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A STATE –SPACE MODEL OF URBAN TRANSPORTATION DISCRETE EVENT DYNAMIC SISTEMS AND IT’S APPLICATION TO ROUTING OPTIMIZATION

BY

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Abstract: The real time control of traffic routing in large communication networks investigated. A state-space model of Urban Transportation Discrete Event Dynamic Systems (UTDEDS) has been established and a rolling control idea based on operation experiment perturbation analysis has been proposed. The theorem is given which assert s that the network performance objectives can be achieved be means of the state dependent shortest route algorithm.

Keywords: Traffic Control, Routing Discrete Event Dynamic Systems, Traffic Estimation and prediction, Control of Urban Transportation.