Transcript

24 April 2025, 05:48pm

Interviewer started transcription

Interviewer 0:04
OK, so did you get a chance to, first of all, thank you for participating. I really appreciate this.

Stakeholder24_PoliceOfficer 0:11
Yeah, no problem.

Interviewer 0:13
OK, so I met your mom. She was great, by the way. So it was fun talking to her. And she speaks very highly of you. So she said you have a lots of opinions.

Stakeholder24_PoliceOfficer 0:25
Oh that's good.

Interviewer 0:27
Yeah. So she said you have lots of opinions. And I said, he's my guy. This is what I want. Your opinions. OK, so did you get a chance to read the background material? I kind of give you a bit of a context.

Stakeholder24_PoliceOfficer 0:42
Yeah, I took a cursory glance through it that, like I said, I …I… I was working all week and I was working night shift and I was like, I was doing like 15-16 hour days. So I didn't have much of a chance to kind of do like a little bit of background in terms of of what you were researching. But I.. I… I kind of like to go into these things I've done like something similar to like this before and I kind of like to go into these things like a little bit of. … Not too much like background knowledge, just kind of like let it flow.

Interviewer 1:12
Perfect. You're… you're a perfect candidate in this case, so a lot of people think they have to do homework, and I'm like, no, this is. OK. So I… I'll just kind of give you a bit

of context before I go through the questionnaire and it's... it's one main question in the questionnaire and then a couple of secondary questions to do with your stakeholder group. So it won't take that ... It won't take that long, but we'll have a bit of a bit of a back and forth discussion if you have any questions, so. What I'm doing is so I'm doing a PhD in AI itself. And you may know that a lot of the AI algorithms right now today are not transparent. They're opaque black boxes, if you will, and even the designers themselves do not know how they came up with their outputs. It's not like the old fashioned software when I went to school way back before you were even born, you know, where we could go line by line, code by code and figure out what happened, when it happened and how.

Stakeholder24_PoliceOfficer 2:01
Right, yes. Right, yeah.

Interviewer 2:21
So what I'm doing is ... field of explainable AI which came into being about 10 years ago to try and break into these black boxes. But what I'm doing and, us engineers being engineers, we build stuff for ourselves, and we're just focused on functionality. Does it work? But we're not.... We forget to build stuff for the public at large, right. And for a lot of stakeholders in any new technology. So when you're looking for an explanation, one of the things I realised I did ... did a deep dive into the social sciences. So, philosophy, neurology, neuroscience, psychology, et cetera and the ... an explanation, although we do it all the time, it's not a universal thing. So we're asking why questions all the time. Why did that aeroplane crash? Why did our friends get a divorce? Why did the ... you know the economy tank, et cetera?
And depending on the situation and the person, the answer is going to be very different. So I said, OK, we're building explainable AI, but we don't even know what the concept of explanation is. So what I've done is come up with a categorization and taxonomy of explanation. And I said anytime you build an AI model, you have to know what you're explaining into whom. So this taxonomy is supposed to help engineers design better models, so I'm taking a case study and I'm interviewing people about one particular AI application which is automated vehicles, ... autonomous vehicles, and I'm asking people from all walks of life. So engineers, drivers, pedestrians, police officers, judges, lawyers... I've interviewed everybody. And so what I'm asking is your viewpoint, your thoughts, your questions about this

particular thing. And there are no wrong answers. OK, everything you give me. Is extremely valuable for this research. So, are you ready?

Stakeholder24_PoliceOfficer 4:27
I am.

Interviewer 4:28
OK. All right. So I'm going to give you a description of the scenario itself, I'm going to read it out loud. If you want text of it, I can put it in the chat or it's pretty straightforward. So OK, so let me just … I need to read the text exactly as written. OK, so it's a case study scenario that involves a real life case within the AI application. Of automated vehicles or AVs. OK, it involves the occurrences of actual car crashes of one particular AV brand called Tesla, and it's advanced driver assistance system called Autopilot. Just so you know, I know it's all in the news lately. I designed this three years ago. OK? Three years ago.

Stakeholder24_PoliceOfficer 5:20
OK.

Interviewer 5:22
So it was prescient, I guess at the time, what he's doing right now. So Tesla's Autopilot system controls the steering, the braking, the acceleration functions of the AV without any assistance from the human driver.

Stakeholder24_PoliceOfficer 5:27
Hmm.

Interviewer 5:37
And furthermore, note that Autopilot could at any time disengage and hand over controls to the human driver. OK. All right. So, according to USA NHTSA, which is National Highway Traffic Safety Administration, their Office of Defects Investigation said between January 2018 and January 2022. So that's a four-year period, Tesla AVs, with Autopilot engaged, were involved in 16 as in 1-6 crashes, where are they struck highly visible stationary either in road or roadside first responder vehicles that were attending to preexisting collision scenes. So, there's a traffic crash up ahead. You've

got police, ambulance, fire trucks, road maintenance vehicles, flashing lights. OK, attending to another accident, and these Teslas drove into them, and on average, note that in these crashes, Autopilot aborted, vehicle control less than one second prior to first impact. So it approached it.... It kept driving, ... kept driving, didn't change course or anything, and then released control less than a second before the impact it. So, I have police reports you know, I have photographs. If you want to see them like I have a link. If you want to take a look at this.

Stakeholder24_PoliceOfficer 7:11
Yeah. Yeah, absolutely. Yeah, very interesting.

Interviewer 7:16
OK. OK, so let me copy and ... Where's the chat? Here we go. OK, so I've compiled newspaper reports and you know, TV news reports, all kinds of stuff. So if you can... and there are crashes all over America of these.

Stakeholder24_PoliceOfficer 7:39
So that's it.... That's interesting. So like they it is that like in an indemnification thing where it's like it's a way to kind of like protect themselves from being sued. So they release the ...the control of the vehicle back to the driver like a option of a second before or?

Interviewer 7:40
I don't know. We don't know.

Stakeholder24_PoliceOfficer 7:59
Oh.

Interviewer 8:01
We don't know. OK, so this is OK, so this is the scenario if... So based on this scenario, the main question I have for you is OK um... When you think of this car crash, OK, let's assume that everything else on the car was working perfectly. OK, so the hardware, the airbags, the steering, the braking, acceleration, everything was working fine. All other systems were working fine.

Stakeholder24_PoliceOfficer 8:25
Right.

Interviewer 8:35
Now, you're gonna ask, why did this car crash happen? We all asked that question. When you ask that question, that why question, what do you have in mind? Like what kind of explanatory information would you seek from the driver, which was Autopilot at the time? Keep in mind that there was a driver behind the wheel, but for whatever reason, the driver wasn't paying attention. Could have been sleeping, could've been reading, texting, whatever. So the AV was doing the driving, Autopilot was doing the driving. So what kind of questions do you have about its steering, braking acceleration functions that it was controlling?

Stakeholder24_PoliceOfficer 9:17
Right. So … Is it? Is it completely automatic? Like it… it… it so they it… How… how does it… How does it activate like does it manually have to activate it?

Interviewer 9:28
Well, no. Yeah. The driver has to press a button to turn on Autopilot, and the Autopilot was functioning

Stakeholder24_PoliceOfficer 9:37
OK.

Interviewer 9:37
And as it was driving down the street normally, you know, following all the rules of the road, everything. And then it crashed into these scenes. It's 16 different occasions all over America.

Stakeholder24_PoliceOfficer 9:43
OK. Right.

Interviewer 9:51

So the pattern is first responder vehicles OK, so that's why NHTSA opened up the investigation.

Stakeholder24_PoliceOfficer 9:55
Right, yeah. Yes.

Interviewer 10:01
So in this pattern, what questions do you have for the car, the designers of the car or you know?

Stakeholder24_PoliceOfficer 10:10
Is it capable of seeing like I mean, if... if it's specifically like emergency vehicles like they have a lot of like, you know, reflective... like symbols and stuff like that on the on the vehicle. That could be like potentially difficult for the... the sensors to pick up. I've ... I've had a... a.... now that you .... now that we're actually talking about this, I actually have like a first hand experience of a Tesla going through a ... a impaired vehicle .... motor vehicle collision and it was it was one Tesla that crashed into a street car pole and it was another Tesla that went through the scene because it didn't recognise. It was the driver was also drunk in the second Tesla and he ... I guess he put it on automatic or ... piloted controls and he went through the scene and then we eventually stopped it. It would eventually recognise one of our cars and it stopped automatically, but the driver was drunk. But it did.... The... the Tesla that was in Automatic pilot it ... it, it didn't recognise our .... our crash scene, right, like in all the police cars and all that stuff lined up around it.

Interviewer 11:29
So how close did it get to you guys?

Stakeholder24_PoliceOfficer 11:32
It drove right through it ... It drove.... Yeah, yeah.

Interviewer 11:32
It drove right through you?

Stakeholder24_PoliceOfficer 11:33
Yeah. Yeah.

Interviewer 11:35
So what stopped it? What stopped it?

Stakeholder24_PoliceOfficer 11:38
We ended up having like … there was a few of us around the crash site. So it was one of us … just kind of drove and then tried to pull it over and it wasn't stopping and we just cut in front of it and then it just slammed on the brake.

Interviewer 11:52
OK. So. So what? What year was this?

Stakeholder24_PoliceOfficer 11:59
This could have been more than like more than two, three years ago. Yeah, no.

Interviewer 12:03
OK, So what question do you have for that scenario as well as these? Because it sounds eerily similar to what happened in these 16, right?

Stakeholder24_PoliceOfficer 12:07
Yeah. Yeah.

Interviewer 12:17
So tell me what questions you had for that Tesla.

Stakeholder24_PoliceOfficer 12:22
So is it? Are the Teslas like… is there any like testing? And I mean they have to have testing for like emergency vehicles if they're being stopped or pulled over, they have to be able to recognise that. And … Is there like … Is there any like safety regulations around that right?

Interviewer 12:54
OK So talk about the car crash itself and you're the police officers. All of you guys

who saw this thing do what it did. It drove through your … your traffic accident scene. As a police officer, what questions do you have about its… its decisions to continue driving through that scenario and not stop, not change direction, not brake, not steer away not you know?

Stakeholder24_PoliceOfficer 13:25
Yeah, so I mean.

Interviewer 13:26
What questions do you have about those decisions and those outputs?

Stakeholder24_PoliceOfficer 13:31
I mean the only thing I can think of is like just purely from an investigative perspective, we would need to make the determination on whether or not like, I mean, I don't really deal with a lot of like, you know, Teslas and stuff like that or AVs that use the automated function … But we would need to figure out like why the autopilot did what it did, and if it's extremely like obfuscated or like nebulous. Then it's …it…I mean it … it… it's… it's a cause for concern. But if I mean the how much how much input can the like the… the…. the driver have while it's in autopilot and when does it relinquish any automated functions over to the driver? How soon after like that? That would all kind of come into question just in terms of like… at fault or you know the for the driver.

Interviewer 14:41
OK, so the driver can override Autopilot at any point in time.

Stakeholder24_PoliceOfficer 14:48
Right.

Interviewer 14:50
Obviously the driver in your scenario was drunk, so did not take over, did not pay attention, wasn't cognizant even of what may be happening. So, therefore the Autopilot was doing the driving.

Stakeholder24_PoliceOfficer 14:57
Right, right.

Interviewer 15:04
Let's assume that in your scenario, in all of these 16 scenarios that there's nothing wrong with the cameras. Nothing wrong with the hardware, the sensor, the information went into its system. It's brain, if you will. OK? And for whatever reason, yeah, it processed of keep driving.... keep driving ,... keep driving. Whatever happened between input and output is what we want. Tesla. And you know, all the engineers to figure out why did it keep driving. So, from a policeman's perspective, you pointed out to two things like why did it...
Stakeholder24_PoliceOfficer 15:34
Yeah.

Interviewer 15:41
Keep driving through a scenario like this when you're thinking what factors ... are you asking specific questions about its choice to keep driving through a scenario like this?

Stakeholder24_PoliceOfficer 15:54
What does it recognise as like tangible objects?

Interviewer 15:57
Mm hmm.
Stakeholder24_PoliceOfficer 15:58
I mean. I mean, I ...I ...I would like to see more....Like what programme does it use to operate right? And if that can be like just in terms of like purely like a... a ... You know, the... like if it was a driver's fault, or if it was the the ... the Tesla's programming, right? But I would like just.

Interviewer 16:36
Clearly, in this scenario, right? So I'm going to answer some of those questions. Right now, there's a level of automation driving, and right now Tesla is at a I'll define that later, but the driver is always responsible according to the law, OK.

Stakeholder24_PoliceOfficer 16:55
Yes.

Interviewer 16:57
And because the technology is … and Tesla tells the people that it sells the car to the level of driving automation, it's not perfect, right? And so the driver must always be alert and take over at any point in time. So it is the driver's fault for not overseeing the technology.

Stakeholder24_PoliceOfficer 17:18
Yeah.

Interviewer 17:20
The issue here is, despite that, it's selling these cars and you know, obviously it's. I'm going to stop right there. OK, 'cause, I'm going into the secondary questions and I don't want to lead you somewhere I shouldn't be. OK, so we'll, we'll talk these later. I'm going to take a break from the main question and then come back to it.

{Secondary Questions}

{General Discussion}

Interviewer 27:13
So, knowing what you know now and the fact that the driver wasn't paying attention. So essentially we're talking about an entity that is an agent in our world right now, so it does the steering, it does the braking, it does the acceleration, unlike lane centering or all the other features where it's adaptive cruise control where a human actually is part of that loop. Of those three functions, human isn't part of the loop when Autopilot gets turned on. OK Level 2, the human can take over and inject themselves completely, right, at any point instantaneously. That didn't happen here. So if a human being went around, let's go back to the first question. If a human being went around America doing these types of 16 crashes, it wasn't autopilot. It

wasn't an automatic. What questions would you have for that driver about these why questions? How would you probe that? The decisions that ...that human being made and the actions taken.

Stakeholder24_PoliceOfficer 28:14
So is that is that under the assumption that like the... like for the driver like the driver of the of the Tesla?

Interviewer 28:20
Yeah, yeah. Let's assume Autopilot wasn't turned on OK and the driver drove through the accident. Let's suppose there's one driver that did cause these 16 crashes and then came to Toronto and did it to you guys, OK?

Stakeholder24_PoliceOfficer 28:28
OK, OK. Yeah.

Interviewer 28:40
What would you? What would? What questions would you ask of of that driver about these accidents? And this pattern of accidents.

Stakeholder24_PoliceOfficer 28:53
I mean.

Interviewer 28:53
Do you put them in handcuffs? OK.

Stakeholder24_PoliceOfficer 28:55
Yeah, yeah. The obvious question is, what were you doing?

Interviewer 28:59
Alright.

Stakeholder24_PoliceOfficer 29:00
With your eyes open, right?

Interviewer 29:02
Right, right.

Stakeholder24_PoliceOfficer 29:04
And I mean, if he does go into the fact that, I mean now, now knowing I I I never understood like the like the sorry the spectrum of like automation in these cars. I didn't know that like I thought, you know, Tesla was kind of like a pioneer in terms of. You know how advanced their AI systems are, and like how responsive they are and how much human input they actually require and all that stuff.
But to hear that I was just like, like, I mean now I would be like, did you just assume that, like, you know, you just could fall asleep? And and that's it, right. Let the car go. And I mean, did you have any input whatsoever? That's so the, I mean.
That that's probably the premier question that I would have is like did you have like did you do like … were you alert? Were you like … what was, what were you doing the whole time while you were driving through the scene, right?

Interviewer 29:58
Right, right. So ask me about alertness. What are you thinking of particularly while the driving through this scenario is happening?

Stakeholder24_PoliceOfficer 30:10
I mean.

Interviewer 30:10
What kinds of things are you thinking about when you say alert?

Stakeholder24_PoliceOfficer 30:14
Eyes open, ready to like, take steering wheel and all that stuff. I mean, like my … my car has, like, it's like a 2025 Hyundai. And it has like, the… the lane assist. And I don't what they call it, but they have lane assist and it has the like the… the sensors on the front. So it can gauge, you know the car in front of me and it can keep a fair distance when I'm on the highway and it it'll maintain that distance. But I it …it… it prompts you every 15 to 20 seconds like if you are too light on the wheel right? Or you know, if you have like one hand or whatever on the wheel and it'll be like, hey, make sure

you have your hands there. Right. So it doesn't allow you to cuz it'll just deactivate if it does that.

Interviewer 30:53
Right.

{General Discussion}

Stakeholder24_PoliceOfficer 36:13
And that's the most like, alarming thing when he was, like, told because he, the guy told me he was like…. he had it on Autopilot and I was like, you're in downtown Toronto on like you're it's 11:00 PM on a Friday and you're in downtown Toronto in the middle of summer. And I'm like, there's. … What are you doing, like, like? And I … I didn't like…. I… I… I had came from the same presupposition that, you know, you know, automated means, you know, hands free and all that stuff. Right. But.

Interviewer 36:24
Right.

Stakeholder24_PoliceOfficer 36:43
But, and so was he, apparently. But I was like, like, you know, my I was a little bit junior at the time. And I and my coach officer was like, no, you're behind the wheel, you have care and control of the vehicle. You're go…. You're …. you're responsible, right. So.

Interviewer 36:45
Yeah. Right, right.

Stakeholder24_PoliceOfficer 36:57
But yeah, I mean I and the whole time I was thinking I was like, OK, so you thought you was you were under the assumption that this vehicle was fully automated.

Interviewer 36:57
Yeah.

Stakeholder24_PoliceOfficer 37:06
And you wanted to process like everything that's going on down here or like we're at Bay and Front right now. Like there's like....

Interviewer 37:13
Right.

Stakeholder24_PoliceOfficer 37:14
Thousands of people all over the place or like eight different traffic lights. Like there's like,... like Ubereats cyclists or the one like, disobeying every single traffic law there is known to the HTA, right? So I mean, I don't know how you how it would it. It's sophisticated enough to even begin to process all of that information.

Interviewer 37:27
Yeah. It isn't.

Stakeholder24_PoliceOfficer 37:35
Yeah. And then yeah, there's yeah.

Interviewer 37:36
It isn't right, and most Tesla drivers will tell you they're constantly paying attention, right? And they can tell you incidents where the car.

Stakeholder24_PoliceOfficer 37:41
Yeah.

Interviewer 37:46
Veered off the road or was going somewhere something wasn't in that's way and it brakes. Something was in its way and it didn't brake. Like it's doing strange things every Tesla driver I've spoken to has a story, right? Or multiple stories, so they're aware it's.... But there are a few who don't read the fine print who don't pay attention when they're told what level 2 means, right? And they just press the button and keep going, right and unfortunately

Stakeholder24_PoliceOfficer 37:48

Yeah. Right.

End Transcription for analysis .... general discussion continued until 00:57:26 when Interviewer stopped recording and transcription