METRICS

For **each packet**, we want to access all of the following metrics, by saving them in a PostGreSQL database. Then, we can find different patterns (between groups of packets if needed).

Metrics	Description	Benefit in our work
TimeStamp	Time at which the packet was captured	Allows analysis of traffic patterns, inter-packet timing, and device activity over time
Packet Size	Average packet size in bytes	Streaming flows have larger and more uniform packet sizes than IoT sensor traffic
Transport Protocol	Transport protocol (TCP, UDP, ICMP, etc.)	Differentiates between video/audio (often UDP/RTP) and control (TCP/MQTT) traffic
Source Port	Source port number used by the sending application	Indicates the application type (HTTP = 80/443, RTSP = 554, RTMP = 1935)
Destination Port	Destination port number used by the receiving application	Helps identify streaming or control services based on port usage
Direction	Direction of the packet (uplink/downlink)	Helps distinguish device roles (sensor vs. server) and traffic patterns based on upload/download ratio
Source IP	Source IP address — the device sending the packets	Helps identify which device generated the traffic (camera, TV, PC)
Destination IP	Destination IP address — the device or server receiving the packets	Helps determine whether the communication is local or with a cloud service (YouTube, RTSP server)