

ABSTRACT

A UNIFIED PLATFORM FOR DOMAIN ADAPTABLE HUMAN BEHAVIOUR INFERENCE

This disclosure relates generally to a unified platform for domain adaptable human behaviour inference. The platform provides a unified, low level inference and high level inference of domain adaptable human behaviour inference. The low level inferences include cross-sectional analysis techniques to infer location, activity, physiology. Further the high inference that provide useful and actionable for longitudinal tracking, prediction and anomaly detection is performed based on several longitudinal analysis techniques that include welch analysis, cross-spectrum analysis, Feature of interest (FOI) identification and time-series clustering, autocorrelation-based distance estimation and exponential smoothing, seasonal and non-seasonal models identification, ARIMA modelling, Hidden Markov models, Long short term memory(LSTM) along with low level inference, human meta-data and application domain knowledge. Further the unified human behaviour inference can be obtained across multiple domains that include health, retail and transportation.

[To be published with FIG.2]