MICHELE BUONO OFF-SCREEN
Nevada desert, Arizona behind them and a hundred miles to their destination. So many stories around here that never stop. They arrive at a new frontier and cross it to go further, always.
Las Vegas. Two cars chase each other around the racetrack. One hundred, one hundred and fifty, two hundred and pushing harder and harder. They watch each other, they study each other and when they understand the best moment to overtake, only then do they accelerate. Is that all? - you may be thinking - No, it’s not. The thing is that there's no one behind the wheel. There isn't even a place for the driver. These cars do everything themselves: they see, reason and decide. It's not just about racing. These cars are writing a bigger story and there's a lot of Italy in it.

SIGFRIDO RANUCCI IN STUDIO
And it is the best part of Italy, we will see which one it is. The one that is contributing to the epoch-making transformation of the history of transport, namely a project, that of the self-driving car. This also allows us to hypothesise about the future and imagine a car that picks us up from our homes without a pilot, even when we are old, and takes us where we need to go, and then it might even drop us off and go to pick up another person. So, if we don’t drive this car, is there any point in owning it? Because then it would be a shared service with other people. And if we don't own it, then we could reduce the number of cars, the number of vehicles in the city. This will imply more space available for green areas, less environmental impact, less energy consumption, lower social costs because - if an artificial intelligence is driving, perhaps the risk of an accident is much closer to zero. However, this artificial intelligence must be trained well, and in this field we Italians are among the world's leaders. But few people know this. Now, a prestigious Italian company, Dallara, which designs and builds vehicles that then race on the tracks of Indianapolis, came up with an idea: "why don't we make these driverless cars race and push them to their maximum potential, driven by an artificial intelligence"? Well. This challenge was taken up across the ocean by many sponsors, by the state of Indiana and then by 37 universities around the world. Now, for the first time in history, unmanned vehicles will be racing and speeding at three hundred kilometres per hour. Who won? A million dollars is up for grabs. But first the algorithms have to be tested in a virtual race. Our Michele Buono.

MICHELE BUONO OFF-SCREEN
It all starts in the province of Parma. Varano de' Melegari, this is Dallara. Racing cars, road cars and Indycars, the ones from the Indianapolis 500. One day at Dallara they asked themselves: "What if we allowed a driver to drive a car before it was built?". And that's how this simulator took shape. Only the object, the drivers and the engineers are real, the rest is mathematical modelling.

MR. DALLARA, ENGINEER
We change some numbers, we tell you now you will drive a longer car, a shorter car, a car with more horsepower and you tell us if this car is more drivable.
MICHELE BUONO OFF-SCREEN
The advantages? The ability to quickly simulate the most extreme conditions of a vehicle and to correct the design live, before going into production, on the track or on the road.

ANDREA PONTREMOLI – CEO OF DALLARA GROUP
Everyone advised us against it because it was impossible. To paraphrase Einstein, we hired all new graduates who didn't know it was impossible and they did it.

MICHELE BUONO OFF-SCREEN
Then Dallara outbid themselves: what if we make these cars run on their own, without the driver?

MICHELE BUONO
You basically said to a bunch of kids or so: would you be able to drive cars around the Indianapolis track at 300km/h without a driver?

ANDREA PONTREMOLI – CEO OF DALLARA GROUP
We asked everyone, but it was the young people who took up the challenge because we all have bias when it comes to this: thinking that it would be impossible, very difficult, very expensive and it would take a long time.

MICHELE BUONO
What did you put?

ANDREA PONTREMOLI – CEO OF DALLARA GROUP
We put the cars.

MICHELE BUONO
The rest, the intelligence that needs to be on board?

ANDREA PONTREMOLI – CEO OF DALLARA GROUP
The intelligence on board will be provided by these guys from the university.

MICHELE BUONO OFF-SCREEN
Universities from all over the world take up the challenge: they have to prove that they have a software and algorithm project up to scratch. Only nine countries can win the selection. Italy is there. Two universities: Politecnico di Milano and the University of Modena and Reggio Emilia.

MICHELE BUONO
What is the challenge?

MARKO BERTOGNA – FULL PROFESSOR OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
Obviously, it's a speed challenge, it's about taking the car to what is called the limits of handling, the limits of controllability. When it's operated by human beings, they do it with a whole series of sensations that the driver has, which are difficult to transfer, to encode. In this case, the main challenge is to foresee what could go wrong, a gust of wind, a wheel that steers a bit too much...

MICHELE BUONO OFF-SCREEN
The unexpected then becomes codes and algorithms to simulate the conditions of a race and instruct the vehicles before going on the track.
LUCA BARTOLI - STUDENT OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
We are teaching this car all the parameters so that it can steer and accelerate as a regular person would.

MICHELE BUONO OFF-SCREEN
The first test is in virtual reality. The Indianapolis track is simulated and the algorithms are driving, and only if they are able to avoid making a mess, then the race will really take place. The cars accelerate, pull alongside each other, overtake each other, some go off the road, but in the end they are all safe. In virtual reality. The Politecnico di Milano won and took home one hundred thousand real dollars. The race - the one in reality - can now take place. This is not a simulation: Indianapolis is really flowing under the seats. A million dollars up for grabs for whoever goes the fastest and doesn't crash the car. Indiana roads. This is the Indianapolis Motor Speedway. Now it's all real: the cars, the track, the turns and the obstacles.

MARKO BERTOGNA – FULL PROFESSOR DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
This is it! I'm so excited today, guys, I came here and I had goosebumps, it's a wonderful thing. Beautiful, beautiful, beautiful!

MICHELE BUONO OFF-SCREEN
One week to go before the race and many more tests. It's the first time in history that driverless cars are running automatically.

MICAELA VERUCCHI - PHD IN COMPUTER SCIENCE - MODENA - REGGIO EMILIA UNIVERSITY
If we hit the pylon we're going to crash into it... whatever! We've lost a GPS antenna completely and so the car's come to a standstill.

MICHELE BUONO OFF-SCREEN
It's as if they can see the cars: they perceive curves and straights, they know when it's time to steer and brake. Dallara set up the cars, the university teams in the race taught them to think for themselves. Dallara USA, Indianapolis office. What did you put in the cars?

STEFANO DE PONTI – CEO OF DALLARA USA
Basically, everything you see is the hardware that replaces the driver through a software operated by the students and the university staff, that gives commands to the driver/computer to do all the driving operations and make the car autonomous.

ALEJANDRO JUNCOS – JUNCOS TECHNICAL COORDINATOR
The cars are equipped with radars, cameras and computers that send signals to various electronic motors to move the steering column, the wheels and act on the braking system.

MICHELE BUONO
Where is the brain?

ALEJANDRO JUNCOS - JUNCOS TECHNICAL COORDINATOR
It's here. There are five computers that sit in the pilot's seat. They gather all the information that comes to them from the cameras and the radar - there are also GPS, here they are - and in the snap of a finger they are able to make a decision.
MICHELE BUONO
Where are the eyes?

ALEJANDRO JUNCOS - JUNCOS TECHNICAL COORDINATOR
Eyes are everywhere!

MICHELE BUONO
Does it have more eyes than a human being?

ALEJANDRO JUNCOS - JUNCOS TECHNICAL COORDINATOR
Of course! And they see 360 degrees the whole time the car is running.

MICHELE BUONO OFF-SCREEN
There are two days left before the race and you still need to run a lot of tests. You teach the cars the route, tell them how many laps of the track to do and how fast to go. They do the driving. Trajectory respected; speed as well. It's the turn of the Politecnico di Milano. Function test done; off we go.

FILIPPO PARRAVICINI – PHD STUDENT OF ENGINEERING AND AUTOMATION POLITECNICO DI MILANO
I think we've been spinning but haven't touched anything....

MICHELE BUONO OFF-SCREEN
The car came to a sudden halt as if it had seen danger but there was nothing in front of it. It may have seen too much, perhaps a shadow perceived as an obstacle. They are learning how to behave in cars.

FILIPPO PARRAVICINI – PHD STUDENT OF ENGINEERING AND AUTOMATION POLITECNICO DI MILANO
Anyway, there was an emergency brake that was handled more or less well, the car did a 360, stopped in the middle of the track, we didn't touch anything, so we're safe. It picked up so much data at the highest speed ever reached by anyone here.

MICHELE BUONO OFF-SCREEN
235 kilometres per hour. It is a story that is written day by day. It's unprecedented. There are no precedents. It's like reinventing cars: you can just try, correct and try again. In the morning on the track and in the evening at your base in Indianapolis.

AYOUB RAJI – PHD STUDENT OF COMPUTER SCIENCE - MODENA - REGGIO EMILIA UNIVERSITY
What we then do every day is simulation testing, look for possible bugs - what we call bugs – which are failures of the code, and even try to make it fail, and then find that extreme case and solve it before going on the track again.

SERGIO SAVARESI – PROFESSOR OF AUTOMATIC VEHICLE CONTROLS POLITECNICO DI MILANO
The intelligence for tomorrow is all done. For tomorrow we just have to, in quotes, change a few parameters we have to tell it "when you're coming out of turn 4, accelerate very fast", everything else it already knows how to do. We come out of turn 4 at 90 mph, we give it a very high reference and at this point, we accelerate... we pull fourth to 6500 rpm not 7000 rpm.

MICHELE BUONO OFF-SCREEN
What should not happen in a race is for cars to go crazy, get destroyed and do a lot of damage. The future is being written, of course, but there is investment, sponsorship and the image of the Indianapolis Motor Speedway at stake.

MICHELE BUONO
It is the first race of this kind, what made you say well, let's take the risk?

DOUG BOLES – CEO OF INDIANAPOLIS MOTOR SPEEDWAY
Our DNA. This racetrack has been around for more than a hundred years and in 1909 - when it was built - the new technology was the car. The self-driving race - therefore - is not a risk for us but an opportunity to prove a new technology that will advance the concept of motor vehicle, and that is bringing the brightest minds from around the world to compete here, at the Indianapolis Motor Speedway, just as we have done with the 500-mile race since 1911.

MICHELE BUONO OFF-SCREEN
Once the circuit was built, they invented the race: after 200 laps the 500-mile race was born, with lots of innovation to think about and try out. On 30 May 1911, Ray Harroun arrived on the Marmon Wasp with a technological innovation on board: a mirror to see what was happening behind him while he was driving. Previously there was a mechanic sitting next to him, looking all over and reporting back. Now there's no mechanic for Ray, the car is lighter and that's how he won that 500. The rest is history, for the rear-view mirror and safety.

MICHELE BUONO
How do you see the impact of self-driving cars on the automotive industry?

DOUG BOLES – CEO OF INDIANAPOLIS MOTOR SPEEDWAY
It will build the basis - I believe - for a lot of car technology in the next two decades and how we will organise transport in the future. We will see the fruits in our everyday lives.

SIGRIDO RANUCCI IN STUDIO
It is another one with vision, Mr. Doug Boles who is the CEO of Indianapolis Motor Speedway. He has willingly invested in this technology because he knows it will revolutionise the world of transport. And he also has a certain interest because he wants to attract the best talent in the world to his area. That's why the US universities have come: from the prestigious MIT in Boston, Berkley, the University of Indiana and Virginia, the West Point Academy in Hawaii. Then they come from India, South Korea, but also from Europe: the Germans from the Technical University of Munich, and then our two universities, the Politecnico di Milano and the one of Modena Reggio Emilia, together in nine teams. Now, what do these guys have to do? They have to train the artificial intelligence: the cars are launched at speeds close to 300 kilometres per hour and they have to teach the artificial intelligence to react to unexpected events. The cars have 360-degree eyes - cameras and radar - that send images and precise inputs to computers, which then transform them into inputs to engines that sometimes accelerate, sometimes steer, sometimes brake.
Only when there is a pilot in the flesh, it is he who reacts according to his perceptions. In this case, there is no driver, so the artificial intelligence has to be trained to cope with the unexpected: a gust of wind, a turn, an obstacle. In short, you have to train the algorithm for the unpredictable. In this race at Indianapolis, the cars, bodies and engines are all the same: all Dallara. The difference will be made by whoever trains and builds, or writes the intelligence algorithm that guides them. The race this time is to reach the maximum possible speed and try not to go off the road or get stuck. A million dollars is up for grabs. Who will win it?

Michele Buono Off-Screen
Everything is ready at the Indianapolis oval racetrack. There is only one type of car, the Dallara Av-21, because it is the algorithms that are competing. Forty thousand lines of code, on average, will drive these cars. All teams have checked and rewritten lines to the last.

Michele Buono
The latest corrections you have made?

Micaela Verrucchi – PhD in Computer Science - Modena - Reggio Emilia University
We did them last night and they went well.

Michele Buono Off-Screen
Indianapolis Motor Speedway. The world’s first driverless car race is about to begin. It will be a speed race. Six laps of the track, one car at a time, and the first three cars will go through to the final. Politecnico di Milano starts first, the manoeuvres are perfect, the average speed is high, it has exceeded 200 km/h, a little faster than the Germans from Munich. University of Modena Reggio Emilia, 140 miles the speed at the moment, over 225 kmh. The car is behaving well. It sees the pylons, slows down, avoids them and picks up speed. It's going faster and faster.

Marko Bertogna - Full Professor of the Department of Physics, Computer Science and Mathematics - Mo-Re University
Michele! It's still long, it's still long!

Michele Buono Off-Screen
He senses the corners, the car scales and chooses the best line. Remember, there is no driver. The car is driving itself. For the American and South Korean universities, the race ends in the semi-finals. The best algorithms and fastest cars are from the European teams: Technical University of Munich, Politecnico di Milano, University of Modena and Reggio Emilia - at the top of the rankings - go through to the final.

Marcello Cellina – Automation Engineer Politecnico di Milano Polimove
It worked this morning, there is no reason why it should not work this afternoon.

Michele Buono Off-Screen
Politecnico di Milano. Just enough time to warm up the tires and the sensors detect that you can increase your speed. Milan goes fast. Peaks of over 200 kilometres per hour on bends. He's pushing harder on the straight. Telemetry is reporting something unusual.

Michele Buono
What happened?
FILIPPO PARRAVICINI – PHD STUDENT OF ENGINEERING AND AUTOMATION POLITECNICO DI MILANO
The car was good, the controller was good, we lost the first GPS after the first lap and there we crossed our fingers, we said let's hope it sticks. Stefano, our tracking expert was looking at the telemetry, he saw the second GPS going and said we're gone, it's over, fifty metres later we hit the wall and that was it.

MICHELE BUONO OFF-SCREEN
This competition is about creating the extreme conditions of an autonomous driving system to flush out all the problems. The GPS didn’t hold up at such speeds and vibrations. The German car starts. The Munich team sets the speed slightly lower. They don't want to risk it. Modena Reggio Emilia. The Italians are pushing hard. The car is going over 250 kilometres per hour. Telemetry is normal. Look out! Something is not going right. The car is slowing down.

MICHELE BUONO
What happened?

MARKO BERTOGNA – FULL PROFESSOR OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
We had done the best lap of all, but a last minute bug got us, at the very last moment. The guys have been great, we have proved that Italy was there, Europe was there, we were making a great record, but a bug at the last moment, a 3 instead of a 4 and...

MICHELE BUONO OFF-SCREEN
Human error. There were six laps to do, two warm-up laps and four speed laps. The team wrote in the setting that the speed laps were 3 instead of 4, so the car slowed down because it complies with the rules and the Germans won. Prize: one million dollars. There was no second prize money, but the American organisation considered the Modena-Reggio Emilia team the moral winner of the competition - their car was the fastest - and wanted to award them one hundred thousand dollars.

MICHELE BUONO OFF-SCREEN
It's not just about racing, we said. These cars are writing a bigger story: a new way of making humanity move.

FILIPPO PARRAVICINI – PHD STUDENT OF ENGINEERING AND AUTOMATION POLITECNICO DI MILANO
In fact, you've proven that when you want to take that car to 50 mph in the city, you can do it, and that will certainly speed up the process of the spread of self-driving cars.

PAUL MITCHELL – CEO OF ENERGY SYSTEMS NETWORK
And not only in cities. It can work on motorways, practically everywhere.

MICHELE BUONO
What would be the impact on society?

PAUL MITCHELL – CEO OF ENERGY SYSTEMS NETWORK
It will save many lives because autonomous vehicles will be safer than human-driven vehicles and will help reduce energy consumption, so it will be good for the planet.
MICHELE BUONO
Why are you investing in this story?

ERIC HOLCOMB – GOVERNOR OF INDIANA
Today on this track we met the future of mobility, the future of transport, smart roads, smart vehicles, smart energy, and we want to lead the way in innovation of how we move and how we transport goods.

MICHELE BUONO OFF-SCREEN
This is the aim of the American organisers, private and public sponsors: to be the first to own this technology that they have seen handled so well by a German and two Italian universities.

MICHELE BUONO OFF-SCREEN
Italy, Modena. An artificial intelligence system for self-driving cars for private transport is being trained at the university's department of physical and computer sciences.

MORENO RAZZOLI – STUDENT OF COMPUTER SCIENCE - MODENA - REGGIO EMILIA UNIVERSITY
Right now I am generating a data set that will be used by artificial intelligence to learn how to tell the difference between a car and a pedestrian, a cyclist and so on and how to locate them in three-dimensional space during a phase called training.

MARKO BERTOGNA – FULL PROFESSOR OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
It's like teaching a child: you really need a lot of examples for a neural network to be trained, tens of thousands.

MICHELE BUONO OFF-SCREEN
The system self-learns and understands how to behave from the moment the passenger writes down the destination, what speed should be kept and all the rules to respect. What to do when it spots a zebra crossing, or people walking around the car or wanting to cross.

MICHELE BUONO
So is it possible to think of a fully fledged autonomous mobility system in an urban dimension?

SERGIO SAVARESI – PROFESSOR OF AUTOMATIC VEHICLE CONTROLS POLITECNICO DI MILANO
Surely in 10/15/20 years at the latest we will see our cities with fully autonomous cars that could revolutionise our mobility model.

MICHELE BUONO
So this is the paradigm shift from owning a car to using a transport service, because if I call it up and it takes me where I need to go, then owning a car will no longer be necessary.
Certainly this is the revolution: the complete change of model from car ownership to public service.

When fully operational, by how much could the car fleet be cut?

Forty million cars today, four million in this future with a completely different model of mobility.

We are obviously only talking about Italian numbers. From 40 million to 4 million that will be on our roads. It goes without saying that on a global level the impact would be far more important and significant in terms of space, harmful emissions and also lower social costs. We are now at the dawn of a new era of mobility, but also of humanity, because these vehicles will be running in so-called smart cities, on smart roads with optimised energy. Hopefully also intelligent energy. The Americans know this, that's why they are investing. They want to be the first and they believe it. And it doesn't even seem true to them that they have the best cherries in the basket.

They have researchers who are the most advanced in terms of technology and knowledge, and who are also able to achieve the set objective in a very short time. As long as they pay, they are able to take advantage of the talent that has been trained by other universities: German or Italian universities. We, on the other hand, lacking an ecosystem to welcome these talents, can only risk having them stolen from under our noses. It's as if we had oil or gas deposits and then in the end we gave away the barrels, we gave away the gas. It's a real shame because we are talking about the industry of the future: automation, mobility, the possibility of creating new professions. That is why Dallara and the Americans believe in it, and this time they are moving the racetrack to Las Vegas. It will be a little more complicated because this time the artificial intelligence will have to determine, speeding at 300 km per hour, how, where and when to overcome an obstacle. This time the future is at stake.

Three months after the first world competition, they are proposing another competition and want to raise the level of the challenge.

What did you learn in Indianapolis that prompts you to ask for an even more complex challenge?

We have realised that it is possible to go fast but it is not enough, we have to go further. The self-driving vehicles, when they are on the market, will not travel one at a time but they will travel on roads and highways at the same time, they will cross and overtake each other at 70, 90 miles per hour. So we need to run this test now.

Challenge accepted. Nevada roads. Three months later, self-driving cars will have to race and overtake each other at the Las Vegas Motor Speedway.
MARKO BERTOGNA – FULL PROFESSOR OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
Compared to Indianapolis, it's much more difficult because we have to overtake the other vehicles and you don't know how they're going to behave, how fast they're going to go, how fast we're going to overtake, so it's all a bit of a question mark.

MICHELE BUONO OFF-SCREEN
The competing teams have already written the algorithms, now they have to test them on the track, collect the data day by day and fine-tune them before the race. University of Modena and Reggio Emilia, Las Vegas base. Like every evening, they watch the morning practice video and update their strategy. Chase on the same trajectory, one of the two cars is increasing in speed, it has the other car in front of it, what is the reasoning of the car?

MICALEA VERRUCCHI – PHD IN COMPUTER SCIENCE - MODENA - REGGIO EMILIA UNIVERSITY
It recognises it as an obstacle and because it has a higher speed it understands that it must overtake it otherwise it would collide with this obstacle.

MICHELE BUONO OFF-SCREEN
Their algorithm evaluates within seconds among dozens of different options and decides the optimal trajectory to avoid the obstacle. Overtaking and collision avoided. This morning, the team from the Polytechnic is travelling in the direction of Arizona and Yucca. There is a very long track in the desert that is perfect for a test run: launch the unmanned car to the limits of what is possible and see what happens. At Indianapolis, the GPS couldn't cope with the high speeds. The guys have collected all the data, analysed all the possible sources of failure, and now they want to understand and seek revenge. The start. The car picks up speed. The Dallara Av 21 is going faster and faster. It is exceeding 140 mph; 150, 160 and more; the car is heading towards a speed never reached before by a self-driving car. It goes over 175 miles per hour, at 175.96 it locks up, that's over 282 kilometres per hour. Meanwhile a world record has been broken and the guys have collected the data they need. Now the race is in Las Vegas. Eliminators for the final.

MICALEA VERRUCCHI – PHD IN COMPUTER SCIENCE - MODENA - REGGIO EMILIA UNIVERSITY
271 will be the maximum speed.

MICHELE BUONO OFF-SCREEN
Italian universities once again lead the way and go into the final with the Technical University of Munich and the team from the University of Seoul, South Korea.

MARKO BERTOGNA – FULL PROFESSOR OF THE DEPARTMENT OF PHYSICS, COMPUTER SCIENCE AND MATHEMATICS - MO-RE UNIVERSITY
The two Italians first, it's a good thing for our country because there are people here who work on these things.

MICHELE BUONO OFF-SCREEN
Round one: Politecnico di Milano vs. Seoul University.

We managed to overtake going faster than 170 kilometres per hour. They failed, they withdrew from the competition so we won this elimination round.
**MICHELE BUONO OFF-SCREEN**
Milan wins, Seoul is out. Now it's Modena Reggio Emilia's turn against Munich. The start. The two cars pick up speed. They look at each other, study each other, make quick calculations on what's around them to decide the best moment to overtake. The distance shortens, the car from Modena is approaching the German car, is on the same trajectory and decides that the moment to overtake is now.

Germany is back in the lead. Modena! Monaco... Modena is out. Last race for the victory now. Italy is represented only by the Polytechnic of Milan. They'll have to challenge the Germans from the Technical University of Munich. The start. The two cars are choosing their trajectories. They're gradually increasing their speed Milan... Munich... Milan is in the lead.

**MARCELLO CELLINA – AUTOMATION ENGINEER POLITECNICO DI MILANO**
We are now ahead.

**MICHELE BUONO OFF-SCREEN**
Germany is back in the lead.

**MICHELE BUONO OFF-SCREEN**
Milan accelerates.

We are ahead again.

**MICHELE BUONO OFF-SCREEN**
It touches almost 280 km/h. The Munich car doesn't give up, it tries to overtake... the Politecnico di Milano has won.

**ANDREA PONTREMOLI – CEO OF DALLARA GROUP**
These guys have come up with some incredible things. Today we saw this car doing over 280 kilometres per hour with autonomous driving, it's an impressive thing, and I saw on the track for the first time an overtaking between two autonomous cars. Maybe we don't technically realise what it means to have done this.

**SIGFRIDO RANNUCCI IN STUDIO**
Perhaps we will understand in the future when having left room for imagination will no longer be important. That kind of imagination is based on knowledge. The computer is incredibly fast and accurate, but it is stupid: it does not give the benefit of the doubt. Men, on the other hand, are incredibly slow and inaccurate, but are endowed with intelligence. When we talk about Artificial Intelligence, it is nothing more than putting the speed of a computer at the disposal of man's experience and intelligence. The result would be an instrument with incredible potential, perhaps incalculable at this time. It is obvious that the future of mankind will depend on what it is able to build. On 26 April, NASA will make the Cape Canaveral base available to the Politecnico di Milano. This is the shuttle's landing strip, which is about 5 kilometres long. It will be made available because it wants the Politecnico to attempt a record, that of breaking the 300 kilometre per hour barrier for an unmanned self-driving car. Good luck to Politecnico. On the other hand, we risk losing and having our talents stolen, the most precious asset for a country, its human resources, and thus losing a piece of the country's potential, which is important because it is that piece of our country that knows how to control technology, otherwise we will just have to put up with it.