

Ethernet

WiFi





ICMP

IPv4

UDP



SMTTP

DNS

BGP

HTTP

ARP



IPv6



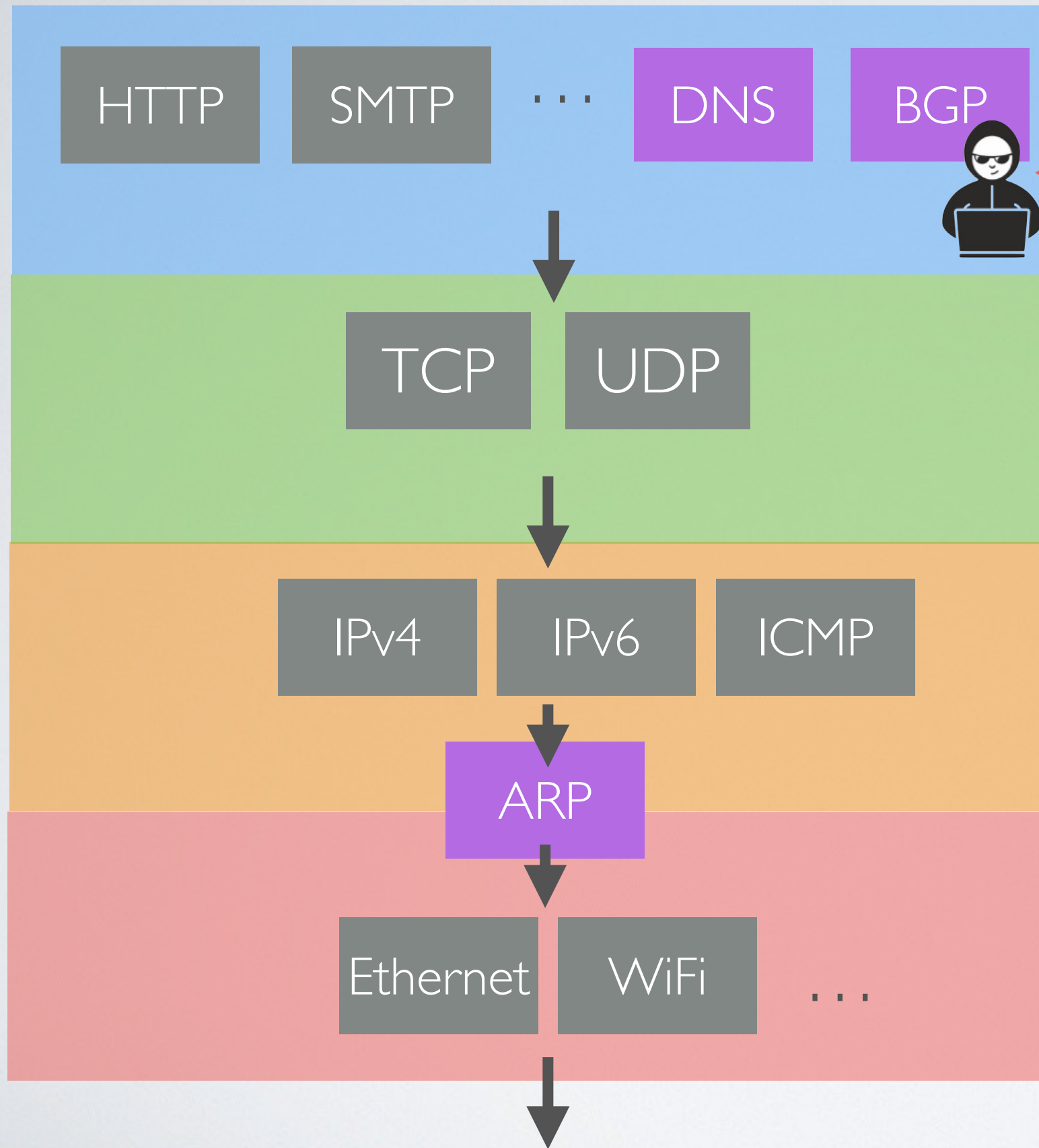
TCP





- Route Hijacking
(spoofing, DOS)
- DNS-cache poisoning
(spoofing, DOS)





- Route Hijacking (spoofing, DOS)
- DNS-cache poisoning (spoofing, DOS)

Preventing DNS spoofing

DNSSEC - Domain Name System Security Extensions provides authentication (but not encryption) between DNS servers

- Not widely deployed

DNS over HTTPS (since 2018) provides authentication and encryption between client/server and server/server

- Pushed by Google and Mozilla