



Stopped Bus Safe Passage



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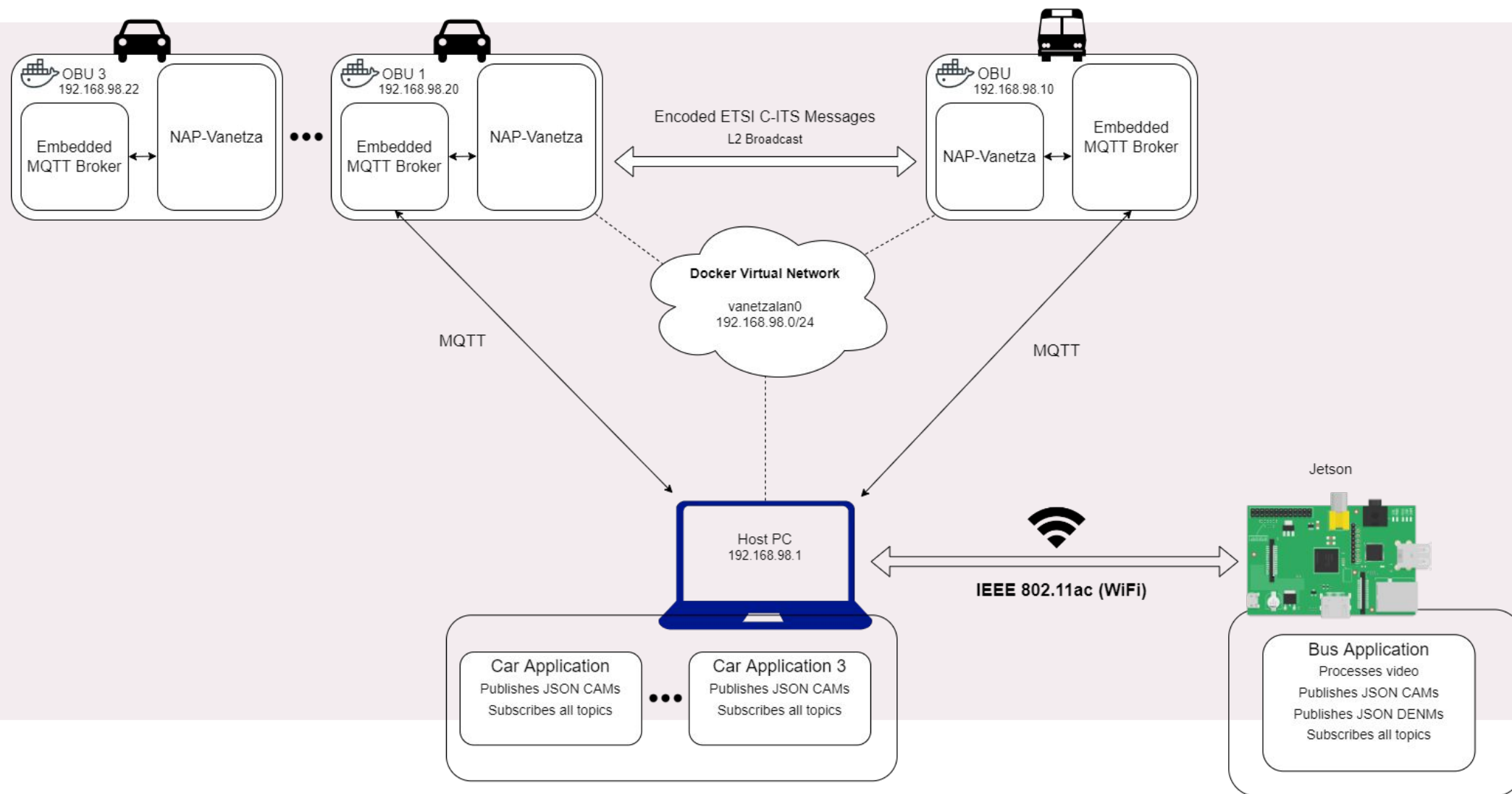


Objectives

- Detection of persons and vehicles through a camera mounted on a dashboard of a bus
- Warn surrounding cars about vehicles coming the other way and persons on the road in front of the bus
- Posteriorly send the video feed to the surrounding cars to ease overtaking maneuvers

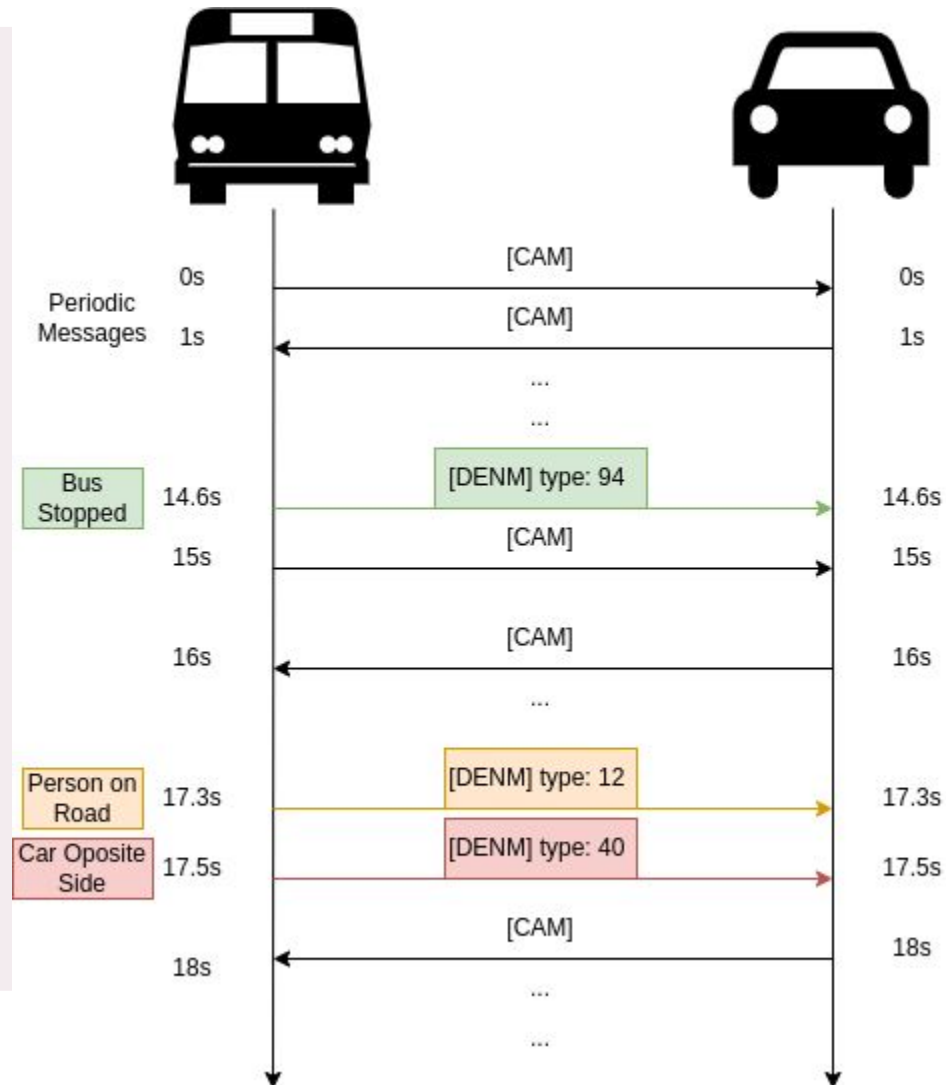


System Architecture



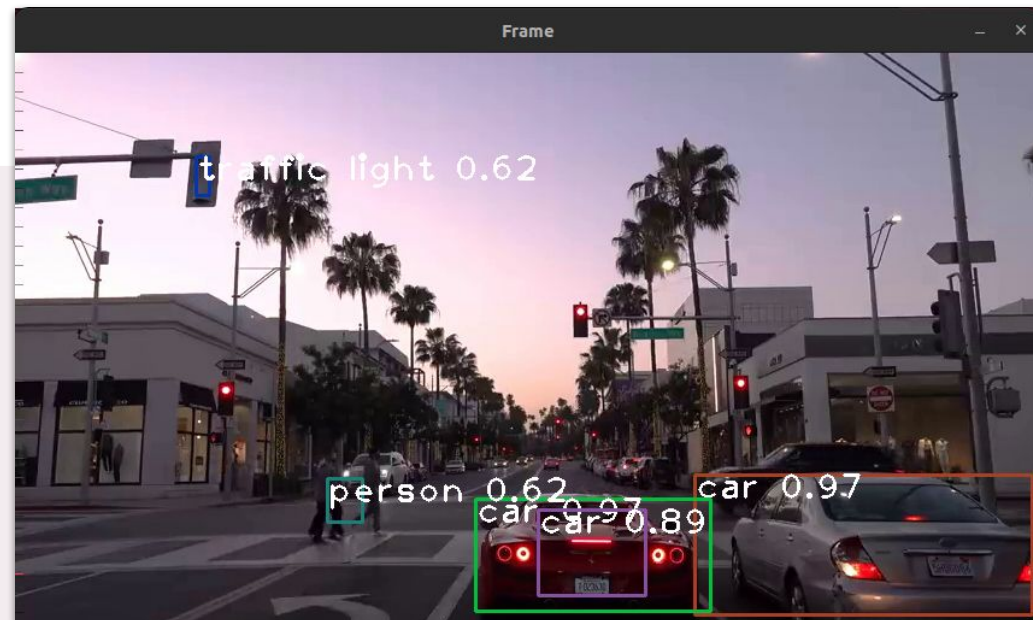


Demonstration timeline (example)





What's done?



```
carobu_1 | received packet from 6e:06:e0:03:00:01 (101 bytes)
carobu_1 | DENM application received a packet with decodable content
carobu_1 | DENM JSON: {"fields":{"denm":{"management":{"actionID":{"originatingStationID":1,"sequenceNumber":0},"detectionTime":1626453837,"eventPosition":{"altitude":{"altitudeConfidence":1,"altitudeValue":0},"latitude":40,"longitude":-8,"positionConfidenceEllipse":{"semiMajorConfidence":0,"semiMajorOrientation":0,"semiMinorConfidence":0},"referenceTime":1626453837,"stationType":0},"situation":{"eventType":{"causeCode":12,"subCauseCode":12},"informationQuality":7},"header":{"messageID":1,"protocolVersion":2,"stationID":1},"newInfo":true,"receiverID":2,"receiverType":5,"rssi":-255,"stationID":1,"test":{"json_timestamp":1652989936.653049},"timestamp":1652989936.652708}}
```



Questions?