

Teenarat Anuchat 2010: Efficient Design of Convolutional Interleavers in MPEG-4 Image Wireless Transmission System. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Assistant Professor Srijidtra Charoenlarnnopparat, Ph.D. 91 pages.

This research improves the performance of the MPEG-4 image transmission systems by designing the convolutional interleavers to alleviate the effect of bursty noise. The system is tested in a rician flat block-fading channel that varying the fading variable for every symbol intervals and every five symbol intervals. In case of using the convolutional interleavers into the system, the simulation results show some improvement on the PSNR performance of 2 dB and 18 dB for the case of the fading variable vary every symbol intervals and every five symbol intervals respectively. In this research we use a JAVA computer program to simulate our system

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Student's signature

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Thesis Advisor's signature