

Itsaree Sapasirisopon 2008: Design of Random Interleavers for MPEG-4 Image Indoor Wireless Transmission System. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Assistant Professor Srijidtra Charoenlarnopparut, Ph.D. 98 pages.

This research improves MPEG-4 image indoor wireless transmission system using random and semi-random interleavers. The system is tested for slow and fast flat fading channel. The simulation results in PSNRs show the better improvement of about 17 dB and 2.31 dB for slow and fast flat fading channel, respectively. In addition, our designed random interleaver is modified in order to decrease the processing time. It can be reduced from 43.73 second per image to 4.07 second per image. The application software which is used to simulate our system, is developed by JAVA computer program.

Student's signature

Thesis Advisor's signature

___ / ___ / ___