Ahmedabad University

CSE523 - Machine Learning

Project 11: Identify abnormal driving behavior using spatio-temporal analysis

Weekly Report 3

Group: Titans

Team Members

Enrollment Number	Name
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Week three:

. Tasks performed

- Completed Tasks:
  - Task 1: Data Understanding - The trajectory dataset was analyzed and separated into normal and abnormal data files.
  - Task 2: Data Preprocessing - The data underwent preprocessing steps such as labeling each data instance with its respective folder name and removing certain irrelevant columns.
  - Task 3: Feature Extraction - Relevant features were extracted from the pre-processed trajectory data using Ant colony algorithm.
  - Task 4: Ant Colony Optimization for Feature Selection - Ant colony optimization was used to select the most discriminative features.
  - Task 5: Logistic Regression Classification - Logistic regression was used as a binary classifier to distinguish between normal and abnormal driving behaviors.
- In-Progress Tasks:
  - Task 1: Refinement of feature selection strategies.
  - Task 2: Exploration of advanced machine learning algorithms to enhance classification performance.