ON−LINE ADAPTIVE VIDEO SEQUENCE TRANSMISSION BASED ON GENERATION AND TRANSMISSION OF DESCRIPTIONS

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Abstract : This paper presents a system to transmit the information from a static surveillance camera in an adaptive way, from low to higher bit−rate, based on the on−line generation of descriptions. The proposed system is based on a server/client model: the server is placed in the surveillance area and the client is placed in a user side. The server analyzes the video sequence to detect the regions of activity (motion analysis) and the corresponding descriptions (mainly MPEG−7 moving regions) are generated together with the textures of moving regions and the associated background image. Depending on the available bandwidth, different levels of transmission are specified, ranging from just sending the descriptions generated to a transmission with all the associated images corresponding to the moving objects and background.