Prioritized, High-quality Video Transmission Using Raptor and RCPC Codes

- Cross layered forward error correction scheme to increase video quality of wireless connections
- Combines new raptor code with rate compatible punctured convolution
- Unequal error protection at application layer and physical layer

Advantages

- Less wasteful than existing equal error protection (EEP), making it better suited for wireless networks
- Reduction of overall distortion
- The cross-layer design can optimize code parameters, as fixed parameters might lead to mismatches between layers
- The use of UEP codes at multiple layers (AL and PHY) within the network model had not been utilized prior to this invention

Applications

- Video Broadcast
- Telecom Networking
- Government and Military

For More Information, Click to View YouTube Pitch