Transcript
26 February 2025, 02:02pm

Interviewer started transcription

Interviewer 0:03
And … The transcription is going as well. Perfect. So this is this is fantastic. A couple of things that I just want to go over with you. So what we're going to do is it's mainly one big question and then a few background questions about you for categorization purposes. So what we're going to do for the main question is… we're going to go through a real life case study scenario.

Stakeholder4_Engineer 0:35
OK, good.

Interviewer 0:36
And I will describe it to you if you want, I can put it in the chat, you know, so you can reference it in writing if you want. Um… And basically after I describe it to you, I will ask you a main question and I just want your opinions. OK, so this isn't a test for you. You don't have to know anything about AI. Um… It's just about your opinions, your viewpoints, and your life experiences, and that'll just help with the research. It'll become evident after we talk a little bit more so.

Stakeholder4_Engineer 1:12
Yeah, go on.

Interviewer 1:22
OK, so let's start with the description of the case study itself. So basically, this scenario involves a real life case study within the AI application of automated vehicles or AVs, as we say,

Stakeholder4_Engineer 1:32
OK. Yeah.

Interviewer 1:39
So it involves the occurrences of actual car crashes involving one particular AV brand, which is Tesla, and it's advanced driver assistant systems ADAS called Autopilot. OK, so that's the software, OK. Autopilot is the name for the software,

Stakeholder4_Engineer 1:57
Yes.

Interviewer 2:01
So Tesla's Autopilot system controls the steering, the braking and acceleration functions of the AV without any assistance from the human driver.

Stakeholder4_Engineer 2:12
OK.

Interviewer 2:12
And . . . and . . . one more thing to note, Autopilot could at anytime disengage and hand over the controls to the human driver.

Stakeholder4_Engineer 2:22
OK.**Interviewer** 2:22
OK. All right. So according to USA's NHTSA's Office of Defects Investigation, so that's the National Highway Transportation Safety Agency, so they opened an engineering analysis about crashes between January 2018 and January 2022 that involve Tesla AVs, with Autopilot engaged. They were involved in 16 crashes. Now in these 16 crashes, it's all over America, different locations, . . . they struck highly visible stationary in road or roadside first responder vehicles. So police, ambulance, fire trucks, maintenance vehicles, etcetera. Basically that were attending to pre-existing collision scenes so lots of flashing lights, lots of people milling about with their high visibility vests, things like that. OK.
Stakeholder4_Engineer 3:28
OK.

Interviewer 3:28
So 16 of these crashes occurred. Furthermore, on average, in these crashes, Autopilot aborted the vehicle control less than a second prior to impact.

Stakeholder4_Engineer 3:43
OK. Yeah, yeah, yeah.

Interviewer 3:44
Just said. …
OK. And that's it, so, now I have link if you want in the chat to articles about this . . . photographs of these crashes, things like that, a video even, of Tesla, but it's up to you if you want me to share that with you or not.

Stakeholder4_Engineer 4:05
If it's going to uh…. well, you know what? Let's proceed without and if I need, I'll ask you for it, OK?

Interviewer 4:10
OK. Yeah. OK. So as long as the description is obvious to you, what happened and yeah, OK. All right.

Stakeholder4_Engineer 4:15
Yeah, yeah, yeah. And I can I-1 quick question, sorry. Can I ask one quick question?

Interviewer
Mm hmm. Absolutely.

Stakeholder4_Engineer
So so the the crashes were strictly with let's say, emergency type vehicles, police, you know, ambulance, whatever. OK, no, no, No other crashes with just regular vehicles.

Interviewer 4:20
Yes. There have been, like Tesla has hundreds of thousands of cars on the road, right? It since 2018 and there are hundreds of Tesla crashes, all sorts of other objects with Autopilot engaged for this case study, its this subsection of those crashes.
Stakeholder4_Engineer 4:45
Yeah, of course. Yeah, yes.
OK, OK.
OK.
Fair enough. Alright, alright.

Interviewer 5:06
OK. Yeah, that's fine. It's a perfectly good question. OK. Any other questions?

Stakeholder4_Engineer 5:09
And . . . and Autopilot, so see right now my initial reaction is I'm thinking of you know how Google and these other companies are planning to have vehicles without drivers . . . driverless. I think so that's what I'm envisioning here. But . .. but based on your last comment, I don't think that's the case. What you're talking about . . . any Tesla vehicle here that has Autopilot. So you can set it on Autopilot, it takes over and it controls those three items that you set?

Interviewer 5:45
Correct. Yes, yes.

Stakeholder4_Engineer 5:51
Basically. OK, fine. Yep. OK. Yes.
Interviewer 5:52
So I'm not talking about those driverless taxis or anything, because that's a different class of vehicle, OK? And it's a different class of automation which we can go into later on. This is not it. This one requires a human driver to be behind the wheel. OK, right.

Stakeholder4_Engineer 5:55
Yeah, OK, I understand. Yeah.
All right.
Right. Understood. OK, I'm good.
Right.

Interviewer 6:15
OK.OK. All right. So based on the scenario.

Stakeholder4_Engineer 6:15
Um… Hmm.

Interviewer 6:17
You are seeking explanatory information about these crashes from Autopilot from the software and about the motor control functions of steering, braking, acceleration.
Stakeholder4_Engineer 6:30
Yeah.

Interviewer 6:43
So what specific questions would you ask of and or what types of information would you seek from this AI system that was doing the driving, if you will? … Performing the functions of driving. …Like you can to answer this question, you can think you may finish the sentences. I would ask X, Y or Z or I would want to know X, Y or Z or I want information about X, Y or Z.

Stakeholder4_Engineer 7:01
Right. OK, well, well, certainly. Well, certainly I'd want to know, you know, if the vehicles, you know, I was gonna' say since along the lines of, you know, when I'd like to know when the vehicle sensed there was another vehicle. By the sounds of it, it hit other vehicles.

But let me ask you a question. Did it hit based on your description, did it actually hit people or was it just strictly mechanical or that doesn't really matter, I guess.

Interviewer 7:36
It does not matter, but it did … these … in these reports there were no fatalities. OK, so.

Stakeholder4_Engineer 7:37
Yeah. Right. OK, OK. So, so I guess I'd like to know. You know, did the vehicle did the vehicle, the automated or the automatic vehicle? Did it sense that there was something there before it dropped? . . . The communication? OK.

Interviewer 8:02
You don't know because we don't know.
Stakeholder4_Engineer 8:05
OK, OK,

Interviewer:
Because of the nature

Stakeholder4_Engineer
Is this is the way this interaction is supposed to work, right? Is this the way the interaction is supposed to work? OK. Yes. OK. Yeah. All right.

Interviewer 8:09
Right. So. Yeah. So the question is, OK, so your question is … Did the vehicle sense there was a vehicle in front of it?
Stakeholder4_Engineer 8:24
A vehicle or an individual or something, and then decided I'm… That's it. I'm gonna drop Autopilot. OK. So that that'd be a question I would have.
Interviewer 8:33
Mm hmm.
Mm hmm.

Stakeholder4_Engineer 8:36
You know, again, you know at . . . at is it the response the dropping the autopilot is that a response. . . an immediate response or was the response you know a second or two before that, and then it took the system a second or two to to to say "oh OK, it's time to drop and give it to the driver to take over? OK? Um… I'd like to know, you know, is the driver made aware or or how is the driver made aware, if at all that the system will drop?
OK.

Interviewer 9:15
Mm hmm.

Stakeholder4_Engineer 9:17
Let's see here. You know…You know, if it's, it's if it's if it's supposed to control the braking. So now I'm… I'm making an assumption. So I'm making an assumption, you're approaching a a situation where there are other vehicles. Oh, sorry. Maybe I I'd like to know if the vehicle had an opportunity to sense that it was getting close to something. Before it actually got into the accident? Or is it .. Or is is it something that you know the collision with whatever happened? You know, because one thing got into the one thing came in its path or sorry, the other vehicle came into the Tesla's path and it just couldn't. Couldn't respond fast enough and its only response was … You're taking over. Do you see what I'm trying to get at?

Interviewer 10:24
Or stationary .. Yeah, I hear you. So in that scenario for here, these were stationary vehicles that were there attending to pre-existing collisions. So they didn't just jump out in front of it if that's the if that's where you were headed. Yeah. And you know, like you, when you see in the distance.

Stakeholder4_Engineer 10:26
Yeah.
Yes.
OK, fine. So I'll.
Right. OK. OK.
Right. OK.

Interviewer 10:46
Another car crash. You see all the lights and fire trucks and everything, right. So that's that's what that what was present in all sixteen of these crashes.

Stakeholder4_Engineer 10:48
Yeah, right. Right.
OK, so so was the collision uh… Basically on the front? Was it on the side? I'd like to know that information, you know, where did it hit the other vehicle? All right. And the reason I would ask that question is to me, well, first of all, you know, if you're headed towards an object that's fixed in front of you, then that's one problem. The other problem would I would … I would say is you know, I would like to know why the vehicle didn't slow down. . .. prior to getting into that, you know, if you see if you see a group of vehicles and they're all off to

the side, why would you continue at …you know…at a a specific rate of speed, why wouldn't you slow down? Maybe in sense that there's, you know, something happening.

Interviewer 11:54
OK, so your question was where was the crashed… look… click in the chat. So go up to the top, click on chat. I've sent you a link and you'll see photographs.

Stakeholder4_Engineer 12:04
Yes.
OK. Yeah.

Interviewer 12:10
Of these crash sites and.

Stakeholder4_Engineer 12:12
Oh.

Interviewer 12:15
OK, so that gives you a sense of … it hit head on. You see the Tesla hit these other vehicles head on like you could see the state police that was hit and....

Stakeholder4_Engineer 12:25
Oh, I see. Oh, yeah, yeah, yeah.

Interviewer 12:27
The truck that was hit and you know.
Stakeholder4_Engineer 12:30
Oh, I see. OK, there's additional photos. Sorry I didn't see it. OK.

Interviewer 12:34
Yeah, yeah, you can go scroll down.

Stakeholder4_Engineer 12:38
Yes, yes, yes.

Stakeholder4_Engineer 12:43
I see, yeah.

Interviewer 12:46
So what you're seeing is, OK, there's a crash site in front of the Tesla.

Stakeholder4_Engineer 12:53
Yes.

Interviewer 12:54
On on, on the high on the road that Tesla's driving.

Stakeholder4_Engineer 12:58
Yes.
Interviewer 12:58
And, it hit those crash sites, you know, people were injured, no fatalities, but people, some people in some crashes, people were injured.
Stakeholder4_Engineer 13:07
Yes.
Interviewer 13:08
And so that's the scenario and what it's saying is about with respect to these 16 crashes the Autopilot, on average, just released control less than a second before boom, the crash happened.

Stakeholder4_Engineer 13:26
Crash. Yep, Yep. OK.

Interviewer 13:28
Yeah. So you're asking a whole bunch of questions about.
You know.
What it saw or didn't see, right. So you're asking questions about, yeah.

Stakeholder4_Engineer 13:40
Yeah. Yeah, I'm. I'm I'm concerned. My main concern is, you know, you know, was this like, was something in its path? OK. And it just didn't sense it. That's one thing.

Interviewer 13:57
Mm hmm.

Stakeholder4_Engineer 13:57
And I'm and if and if that's not the case, right? I mean on some of these, it looks like it it may have just hit a vehicle. Um… On the side maybe?

Interviewer 14:11
Yeah, but some of these are some of these are inside the road or on the side of the road. But regardless, yeah, regardless it was in front of the Tesla. It was in, you know, so think of it this way.

Stakeholder4_Engineer 14:11
Of the road.
Yeah, yeah.
Yeah. So so why, yeah.
Yes.

Interviewer 14:27
If this was a human being driving and went about crashing into 16, you know crash sites with highly visible objects in front of it, what would you ask that human being?

Stakeholder4_Engineer 14:42
Well, the first thing I'd like to know is why didn't the car… Why didn't the human being slow down? Why didn't the vehicle slow down if it's approaching …what do you call it… an accident situation? That would be, I think the normal response for for someone like you or I driving a vehicle.

Interviewer 14:55
Right.
Right.

Stakeholder4_Engineer 15:02
And approaching an accident situation.

Interviewer 15:04
Right. So would you want the same question to be answered by Autopilot?

Stakeholder4_Engineer 15:05
Oh, definitely. Yes. That's yeah, yeah.

Interviewer 15:13
Yes, OK. OK. So why Autopilot, didn't you slow down? OK.

Stakeholder4_Engineer 15:17
Why didn't you slow down right?

Interviewer 15:20
Right, right.

Stakeholder4_Engineer 15:22
You know, maybe, maybe I'd ask, you know, maybe I would.. . . I would. … You know, maybe I'd ask the Autopilot to warn me. First of all, I asked the the Autopilot to warn me in advance of it delegating control to me back to me. OK, that's one thing. The other thing I'd say is.
Interviewer 15:46
Mm hmm mm hmm.

Stakeholder4_Engineer 15:51
You know, maybe I'd ask the Autopilot to communicate as it's coming to, let's say, a congested area or an area where it may slow. It may notice that there's, you know, a bunch of vehicles, whatever that it would. You know, it would communicate to say, you know, approaching. …Approaching crash site or approaching area of… of stop vehicles. Just so that I'm aware as well, because if I'm if I know that maybe there's potential that I may take over a vehicle or maybe I could be more aware of … of the situation myself and maybe engage manual control if I wanted to.

Interviewer 16:26
Mm hmm. All right, so your these last few questions, you're assuming it saw the scene, knew it was a cracked pre-existing crash site, so you'd wanted to, why didn't you give control to me or warn me?

Stakeholder4_Engineer 16:48
Yes.

Interviewer 16:48
Any other questions you have about its… It's other actions with respect to steering, braking and acceleration functions like the gas pedal control

Stakeholder4_Engineer 17:01
Well, well, again, I . . . I'd, I'd wanna ask it if. I don't know if I mentioned this already, but I'd . . . I'd want to know if your if and I. . . I'd like to know from the system, you know what ability or sorry, like, why wouldn't you slow down, if you are able …I'm assuming that it can see up ahead, or sorry. Maybe that's the question is, are you able to see what's up ahead, right? Are you able to distinguish maybe between, you know, are you able to distinguish, you

know, and . . . and know that there's an emergency up ahead so that you can slow down? If need be.

Interviewer 17:50
Mm hmm mm hmm.

Stakeholder4_Engineer 17:51
Sense danger of some sort, right? And . . . and you're required to slow down. That's . . . that's what I would. That's what I would ask of the system. You know, I would ask that it… it has the ability to sense.

Interviewer 17:57
OK.

Stakeholder4_Engineer 18:08
I don't know if I'm putting...

Interviewer 18:08
So why didn't you slow down? Yeah. So if you sensed it, why didn't you slow down? OK, OK.

Stakeholder4_Engineer 18:12
Yeah, yeah, yeah, definitely.

Interviewer 18:15
Any. . . any other questions?

Stakeholder4_Engineer 18:24
Well, I would ask it. I would ask it. If it's … see looking at some of these photos, I sense that maybe the vehicle, you know, in some cases, yeah it hit, yes, it did hit head on. In some cases I'm. . . I'm interpreting the photos to show that it didn't hit head on so. So I would say you know, I would ask that that the driver hand over this …What I'm … what I'm trying to get at is that is that as I analyse this,… the photos I'm thinking did the vehicle when it actually handed over, did the vehicle actually veer off the road? That's what I'm that's what I'm asking. Or or, you know? So. So if I were to ask the vehicle, I would expect you to hand me the vehicle over. Um…

Interviewer 19:19
Mm hmm.

Stakeholder4_Engineer 19:27
In it, …you know with … with advance notice in advance. You know in advance of just about to when you're gonna hit another vehicle and you know….In in a direction?

Interviewer 19:43
It didn't veer off. Just yeah, just so you know, it did not veer off. Because if you look at the photographs, all the other cars, like a state police, that's a photograph of a state police in hidden the back. All the Tesla photos show it crashing frontal. OK.

Stakeholder4_Engineer 19:49
Yes, exactly. Yeah. Sorry., OK. Yes. OK. Well, that's fine. Yeah.

Interviewer 20:05
So if you see some of the other crashes, it's not the Tesla that's been damaged sideways or in the back or whatever. It's the Tesla damaged in the front.

Stakeholder4_Engineer 20:15
In the front. OK. OK. So the … was all these? Yeah.

Interviewer 20:17
Yeah, these photos show the Tesla. Yeah, yeah.

Stakeholder4_Engineer 20:22
I see. OK.

Interviewer 20:25
OK fair enough, no. So you're asking a question about the steering. Fair enough. Like, you know, if it veered off slightly to the left or right, why didn't it hand over to you? Yeah, the human driver. OK.

Stakeholder4_Engineer 20:26
OK. Well then, yeah.
Yeah.

Interviewer 20:40
Any other questions you'd have about the algorithm itself, the software itself, you know any questions about the design or improving the algorithm, like what sorts of functions would you want? Features, methodology, that kind of thing?

Stakeholder4_Engineer 20:59
Yeah, yeah, yeah.
I'm thinking.

Interviewer 21:11
Mm hmm, that's fine, yeah.

Stakeholder4_Engineer 21:23
Really, you know. Well, really, I, you know, I'd. I'd want to make sure or sorry. I would like to ask that the vehicle. … um… The . . . the vehicle brakes. 'Cause in this case here it sounds like the vehicles did not brake because they just abandoned.

Interviewer 21:57
Yes.

Stakeholder4_Engineer 21:57
Autopilot, right. Just before hitting vehicle in front of them. So I'd ask that again that before impact.

Interviewer 21:59
Yep, Yep.
Yeah.

Stakeholder4_Engineer 22:07
At a certain time before impact … impact, an impact situation should be…Should be acknowledged and the braking should be applied immediately upon that.

Interviewer 22:19
Yes, yes.

Stakeholder4_Engineer 22:20
So that's I think that's the only other thing that I can that I would think of here.

End Transcription for analysis …. general discussion continued until 54:10 when Interviewer stopped recording and transcription