

Outsourcer

Thread 1

Capture new frame

Compress frame

Sign frame

Send frame

If new response

Verify signature

If index = sample index

Sign frame

Send frame

If new response

Verify signature

Compare responses

Thread 2

Receive new response

Thread 3

Receive new response

TCP
Sending
Socket

TCP
Receiving
Socket

TCP
Sending
Socket

TCP
Receiving
Socket

Frame, index,
number of acknowledged outputs,
signature

Response, index, signature

Frame, index,
number of acknowledged outputs,
signature

Response, index, signature

TCP
Receiving
Socket

TCP
Sending
Socket

TCP
Receiving
Socket

TCP
Sending
Socket

Contractor

Thread 2

Receive new input

Thread 3

Verify signature

Thread 1

Preprocessing

Inference

Thread 4

Postprocessing

Sign response

Send response

Verifier

Thread 2

Receive new input

Thread 3

Verify signature

Thread 1

Preprocessing

Inference

Thread 4

Postprocessing

Sign response

Send response