CS352 – Computer Networks & CS354 – CN Lab

Faculty: Dr. Goutham Reddy Alavalapati

Activity Log:

1. Lecture slides of the covered syllabus including Network Layer have been posted on the Google Classroom.
2. Lecture slides of the syllabus yet to cover: Transport Layer was also posted, which can be considered as a homework during this vacation.

   Syllabus: Elements of transport protocol-Congestion control –Trans-mission Control Protocol (TCP)- Remote Procedure Call (RPC)- –client-server applications- The Real-time Transport Protocol(RTP) - congestion control in TCP –UDP –Quality of service in IP

Sources:

1. "Computer Networks: A Systems Approach" L. Peterson, and B. Davie.
2. "Computer Networks" S. Tanenbaum and D. Wetherall.
3. "Computer Networks" Kameshwari Chebrolu, IIT Bombay

   Online: https://www.youtube.com/watch?v=wZLMLX_hWk0&list=PL-bZp8Qhr-SZG08n3IeXT8R5hafSg_jIv

Implementations

Assignment-1: Programs for IP address conversion function

Assignment-2: Connection-oriented Client-Server applications

Assignment-3: Connectionless Client-Server applications

Assignment-4: Implementation of Chat servers and mail Servers

Assignment-5: Implementation of routing algorithms

Assignment-6: Programs using Remote Procedure Call(RPC)

Assignment-7: Client-Server applications based on Raw Sockets, IP Spoofing

Reading:

1. W. Richard Stevens, *UNIX Network Programming, Volume 1, Second Edition: Networking APIs: Sockets and XTI*, Prentice Hall, 1998
2. W. Richard Stevens, *UNIX Network Programming, Volume 2, Second Edition: Interprocess Communications*, Prentice Hall, 1999
3. W. Richard Stevens, Stephen Rago, *Advanced Programming in the UNIX Environment*, Pearson Education, 2/e