

Sample of Level 3 English Editing

Field of research: Encoding

Reordering ~~Macro~~the data operation of macro-block Data Operation to Enhance Defor improving the performance of ~~de~~-blocking Filter Performancefilter in H.264/AVC

INTRODUCTION

The Joint Video Team (JVT) made up of the ~~is composed by~~ ITU-T Video Coding Experts Group (VCEG) and ISO/IEC Moving Picture Experts Group (MPEG) created the ~~JVT formulates a new~~ video compression standard known as ~~is~~ H.264/AVC [1]. H.264 has been adopted widely by a myriad of technological devices, ranging ~~The video compression standard provides~~ from ~~the~~ mobile phones to HDTVs ~~HDTV widespread application~~ and greatly optimizes ~~improves largely~~ rate-distortion. Comparing H.264 with ~~efficiency. H.264 was compared to the~~ existing standards such as MPEG-2, H.263++ (Annexes DFIJT) and MPEG-4, it excels with respect to the ~~in similar regards under the~~ video compression quality, in which more than 50% ~~to be possible to save approximately 50% above~~ bit-rate can be saved [3]. Nevertheless,

~~Although the encoding~~ efficiency ~~efficient~~ of H.264/AVC is higher than previous ~~the~~ video encoding standards, it encompasses a rather ~~standard formerly, but it have the quite~~ complex encoding technology with a large number of modes. As a result, and the mode choice, so its operation ~~order~~ complexity is also far greater than that of previous ~~to be higher than the~~ encoding standards.

The aforementioned complementing features ~~standard actually formerly. These improved characteristics are a consequence of the use~~ due to the application of several new encoding tools ~~within the compression process within H.264 defined by the standard.~~ Each of these encoding tools contribute ~~new encoding techniques contributes more or less~~ to the total gain of ~~whole~~ H.264/AVC encodingsystem in terms of the compression ratio, but nevertheless, also increase ~~increased~~ its operation order complexity.

One unique feature of H.264 ~~of the most special features in H.264/AVC~~ is the de-blocking filtering. Due to the method of ~~Because of the characteristic of H.264/AVC encoding compression~~ calculation in H.264/AVC encoding compression, ~~method sometimes has obviously the~~ block artifacts can appear ~~phenomenon~~. The de-blocking filter helps ~~contributes to~~ eliminate or reduce ~~diminish the~~ block artifacts in the decoded video sequence, while producing the same objective quality as the non-filtered video and reducing, ~~that can reduces~~ the bit-rate typically by 5%~10% [3]. However, ~~But~~ due to irregular data access during ~~the~~ de-blocking filter operations ~~irregular data access~~ and use of an ~~uses~~ inner loop in ~~of~~ the highly optimized filtering algorithm. ~~Thus~~ the de-blocking operation accounts for ~~consuming~~ one-third of the computational complexity of the H.264/AVC decoder [6].