

Car Unlimited

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[The present episode focuses on self-driven cars that usually were equipped with limited memory. With time, a lot of changes are taking place to expand this memory. Artificial Intelligence is speeding up this improvement. Cloud platforms are being used that connect the experiences of hundreds of cars to provide better guidance in difficult situations. Efforts are on to alter the programming to avoid all accidents. Human drivers are not being banished altogether. They can use AI supported self-driving system as an assisting tool. The episode has the story of a car that can negotiate not only difficult road conditions but off-road emergencies. A kid is astonished to learn about all these from her uncle.]

[Little Sumi, a student of class eight, is hooked to his uncle Rabi's story that narrates the experiences with an intelligent car. Rabi is aged around forty and is a mechanical engineer by profession.]

Characters

Summi (Class Eight Students)

Rabi (Summi Uncle Age 40)

Richa, (Sumi's mother)

Barun (Summi's father) (Age 45)

P1 and P2 (Person in the crowd)

SI and Jamil (Dabha Wala)

Scene-I

Sumi: And then uncle, what happened? The car drowned in that river with all its passengers?

Rabi: You are not wrong in assuming that. But the car was not a normal one!

Sumi: Not normal? What do you mean uncle? It is only a four wheeler, not a human being!
How can it be something different, I mean abnormal?

Rabi: Cars can also be intelligent Sumi! Vehicles can be programmed to sense and sometimes even think!

Sumi: Think? (giggles) Like that car in the film? What was the name...yes...Tarzan! This is funny!

Rabi: Don't be partial to Bollywood, Sumi! Think like a global citizen. There are so many films on intelligent cars...

[Richa, Sumi's mother enters with tea and snacks.]

Richa: Yes of course. Right now what I recall is that Johnny Cab in the film Total Recall.
Here is your favourite Darjeeling tea Rabi.

Rabi: That was a game changer my dear bhabi-ji. (Takes a sip from the tea filled cup.) In that decade, I mean the nineties, we had a few more films that showcased self driven cars.

Richa: Yes, one was Timecop and the other...fifth...something like that...I do not remember clearly.

Rabi: The Fifth Element.

Richa: Right Rabi! The car in that film used to fly even!

Sumi: These are all backdated stories. I am getting bored uncle. You first complete your story or I won't talk to you!

Rabi: See bhabi, she always tries to blackmail me! Ok, I am getting back to where we left.

Richa: Story about a car? Things have changed so much, kids are no more eager to listen to mythological tales or Aesop's fables.

Sumi: There you start again ma! You will never learn to live in the present times.

Rabi: Oops! That's a very strong allegation bhabi! Anyways, I was telling the story of a car that was crossing a bridge over the Chel river in North Bengal during the monsoons. The incessant lashing of the rains had weakened the bridge and it collapsed.

Richa: You mean when the car was crossing it?

Rabi: Exactly! And the car fell into the flooded river with the three passengers and the driver in it.

Richa: That's so shocking! Everyone died?

Rabi: There lies the twist in the story. The car was built to survive such crises. It quickly went into an emergency mode, sensed its ambience and started reorienting itself.

Richa: Reorienting means? A car cannot become a submarine all of a sudden.

Sumi: These rivers are generally shallow uncle. Can a submarine cruise in such a stream?

Rabi: Bhabi, it seems that the mind of Sumi is now dwelling on terribly backdated items. I can tell without hesitation that she is thinking about Nautilus!

Richa: Nautilus? That science fiction thing? Jules Verne wrote about it in the late nineteenth century!

Rabi: Of course! Everyone knows that Nautilus is the fictional submarine captained by Nemo. But I am surprised that even Sumi is fascinated about it!

Sumi: Ok-ok, no need to taunt me anymore, I surrender. Yes, I was thinking about Jules Verne's novel 'Twenty Thousand Leagues Under the Sea'. Now tell me about the car. Did it take the shape of a submarine?

Rabi: No Sumi, it did not. With development in technology we might one day actually witness that but the car that fell into the river tried to survive differently.

Richa: Let me guess. Umm...did the car have anything like an air bag...I mean the sort of thing that inflates on a sudden impact and saves the driver?

Rabi: You are right on target bhabi! The attached air bags did the trick.

Sumi: I still cannot understand uncle! How can a car manage to inflate several air bags inside the stream to keep it afloat?

Rabi: The instructions came mainly from the sensors attached to the body of the car. Additionally there is a voice input system that receives signal. The driver did say 'We are drowning!' That left no doubt in the system about the next action to be taken.

Richa: Hmm...intelligent.

Rabi: Just a correction bhabi, artificially intelligent.

Sumi: AI! Now I get the whole thing! It's artificial intelligence that you were talking about. It means that this story is also a fiction. Nothing real (Lets out a sigh as a mark of disappointment.)

Rabi: Sumi, a citizen of the present time, thinks that artificial intelligence is fictional. What should I do to convince her bhabi?

Richa: I cannot be of any help in this matter Rabi!

Rabi: I can understand that. Ok, I shall take leave today but next Sunday I shall be back with more stories.

Sumi: More fiction?

Rabi: We shall see then! Bye Sumi, bye bhabi. Thanks for the tea. I shall have to rush to a meeting now. See you on Sunday:

Sumi: Bye uncle!

[Scene change music.]

[An accident has happened on the road in front of Sumi's house. A motorcyclist has been hit by a speeding truck. Local people have flocked around the injured biker who is lying on the road. Richa, Sumi's mother has also joined the crowd.]

Person1: How can a truck enter this road? It's a narrow lane only, not an arterial road of the city. This is not permitted.

Person2: It must have been brought inside by that contractor...

Barun: Which contractor?

P2: The one who is raising that building complex on the other side of the playground.

Barun: The biker is injured so badly!

P1: I have called the ambulance. It should be here soon.

Barun: Did the truck lose control? What happened actually?

P2: You cannot hold the biker innocent. These days young boys drive their motorcycles so recklessly...

P1: None of us were here when the accident took place. Even the shops are closed during these afternoon hours.

Barun: Where is the driver of the truck?

P1: Both the driver and his assistant has fled. Someone tried to call the contractor to confirm whether the truck is supplying materials to him but his phone is switched off.

Barun: Hmm ... I see ... but this must be reported to the police as well. They will have to make a note of this.

P1: Right. See...there...the police is coming...

[Sound of a police jeep approaching the accident spot. The jeep stops and a sub-inspector alights from the vehicle.]

Sub-Inspector: Clear off. Allow me to see the injured fellow first.

P1: Come, this way. See there ... he is bleeding profusely.

SI: Has anyone called the ambulance.

Barun: Yes, that has been done. Your good name please...

SI: I am Asim Ghosh, sub-inspector, Oxytown thana. And you are?

Barun: We all are residents of this area. We came out after hearing the sound of the clash and the cry of the injured biker.

SI: I see. The boy needs to be treated immediately. Let me do one thing, I shall carry him in my jeep to the nearest hospital. I can come back in the evening to collect the necessary details of the accident.

Person1: That will be very kind of you Mr Ghosh. We all be available in the evening for briefing.

SI: Ok then...constable put that fellow in our jeep. We need to stop the bleeding to save his life. Thank you everybody. I shall be back.

[There is a murmur as the biker is lifted into the vehicle 'Slowly', 'Carefully', "Oh, so much bleeding...". Then the jeep starts and speeds off from the spot. The crowd disperses and everyone returns to their home. Sumi was waiting for his father to know what has happened there on the street. Barun rings the doorbell and Sumi opens the door.]

Sumi: What happened papa? There was such a loud noise!

Barun: Hmm...a biker got knocked off from his motorcycle by a truck. Sumi, ask you mother to give me some water.

Richa: You sit down first, I am bringing water.

Barun: Sumi, the world is becoming so chaotic gradually. I shudder to think what your generation will face when you grow up!

Richa: Water...I was wondering what is going on there on the street...drink slowly Barun.

[Barun gulps down the glass of water.]

Barun: Ah (releases a sigh of satisfaction)...it's such a terrible sight Richa, the young boy lying in a pool of blood. But I must say that the sub-inspector is a kind person. He took him to the hospital in his jeep.

Sumi: Why do such accidents happen papa?

Richa: Because vehicles do not obey traffic rules.

Barun: And some of the drivers have scant regard for others' lives.

Sumi: Papa, can't we make the vehicles intelligent when human beings are refusing to apply their own intelligence?

Barun: Richa!

Richa: What?

Barun: What am I hearing? Is this our daughter Sumi or are we listening to some philosopher?

Richa: (Smiles) This has a little bit of history.

Barun: What history? Is she doing some online course on intelligent cars? Or has she borrowed some new publication from the school library?

Richa: None of that. Rabi was passing by last Monday and you know his fondness for Sumi! He dropped in and the two got engaged in a serious discussion about an intelligent car.

Sumi: No, that was only a fiction. Not a real story.

Richa: Ah yes, of course. Rabi and Sumi are of different opinions in this regard. Sumi thinks that artificial intelligence is all but fiction. Nothing of it has materialized in reality.

Barun: Now the whole picture becomes clear. Tell me Sumi, what do you expect from a car if at all it can be made artificially intelligent?

Sumi: Well...umm...it should be able to tell us how much traffic is ahead of us.

Barun: That is not a great deal. It is already there in pool cars, private cars, public vehicles. With all those satellites up in the sky and the GPS devices in our hand, the traffic situation can easily be viewed on your screen. Next?

Sumi: Then...ok...it can... say, take me to the lake if it is given the address and there it can park itself at the proper place without any difficulty.

Barun: That has also been taken care of my dear. Several companies who are interested in intelligent cars have already achieved this. Next?

Richa: It is dawning on Sumi that intelligent cars are facts and not fiction. Next I believe...

Sumi: No, you won't say...I will...next is that it will be able to avoid accidents like the one we have had today on that road!

Barun: Now is the real issue. Avoiding accidents. That can only be done when all other vehicles, cyclists and pedestrians are strictly adhering to the traffic rules.

Richa: You mean the intelligent car can just hit a pedestrian if she is crossing the road unlawfully, away from the zebra crossing?

Barun: Towards the end of November such an accident happened in Arizona of the US. The automated pool cab hit a woman when she was crossing the street on her bicycle and she was nowhere near crosswalk reserved for pedestrians.

Sumi: She died papa?

Barun: Unfortunately yes dear. The programming for that car didn't have any provision for such a jaywalker. The car did apply its brakes but only 1.3 seconds ago. That was not enough.

Richa: How sad! People must have rejected such a vehicle after that accident.

Barun: I am not sure about that but the agency operating the pool cabs said after the accident that they have made necessary changes in the programme.

Richa: What type of changes?

Barun: I cannot give you the exact details but the changes include the capacity to recognize people when they are not crossing the streets at designated spots, I mean zebra crossing or cross walk.

Sumi: But papa...

Richa: No more discussion now Sumi. You must finish your home task now. We all will be going out for a drive with Rabi uncle on Sunday and there you can have an awesome chat on automated vehicles.

Barun: Mom is right Sumi. Studies first. I also must get some rest now. The sub inspector will come back shortly for investigation. I shall have to be present there.

Richa: You heard what papa said? Now go to your study-table and finish your task.

Sumi: Ok mom, bye papa.

Barun: Bye dear!

[Scence change music]

[It's a day out for Sumi and his family along with Rabi. They have stopped for lunch at a road-side dhaba.]

Rabi: Hey Jamil bhai, send us some cold water first. We are thirsty.

Richa: You seem to be a frequent visitor here Rabi.

Rabi: At least once a month I come here for lunch. The place does not look very smart as you can see. But the food is very tasty.

(Jamil comes rushing in.)

Jamil: Namaste Rabi-ji, what would you like to have today?

Rabi: The best that you have. But my little nephew will not love the lunch if it does not end with her favourite butter-scotch ice cream! Keep that in mind.

Jamil: (Smilingly) Of course, of course. Give me a few minutes to arrange. (Jamil departs.)

Barun: Rabi, I do not think that the ice cream will be able to take the place of intelligent cars.

Rabi: I agree and I also know that Sumi is now convinced that artificial intelligence is making automated cars a whole lot better. But I didn't have a single question on that from Sumi today.

Richa: She was shocked to listen that intelligent cars cannot avoid accidents altogether.

Rabi: Oh I see! This is worrying you! See Sumi, we all go through evolution. The world of automated cars is no different. It is evolving to better safety levels. You have to be patient about that.

Sumi: No uncle, I believe I am expecting too much from a vehicle. A car is so small. Even if it has some memory, that will be very limited.

Rabi: Come on Sumi, the whole world is expecting improvements in automated cars. Do you know that a particular vehicle is not alone on the street. It is connected to other cars now through cloud services.

(Sumi looks up at the sky)

Barun: What are you looking at Sumi? It's not the rain clouds that your uncle is talking about. It is about an extended storage platform that connects the memory of hundreds of cars. Am I right Rabi?

Rabi: Pretty correct. Cloud storage means that much more effective advice is available to automated vehicles. Information Technology companies are tying up with automobile makers to make this happen.

Richa: Tell me Rabi, will automated cars be totally without human drivers?

Sumi: I also wanted to ask that uncle. We will miss Gyan bhai then...

Rabi: Who is Gyan bhai bhabi?

Richa: He drives the school bus. Sumi is very fond of him.

Rabi: Oh I see. Gyan bhai can easily continue with his job. But see Sumi, even he gets tired sometimes. At those moments he can leave the driving job to the AI system. He can relax a bit but he will be in overall charge of driving.

Sumi: Will the AI system ask for help from Gyan bhai?

Rabi: It may, it may not. Seeking help depends on the system. But try to think of it in this way. When someone is taking a driving lesson, he is turning the steering, applying the brakes, pressing the accelerator. But when he is about to commit a mistake, the teacher sitting beside him will take hold of the steering and save the situation.

Sumi: So AI system is the learner and Gyan bhai is the teacher. Right?

(Everyone joins the laughter in response to Sumi's comment.)

Richa: Ah, food has arrived. It smells so good.

Barun: Rabi has said that it tastes good as well. Let's try.

Rabi: Yes, yes. I am terribly hungry Sumi. Do I have your permission to start?

Sumi: Yes uncle. I am also hungry. (Giggles)

[Scene change music.]

[Rabi is driving the car. They are going for some sightseeing.]

Barun: I am travelling in your car after a long time. Have you made any changes to it Rabi?

Rabi: Do you notice any change yourself?

Barun: Let me see. Well, the outside hasn't changed much but the inside has some new gadgets. Are you trying to make your vehicle intelligent? (laughs)

Rabi: (Evades the question) Intelligent cars are somewhat like human beings. The whole of the intelligence cannot be transferred to its memory during its manufacture. It is a machine that must learn continuously. The sensors should continuously adapt to changing situations.

Richa: But the manufacturing process must have undergone some change to produce such vehicles?

Rabi: No doubt bhabi. New smart robots now work together with their human counterparts. AI helps in the overall production while sensing the work of human employees and adjusting their motions to avoid injuring them.

Barun: But what I gather from your discussion is that the memory space, the guidance availability- these things have improved a lot.

Rabi: Further the cars take very good care of themselves. They warn the owner of damage, leak and other system faults that might get her into trouble.

Sumi: But we have not talked about the car that fell in the river. Was that real?

Rabi: What do you think now? Real or fiction?

Sumi: I am so confused uncle. Please tell me.

Rabi: Well my dear, you are presently driving in the same car that fell into the flooded river.

Sumi: What! You were...

Rabi: Yes I was in the driver's seat and the rest three were my partners. In fact they are still with me and our company is trying it's best to make this vehicle better.

Barun: So the car actually took you out of the river?

Rabi: The car can propel itself in water.

Richa: Like a hovercraft?

Rabi: No, neither a submarine, nor a hovercraft. It just floats and uses the steam to push ahead.

Sumi: I can't believe this!

Rabi: Tell me what can I do to make you believe that you are riding a vehicle with AI powered guidance? Shall I drive straight into some river?

Richa: That won't be wise at all.

Rabi: Well then, I shall tell you something that you did not notice actually.

Barun: What?

Rabi: The breakfast today was pretty heavy and bhabi was saying that we might have to skip lunch. Remember?

Richa: Yes of course.

Rabi: But we all felt hungry when it was time for lunch. How did that happen?

Sumi: You mean to say that the car did something to our appetite?

Rabi: The car created small vibrations in the seats and played a piece of music. These two in combination is generally known to help in digestion and create appetite. I mean it works for most of the passengers.

Barun: And it worked for us today.

Rabi: Small additions to keep up the mood of the passengers.

Richa: I can't believe this.

Rabi: Sumi, look straight ahead. We are nearing the fountain. See! Natural beauty! Surpasses everything that we create artificially. I shall stop here to take a snap.

Barun: Who will take the snap? You or your intelligent vehicle?

[Everyone laughs and the episode comes to a close.]

