OSI Model

Function				Example
Ultimate data destination	Application	← >	Application	Web browser
Format conversion	Presentation	* •	Presentation	ASCII/XDR
Interaction across presentation	Session	*>	Session	Restartable file transfer
Reliable, ordered delivery	Transport	*	Transport	ТСР
Routing/ Internetworking	Network	← ►	Network	IP
Data framing over links	Data link	← >	Data link	Ethernet, WiFi
Bits on the wire	Physical	← ──→	Physical	SONET, 100BT
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Protocol Encapsulation HTTP Payload HTTP Payload Application Apple cation Preseritation Presentation Session Session TCP HTTP Payload Trar sport ТСР HTTP Payload Transport TCP HTTP IP TCP HTTP Payload Payload Network Network ТСР HTTP Payload ETH IP TCP HTTP Payload ETH IP Data link Data link Physical Physical Sender Receiver Bowdoin Sean Barker 2

E	Ethernet (Data Link, Layer 2)						
	Preamble	Dst Addr	Src Addr	Length/ Type	DATA	Error Check	
				IP	ТСР НТТР	Payload	
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Internet Protocol (Network, Layer 3) TOS Version HLen Length Identification Flags Offset TTL Protocol Header Checksum Source IP Addr Destination IP Addr **Options** (variable) Pad (variable) тср нттр Payload Data Bowdoin Sean Barker









User Datagram Protocol (UDP)								
ſ	-					Γ	I	1
	Link-layer	IP	SrcPort	DestPort	Checksum	Len	Data	
ľ	UDP Header							
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Transmission Control Protocol (TCP)

	0 4	4 10)	6 3	I	
	SrcPort			DestPort		
	SequenceNum					
	Acknowledgment					
	HdrLen	000000	Flags	AdvertisedWindow	_	
	Cheo	ckSum		UrgPtr	_	
	Options (variable – max of 320 bits)					
	Data					
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