**Motivation**

The implementation of this project is motivated by the concept of Time Series segmentation. To implement this project we are using multiple algorithms which follows different approaches to meet the same goal. Thus this project also provides a comparison between different approaches with the help of F1 score and other factors like Accuracy, Sensitivity etc. This comparison will help us to choose the optimal approach to fulfil our requirement.

In this rising world of urbanization and actively throbbing real estate industry, GPS (global positioning system) is widely implemented and used in our day to day needs. Apart from this, all of the delivery apps use the same technology to deliver foods and goods.

This might seem trivial, but as per the online census, this positioning system has a whopping error of 52% in its prediction, and thereby largely making this positioning system highly unreliable.

If successfully developed, and deployed this will revolutionize the field of positioning systems.

Our project can be used in transportation science where the focus is on measuring daily travel patterns of individuals or group of individuals.

The motivation for transport mode detection is the growing need in a different kind of MaaS (Mobility as a Service) based services that require reliable information about the recognized transportation mode in order to serve their own customers with the right product offering.