining and Learning Analytics in Educational Research

# $\bullet \bullet \bullet$



### Rev. Dr. Dominic Savio, SJ

**Principal** St. Xavier's College (Autonomous), Kolkata

#### **CHAIRPERSON**

#### 01 Advisory Committee

**Dr. Charlotte Simpson-Veigas** Vice-Principal, Department of Education

**Dr. Arup Kumar Mitra** Controller of Examinations

#### **Dr. Ayan Chandra** Member Secretary, Academic Council

Dr. Partha Pratim Ghosh Coordinator, IQAC

#### 02 Organizing Committee

**Dr. Mandira Mukherjee** Associate Professor, Department of Education

**Dr. Tinni Goswami** Assistant Professor and Head, Department of History

**Dr. Ritendra Roy** Assistant Professor, Department of Education **Concept Note** 

Data Mining refers to a process that is used to turn raw data into meaningful data. Data mining is based on research; many organizations follow the data mining process to transform data into useful information. lt helps the organizations build more innovative strategies, increase sales, generate revenue, and grow a business by cost reduction. Data mining research deals with the extraction of useful and valuable information that cannot be otherwise uncovered from large collections of data. The tools thus created allow uncovering of interesting patterns deeply buried within the data. Data mining is used primarily in the business sector but if systematically used it can be a game changer in the field of educational research where the researcher deals with large amounts of data in a short time. There are various techniques used for Data mining. These Classification are: (i) analysis: Classification analysis is used to classify distinct data into different classes. It is used to restore significant information related to data and metadata. (ii) Association Rule Learning: Association rule learning refers to the process that enables the identification of relations between distinct variables in a large set of data.

(iii) Outlier detection: Outlier detection refers to the data observation in a database that does not match an expected pattern. (iv) Clustering Analysis: The term 'cluster' is the collection of data objects which are similar within the same cluster. (v) Regression Analysis: Regression analysis is the process of analyzing and identifying the relationship among the different variables.

**Learning Analytics** is the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.

technology-enabled learning In a environment, students access the digital library, read e-books, search the internet, participate in discussion forum, chat with peers and teachers, communicate with various experts, etc. Whenever students access the internet and engage in learning activities in an online medium, it creates their digital footprints. There is a need to trace, accumulate and analyse digital footprints and activities performed by the students in a technology-enabled learning environment so as to understand the progress of learning and make effective decisions for the improvement of teaching and learning practices. Learning analytics helps to accomplish those tasks. It further helps to collect, store, manage and analyse the activities performed by students in a technology-enabled learning environment.

Data collection, transformation, analysis and visualization tools assist in gaining insight on student behavior.

This webinar will help to understand how Data Mining and Learning Analytics are used in educational research to improve the following areas:

- Type of syllabus and curriculum that can be framed by policy makers so as to cater to the interest of the students and to keep pace with the developments in the educational field.
- Enhancement of student motivation.
- Improvement of student performance.
- Reduction and removal of learning difficulties.
- Improvement in teacher performance.
- Improvement in the process of mentoring.
- Improvement in the process of management and leadership.

### **Speakers**

MS. ISHITA MAJUMDAR

VICE-PRESIDENT, DATA ANALYTICS PLATFORM, EBAY, USA

#### **VOTE OF THANKS**



#### Dr. Charlotte Simpson-Veigas

#### Vice-Principal Department of Education

St. Xavier's College (Autonomous), Kolkata



### **Contact Us**

Shrayan Banerjee	Spandan Baidya
8697115568	9830581357
Christina Gomes	Avik Banerjee
9007933149	7059193187

sxceduwebinar2022@gmail.com

## E-Certificates will be awarded for active participation.

<u>Register Now</u>

MS. MAU CHAUDHURI GENERAL MANAGER, PEERLESS RESORT, PORT BLAIR



DR. ANAL ACHARYA

ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, ST. XAVIER'S COLLEGE (AUTONOMOUS), KOLKATA