P-2

Yes, I guess, based on my experience safety is very difficult to guarantee right so, now safety is not really non-functional requirement but you can break it down.

P-2

I guess especially in safety domain, like you need to guarantee that it is always trigger when you assume it should be triggered and its always executed in the same way so that it doesn’t fail like for example I don’t know the active safety system its should avoid the accident it should always be triggered before there is a crush right or near to a crush. So you defined the situation and you need really guaranteed that it always be executed.

P-2

I think that’s very tricky You can really mess with safety. I think that’s why companies always afraid of using machine learning techniques mostly more traditional system where you can really check that. It will always be executed. So it’s like one hundred percent safety. That’s difficult to machine learning because you can’t guarantee one hundred percent.

P-2

I guess they will implement some algorithms that will run and measure of the time for example or measure the result and compere the result specially when it comes if there some implementation that is at all related to any thing with the safety, safety related you will need to trace everything from the requirement to the test.

P-2

Requirement design test, implementation all these levels or need to have for traceability and then testing , you will need to have all the test result as well sp you are need to implement something that would exactly captured the result of the test. Thats my understanding, that based on ISO26262. So have the full traceability for safety related system.

P-9

The customer wants to drive with the car from A to B, as an example, but he doesn’t want to think about how to do that in a way that the car is behaving always safe, and no one can hack into the car and take over control of it. So, this is our job as system designer to think about these non-functional requirements like safety, security but also other aspects of privacy for example, becomes a very important aspect especially when you have highly connected systems as in cars becoming more and more popular to have connected to the internet. So, it’s extremely important to the success of the product that these non-functional requirements are there and they are fulfilled and complete that they do not forget any safety critical non-functional requirement because that would be really bad.

P-9

I read few weeks or months ago about this thing. It was a Smartphone app with camera, and it could detect faces, and this camera app used some form of neural network that has been trying to detect all different kinds of faces. But they showed that actually this app is able to detect more than 99 percent of white faces but only 80 percent of colored faces. Now in a camera app this might worth somewhere but it’s not really safety or any other problem but imagining you have automatic emergency Braking System bases on the visual camera and detecting of humans on the road. Now we have the headline of this camera system can automatically braking can detect 99% of white people but only 80% of colored people. Then we have a significant problem on our head. Not that the algorithm is working wrong or in a bad way but it has been trained improperly with not correct training data or the training was not created or selected properly to ensure that the system performs in all situation correctly and this an extreme challenge that come up when you use Machine Learning with kind of safety critical systems. But you have to be sure that you’re trained it properly and correctly according to your safety requirements and you have the requirement it should work for all people no matter what the skin color of this person.

P-9

I can tell you from the safety requirement point of view and one big challenge is that we are not able to guarantee the completeness of the non-functional requirement that we really captured or possibilities that Machine Learning algorithm could decide in certain situation that we can completely guarantee the safety of the system.

P-5

Safety is obviously important but also following the laws of GDPR and ensuring that you don’t leak anything. If somebody is hacking the system your complete medical history, it can be very sensitive. If you are a politician for example and you find out that you have some psychological problems or whatever, it can be devastating for career.