

## **REAL TIME VIDEO COMPRESSION IMPLEMENTED USING ADAPTIVE BLOCK TRANSFER FOR LOWER BIT RATES**

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### **Abstract**

The aim of this paper is to achieve considerable amount of compression in real-time images by using adaptive block transform with lower bit rates. The project aims to achieve the above mentioned objective by developing a code on a Turbo C++ platform / MATLAB. The project discusses important features of adaptive block transform in compression of still images, including the extent to which the quality of image is degraded by the process of discrete cosine transform compression and decompression. Image quality is measured objectively, using peak signal-to-noise ratio or picture quality scale, and subjectively, using perceived image quality. The effects of different functions, image contents and compression ratios are assessed. A comparison with a discrete-cosine-transform-based compression system is given. Our results provide a platform for reduced memory space and bandwidth requirements in on-line applications like video conferencing. Our project also discusses the challenges faced while developing an efficient solution for bandwidth and memory problems on a Turbo C++ platform. The still image formats used are essentially BMP (Bitmap), JPEG (Joint Photographic Experts Group) and GIF (Graphical Inter-Face). On similar lines the real-time image formats we have worked with are MPEG (Motion Picture Experts Group) and AVI (Audio-Visual Interface).

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