AIM843: SpatioTemporal Data Analytics - I / Term 2 (2024-25) / Group Assignment
International Institute of Information Technology Bangalore

Announcement Date: April 01, 2025
Submission Deadline: 11:59 pm IST, May 02, 2025 (Friday)

Summary: Spatial Data Analytics

The group assignment (GA) focuses on spatial data analytics exclusively to be implemented by groups of 2 on an allocated dataset.

The GA is on exploratory spatial analytics, which has two parts: statistical analysis and machine learning (ML). The ML method chosen is based on the availability of appropriate label data in the selected dataset. The statistical analysis includes statistical tests and exploratory data analysis.

The deliverable is an elaborate report with the following details:
- The report must demonstrate the discovered spatial patterns from the data.
- The report must include dataset descriptions, method descriptions, rationale of choice of methods, and visualizations.
- The report must include a section on implementation mentioning all Python libraries used, system configurations, approach used, challenges faced, and solutions.
- The report must be prepared professionally with appropriate captions for images and tables, in-place references and bibliography.

A few points to note:
- The report should also call out contributions by each team member, where there should be unique contributions by each member. The initial data pre-processing can be a joint activity.
- All methods must be implemented using Python libraries.
- A necessary condition is that the entire dataset must be used to explore large-scale datasets.