Improving Error Correction Capability of Aggressive Packet Combining Scheme by using Half-Byte Packet Reverse Technique and Even-odd Selection Method

Abstract

Aggressive Packet combining scheme is very efficient technique for error correction in wireless data communication. Transmitter transmits three copies of the original packet. Receiver applies bit by bit majority voting on the received erroneous copies and gets the original packet.

The major limitation of APC is that, if the bit error occurs in the same bit location of all the received copies then APC fail to correct them which results in reduced correction capability and reduced throughput. In this paper, a new modified APC technique is proposed that can eliminate the major limitation of the APC by using half-byte packet reverse technique and even odd selection method thus increasing correction capability and throughput.

References


15. .

Index Terms

Computer Science  Signal Processing
Keywords

Aggressive packet combining (APC), bit wise majority logic, packet reverse packet combining scheme, even & odd selection.