

In our case, we used the global level (e.g., subregions, the entire network, etc.) and the local level (e.g., the link of interest, links in geographic proximity to the link of interest, etc.) GPS count information together with categorical speed information from real-time GPS readings primarily to identify traffic state (congested or uncongested), and used the speed data from alternate sources to determine the likely speeds given the real-time estimated state. Relying on data mining techniques, such a hybrid approach is capable of producing much more reliable predictions than methods solely based on GPS data.

As far as future work, one may wish to explore whether further improvements can be obtained from a finer categorization of the GPS speed readings and/or from the incorporation of information from other links in geographic proximity to the prediction links. Alternatively, an in-depth exploration of the optimal frequency and time span for calibration periods would be of use. Finally, in future studies, it would likely be valuable to make use of other information such as day of week, time of day, weather, etc.

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