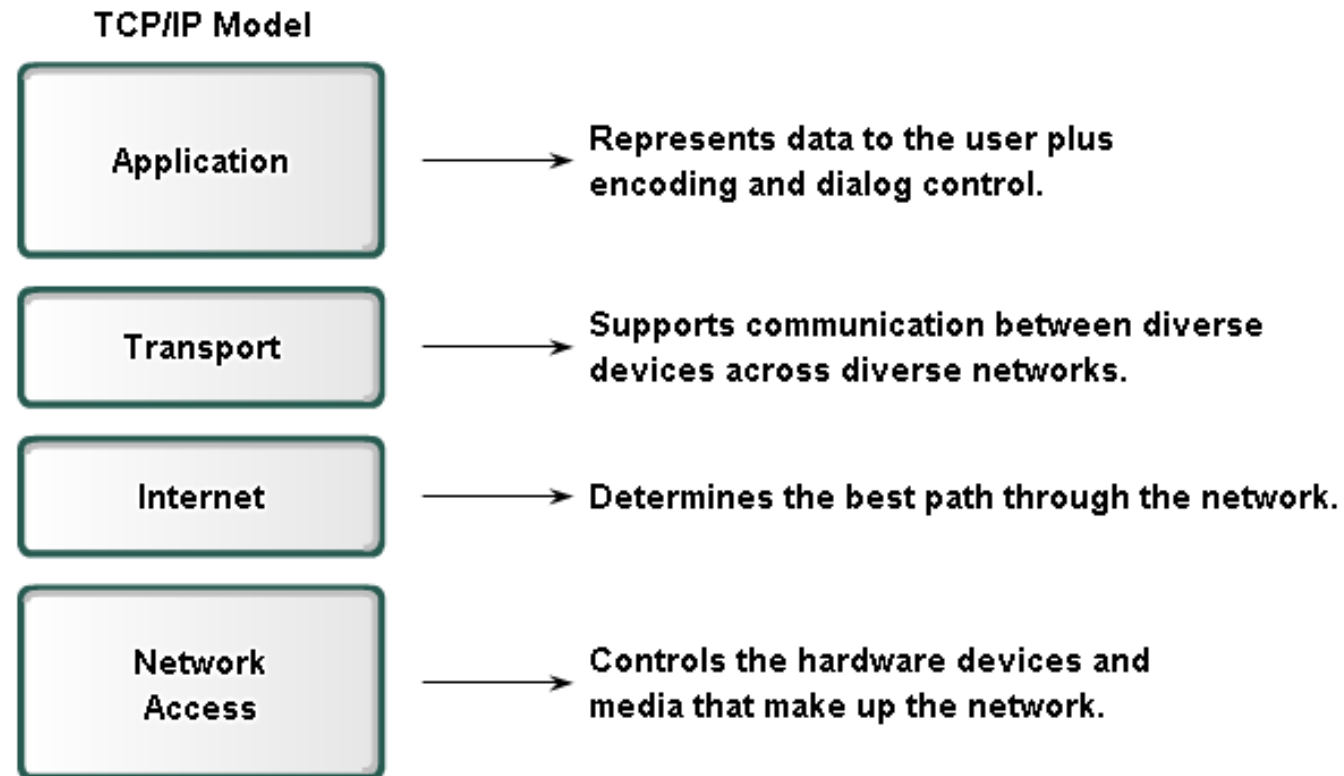


Lập trình mạng

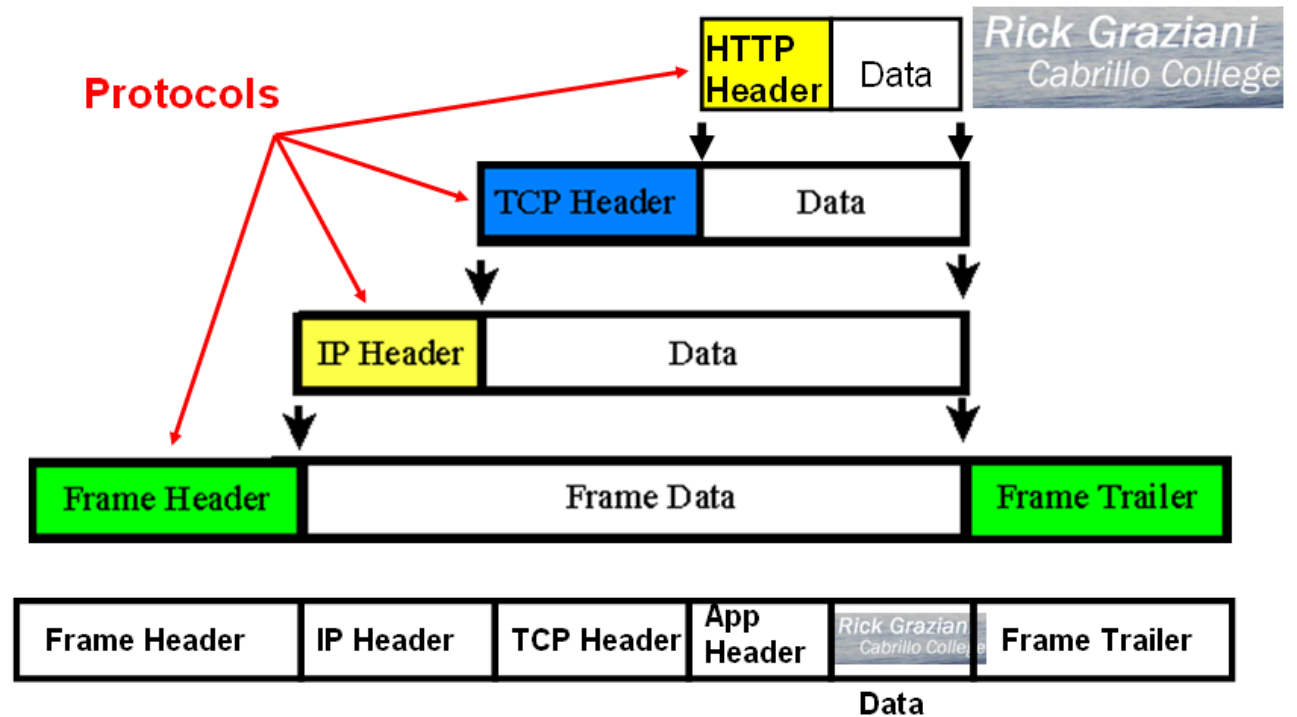
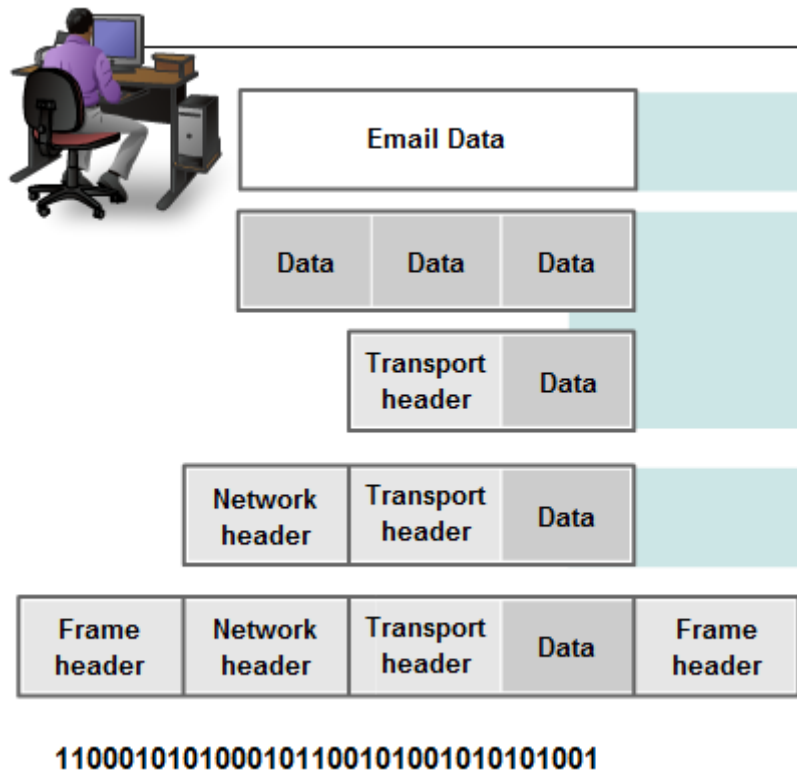
Chương 1: Kiến thức cơ bản

TS. TRẦN NGÔ NHƯ KHÁNH

Mô hình TCP/IP



Đóng gói dữ liệu



Kiểm tra gói tin bằng Wireshark

No.	Time	Source	Destination	Protocol	Info
17	8.553868	207.62.187.7	192.168.1.101	TCP	[TCP segment of a reassembled PDU]
18	8.554136	192.168.1.101	207.62.187.7	TCP	49851 → http [ACK] Seq=553 Ack=1642 Win=0 Len=0

Frame 17 (1514 bytes on wire (1211 bytes captured) on interface 0: Ethernet II

Ethernet II, Src: Cisco-Li_09:4e:0f (00:0f:66:09:4e:0f), Dst: QuantaCo_04:a2:1e (00:1b:24:04:a2:1e)

Internet Protocol, Src: 207.62.187.7 (207.62.187.7), Dst: 192.168.1.101 (192.168.1.101)

Version: 4
Header length: 20 bytes

Differentiated Services Field: 0x20 (DSCP 0x08: Class Selector 1; ECN: 0x00)
Total Length: 1500
Identification: 0x8241 (33345)
Flags: 0x04 (Don't Fragment)
Fragment offset: 0
Time to live: 51
Protocol: TCP (0x06)
Header checksum: 0x7367 [correct]
Source: 207.62.187.7 (207.62.187.7)
Destination: 192.168.1.101 (192.168.1.101)

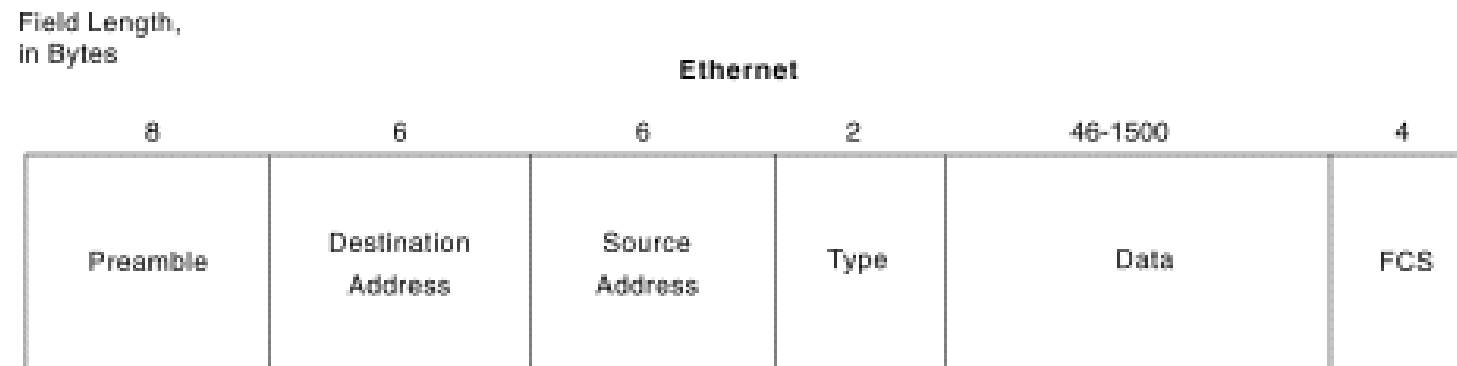
Transmission Control Protocol, Src Port: http (80), Dst Port: 49851 (49851), Seq: 3182, Ack: 553, Len: 1460

```

0000  08 00 54 00 00 00 00 00 00 00 00 00 00 00 00 00    .H...P...
0020  01 65 00 50 c2 bb c7 e0 10 60 5e 09 8c a6 50 10   .e.P....^...P.
0030  06 c8 3a 48 00 00 64 74 68 3d 22 31 22 20 68 65   ..:H..dt h="1" he
0040  69 67 68 74 3d 22 31 22 20 61 6c 74 3d 22 20 20   ight="1" alt="
0050  22 20 62 6f 72 64 65 72 3d 22 30 22 3e 3c 2f 74   " border ="0"></t
0060  64 3e 0d 20 20 20 20 3c 74 64 20 68 65 69 67 68   d>. < td heigh
0070  74 3d 22 31 32 22 20 61 6c 69 67 6e 3d 22 72 69   t="12" a lign="ri
0080  67 68 74 22 20 62 67 63 6f 6c 6f 72 3d 22 23 46   ght" bqc olor="#F

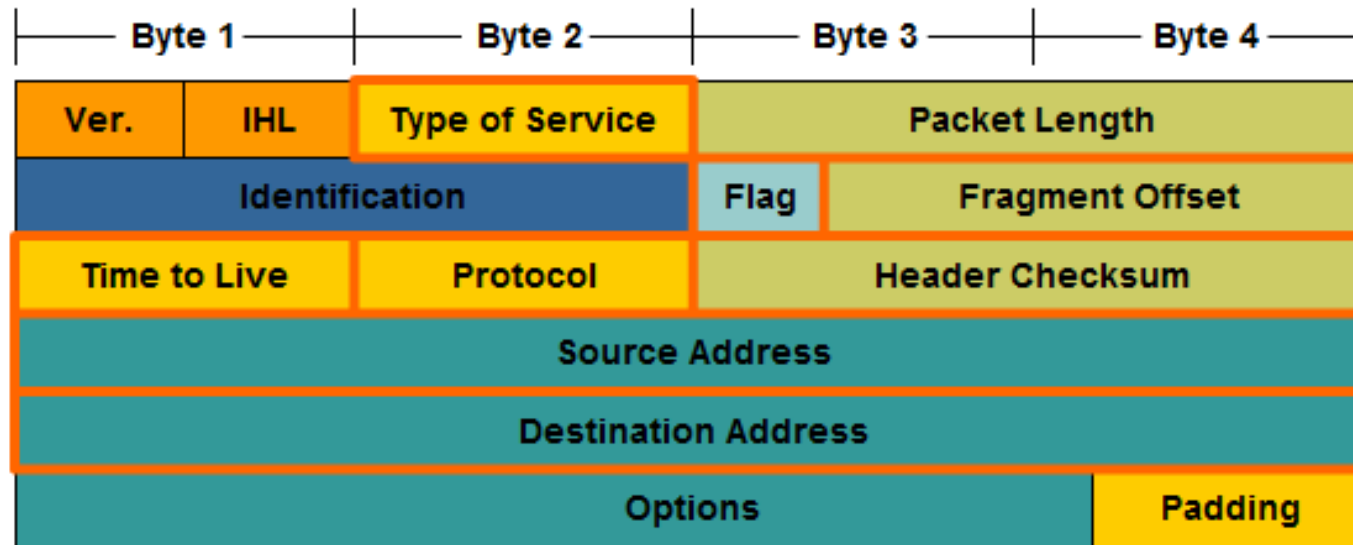
```

Giao thức Ethernet

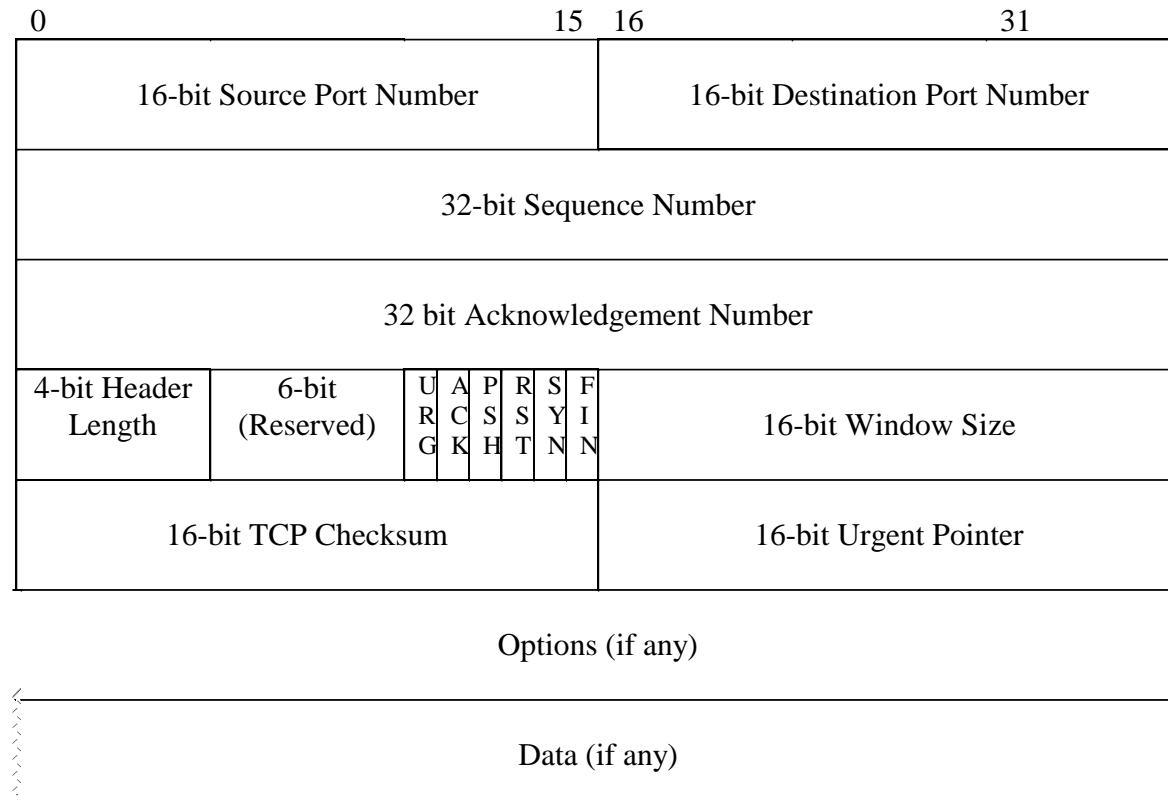


Giao thức IP

➤ Gói tin IP



Giao thức TCP



Giao thức TCP

➤ Đặc điểm:

- Connection Oriented
- Flow control
- Reliability

➤ TCP Port

➤ Các pha trong một phiên làm việc của TCP

- Tạo kết nối
- Duy trì phiên làm việc
- Đóng kết nối

Giao thức UDP

