App layer
transport

\[\text{socket} \quad \rightarrow \quad \text{software interface}\]

\underline{Destination address}

32 bit IP address
138.234.4.42
(network layer addr)

port number (16 bit)
(which process on dest. device)
transport services

Transmission control protocol (TCP)
connection
lossless

User datagram protocol (UDP)
best effort

Other services
- security
- bandwidth
- timing
HTTP: hyper text transfer protocol (uses tcp)

RTT

TCP
connect

GET

web page
HTTP 10: non-persistent connections
page w/ 3 images
HTTP methods
GET
POST
HEAD
PUT
DELETE
stateless

cookies

- server sends a cookie (number) w/ a response
- client requests then contain the cookie
web cache

client

web cache

client

server