Mehta Family School of **Data Science** & Artificial Intelligence

Indian Institute of Technology Guwahati

Presents a Reading Group Seminar on

Modeling periodic signals:

a statistical perspective

Parametric modeling of periodic phenomena has received a great deal of attention in signal processing literature. The aim of signal processing is to recover important characteristics of the underlying phenomenon from the observed signal. Due to the random nature of these signals, Statistics plays an important role in model formulation, estimation, and data analysis. In this talk, I would like to discuss two fundamental models that have been studied extensively in the statistical signal-processing literature. Furthermore, we will discuss different methods for parameter estimation and their advantages and limitations.



Rhythm Grover, PhD Assistant Professor School of DS&AI, IIT G

Venue: 5101, Core-5 Time: 5-6 PM 28th Apr '23

About the Speaker

Dr. Rhythm Grover is an Assistant Professor at the Mehta Family School of Data Science and Artificial Intelligence, IIT Guwahati, where her primary research area focuses on developing statistical models to analyze periodic and nearly periodic signals. Her research has significant applications in various fields such as environmental sciences, communication systems, biomedical, acoustics, finance, stock valuation, image processing, among others. Dr. Grover completed her Ph.D. in Mathematics and Statistics from the esteemed Indian Institute of Technology Kanpur, under the guidance of Professor Debasis Kundu and Professor Amit Mitra. She obtained her B.Sc. degree with a specialization in Statistics from Sri Venkateswara College of University of Delhi in 2012 and pursued her Masters in Statistics from Indian Institute of Technology Kanpur. Prior to joining IIT Guwahati, she served as a postdoctoral researcher at the Indian Statistical Institute in the Theoretical Statistics and Mathematics Unit.