A METHOD OF OPTIMISING A MOBILITY ON DEMAND SYSTEM AND A FRAMEWORK FOR OPTIMISING A MOBILITY ON DEMAND SYSTEM

ABSTRACT

There is provided a method of optimising a mobility on demand system over a planning horizon of time slots and a framework (100) for optimising a mobility on demand system, the method comprising obtaining supply information (324) of a plurality of vehicles, demand information (326) for the plurality of vehicles and network information (328) of a plurality of stations; characterised in that the method further comprises obtaining covariates and control variables from the demand (326) and supply (324) information; determining inference functions (110) for predicting future demand and supply based on covariates; determining control functions (112) for adjusting predicted future demand and supply based on control variables; and using a plurality of inference (110) and control (112) functions to determine optimal control variable values that optimise future demand and supply for profit.

FIG. 1