

This thesis covers the issue of location and trajectory displaying of a car or another object which were determined only on the basis of cell phone signal levels. Localization algorithms, information about the transmitter's positions and a signal propagation model are used to determine the location. A part of the thesis is the Guesstor Client program that displays the results of localization algorithms in a well arranged graphic form, makes it possible to compare the accuracy of different localization methods and allows us to follow the trajectory of automobiles in real time. The Guesstor Client program connects via a remote method invocation protocol the program Guesstor Server which contains the location algorithms and manages the measurements database.