

Models of Public Mass Transportation in GIS Environment

Abstract

The thesis tries to describe and categorize models of public mass transportation. A new model is built upon these models and based on authors' thoughts. This model is constructed to work with headways only instead of timetables. Therefore one cannot precisely estimate the passengers' behaviour. The model works also with street network aside from public transportation lines. An application is built upon these model and allows network editing and processing of shortest-path analysis and accessibility analysis. Technologies used: ExtJS, OpenLayers, CGI, Shapely, STORM, PostgreSQL. This application is then used for building a public transportation network of Prague 6 region and for performing analysis upon this network.