

Computer Networks Lab

In Computer networks laboratory, students diagnose various protocol message details like TCP/UDP using Wireshark. NetSim is used to simulate the features of IP routing, transport layer flow and congestion control, data link layer protocol modelling over CSMA/CD. In network programming, students develop programs to understand the client server model. Special emphasis is given on advanced topics like high request throughput (including ability to scale), multiplexing, buffering, stream/datagram based communication. Students implement a three tier application(client browser, apache2 WebServer, MySQL DB) and study the implementation options. They also do a performance benchmark of separating the DB to another machine. Additionally, students develop network centric applications for Android devices and understand the limitations, when the computation and network bandwidth are constrained to preserve battery charge.