

SSY 150, lecture-5 (Transport Compressed Multimedia Data) quiz questions

2020-04-23

Your name: Haitham Babbili

Your email: haitham@student.chalmers.se

1. What are the main differences between TCP/IP model and OSI 7 layer communication model?
☐ Complete different model ☒ merge application + presentation + session layers into 1 layer
☒ network layer becomes internet layer ☐ Others (specify)
2. Why do we need IP protocols?
☐ set rules for people ☒ set rules for networks ☐ set network hierarchy ☐ Others (specify)
3. For real time transporting compressed video, which protocol(s) is better?
☐ TCP ☐ UDP ☐ TCP +IP ☒ UDP+IP ☐ Others (specify)
4. For video-streaming, which protocol(s) is better?
☐ TCP ☐ UDP ☐ TCP +IP ☒ UDP+IP ☐ Others (specify)
5. For packet network, does Shannon's separate source and channel coding principle hold, why?
☐ yes, it holds ☒ no, due to lack channel information ☒ no, due to finite block size ☐ Others (specify)
6. According to the theory for erasure networks, applying matrix interleaver can influence the received **packet loss errors**, with the following reason(s)
☐ no, no influence ☒ yes, reduces packet loss when combining with channel coding
☐ yes, always reduces packet loss ☐ Others (specify)
7. According to the theory for additive Gaussian white noise channel, applying matrix interleaver could influence the received **symbol errors** and due to the reason
☐ no, no influence ☒ yes, reduced packet loss when combining with channel coding
☐ yes, definitely reduced packet loss ☐ Others (specify)
8. Which parameters in source compression/ encoder may influence the end-to-end performance?
☒ channel coding rate k/n ☒ intra quantization levels
☒ inter motion compensation ☐ packet size ☐ Others (specify)
9. Which approaches are useful to protect the packet losses
☒ source encoding ☒ channel encoding ☐ network modeling
☒ unequal error protection ☒ matrix interleaving ☐ Others (specify)
10. How would one know that a network is congested?
☒ end-to-end delay ☒ delay jitter ☒ increased packet losses ☐ Others (specify)
11. If a source word contains 11 symbols, and 5 parity symbols are added by the RS codes,
(a) How many symbol errors can be corrected by the above RS codes?
☐ 11 ☐ 9 ☐ 8 ☐ 7 ☐ 6 ☐ 5 ² ☒ others (specify)
(b) how many symbol errors can be detected by the above RS codes?
☐ 11 ☐ 9 ☐ 8 ☐ 7 ☐ 6 ☒ 5 ☐ others (specify)

Thank for participating the quiz, hope it was fun to you !