

## Performance Evaluation of Arrival Time Prediction Models

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**Abstract :** Arrival time information is a crucial component of advanced public transport system (APTS). The advertisement of arrival time at stops can help reduce the waiting time and anxiety of passengers, and improve the quality of service. In this research, an experiment was conducted to compare the performance on prediction accuracy and precision between the link-based and the path-based historical travel time based model with the automatic vehicle location (AVL) data collected from an actual bus route. The research results show that the path-based model is superior to the link-based model, and achieves the best improvement on peak hours.

**Keywords :** bus transit, arrival time prediction, link-based, path-based

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