

MULTIMEDIA APPLICATIONS FOR BUS ARRIVAL TIME PREDICTION USING KALMAN FILTER AND WEB SERVICE

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Abstract: *The use of multimedia applications in transport is closely related to the rapid development of information and communication technologies and their versatile application in different areas of human life. Interactive multimedia applications in the analysis and efficient monitoring of various transport situations provides wide opportunities for timely decision-making, which affects the safety and efficiency of transport processes with increased participants' satisfaction. Research in this paper focused on the bus arrival time prediction (BATP). The paper analyzes two approaches to this complex problem, model based approach-with Kalman filter and in real time approach with web service. For experimental analysis it is designed distributed multimedia information system (DMIS) which purpose is to monitor and manage public bus traffic on a selected section. Under the proposed system, designed several multimedia interactive applications that are installed on distributed multimedia bus stops.*

Keywords: *Intelligent Transportation System, Multimedia application, Bus Stops, Multimodal interactive interfaces, BATP;*