

List of features generated by LycoSTand

Table 1
LIST OF FEATURES GENERATED BY LYCOSTAND.

Feature name	Description	Feature name	Description
flow_id	Flow identifier	fwd_iat_max	Maximum time between two packets sent in forward direction
src_addr	IP address of the initiator	fwd_iat_min	Minimum time between two packets sent in forward direction
src_port	Port of the initiator of the flow	fwd_iat_mean	Mean time between two packets sent in forward direction
dst_addr	IP address of the receiver	fwd_iat_std	Standard deviation time between two packets sent in forward direction
dst_port	Port of the receiver of the flow	bwd_iat_tot	Total time between two packets sent in backward direction
ip_prot	IP Protocol number	bwd_iat_max	Maximum time between two packets sent in backward direction
timestamp	Timestamp of the first packet of the flow	bwd_iat_min	Minimum time between two packets sent in backward direction
flow_duration	Duration of the flow in microsecond	bwd_iat_mean	Mean time between two packets sent in backward direction
down_up_ratio	Downlink and uplink ratio	bwd_iat_std	Standard deviation time between two packets sent in backward direction
pkt_len_max	Maximum length of a packet	active_max	Maximum time a flow was active before becoming idle
pkt_len_min	Minimum length of a packet	active_min	Minimum time a flow was active before becoming idle
pkt_len_mean	Mean length of a packet	active_mean	Mean time a flow was active before becoming idle
pkt_len_std	Variance length of a packet	active_std	Standard deviation time a flow was active before becoming idle
bytes_per_s	Standard deviation length of a packet	idle_max	Maximum time a flow was idle before becoming active
pkt_per_s	Number of flow bytes per second	idle_min	Minimum time a flow was idle before becoming active
fwd_pkt_per_s	Number of flow packets per second in forward direction	idle_mean	Mean time a flow was idle before becoming active
bwd_pkt_per_s	Number of flow packets per second in backward direction	flag_syn	Number of packets with SYN flag
fwd_pkt_cnt	Number of packets in forward direction	flag_fin	Number of packets with FIN flag
fwd_pkt_len_tot	Total size of packets in forward direction	flag_rst	Number of packets with RST flag
fwd_pkt_len_max	Maximum size of packets in forward direction	flag_ack	Number of packets with ACK flag
fwd_pkt_len_min	Minimum size of packets in forward direction	flag_psh	Number of packets with PUSH flag
fwd_pkt_len_mean	Mean size of packets in forward direction	fwd_flag_psh	Number of packets with PUSH flag in forward direction
fwd_pkt_len_std	Standard deviation size of packets in forward direction	bwd_flag_psh	Number of packets with PUSH flag in backward direction
fwd_pkt_hdr_len_tot	Total number of bytes used for headers in forward direction	flag_urg	Number of packets with URG flag
fwd_pkt_hdr_len_min	Minimum number of bytes used for headers in forward direction	fwd_flag_urg	Number of packets with URG flag in forward direction
fwd_non_empty_pkt_cnt	Number of packets with ≥ 1 byte of TCP payload in forward direction	bwd_flag_urg	Number of packets with URG flag in backward direction
bwd_pkt_cnt	Number of packets in backward direction	flag_cwr	Number of packets with CWR flag
bwd_pkt_len_tot	Total size of packets in backward direction	flag_ece	Number of packets with ECE flag
bwd_pkt_len_max	Maximum size of packets in backward direction	fwd_bulk_bytes_mean	Average number of bytes/bulk in forward direction
bwd_pkt_len_min	Minimum size of packets in backward direction	fwd_bulk_pkt_mean	Average number of packets/bulk in forward direction
bwd_pkt_len_mean	Mean size of packets in backward direction	fwd_bulk_rate_mean	Average number of bulk rate in forward direction
bwd_pkt_len_std	Standard deviation size of packets in backward direction	bwd_bulk_bytes_mean	Average number of bytes/bulk in backward direction
bwd_pkt_hdr_len_tot	Total number of bytes used for headers in backward direction	bwd_bulk_pkt_mean	Average number of packets/bulk in backward direction
bwd_pkt_hdr_len_min	Minimum number of bytes used for headers in backward direction	bwd_bulk_rate_mean	Average number of bulk rate in backward direction
bwd_non_empty_pkt_cnt	Number of packets with ≥ 1 byte of TCP payload in backward direction	bwd_subflow_bytes_mean	Average number of bytes in a sub flow in forward direction
iat_max	Maximum time between two packets sent in flow	fwd_subflow_pkt_mean	Average number of packets in a sub flow in forward direction
iat_min	Minimum time between two packets sent in flow	bwd_subflow_bytes_mean	Average number of bytes in a sub flow in backward direction
iat_mean	Mean time between two packets sent in flow	bwd_subflow_pkt_mean	Average number of packets in a sub flow in backward direction
iat_std	Standard deviation time between two packets sent in flow	fwd_tcp_init_win_bytes	Total number of bytes sent in initial TCP window in forward direction
fwd_iat_tot	Total time between two packets sent in forward direction	bwd_tcp_init_win_bytes	Total number of bytes sent in initial TCP window in backward direction