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# OVERVIEW AND IMPLEMENTATION OF INTRAPREDICTIONS FOR H.264/AVC VIDEO CODEC

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## ABSTRACT

The H.264 is an international video coding standard developed by the ITU-T ISO/IEC Joint Video Team (JVT).Video compression algorithms operate by removing temporal and spatial redundancies in a video encoder conforming to standards such as H.264. Intra Prediction modes in H.264 improve the compression, exploiting spatial redundancy. This paper presents the algorithm for all the modes of *intraprediction.* The simulated results show better compression can be achieved in Vertical, Horizontal and Horizontal up modes than other modes for a number of pictures that have been experimented with. The compression achieved was 10 or more for these modes without sacrificing the quality of the reconstructed picture. Quality achieved was over 32 dB, indistinguishable from the original. In most of the pictures experimented with, compression improves appreciably with *Intraprediction* than without it up to 51%.

**KEYWORDS:** *Intraprediction, Quantization, Cavlc, Macroblock Video Coding Layer (VCL)*