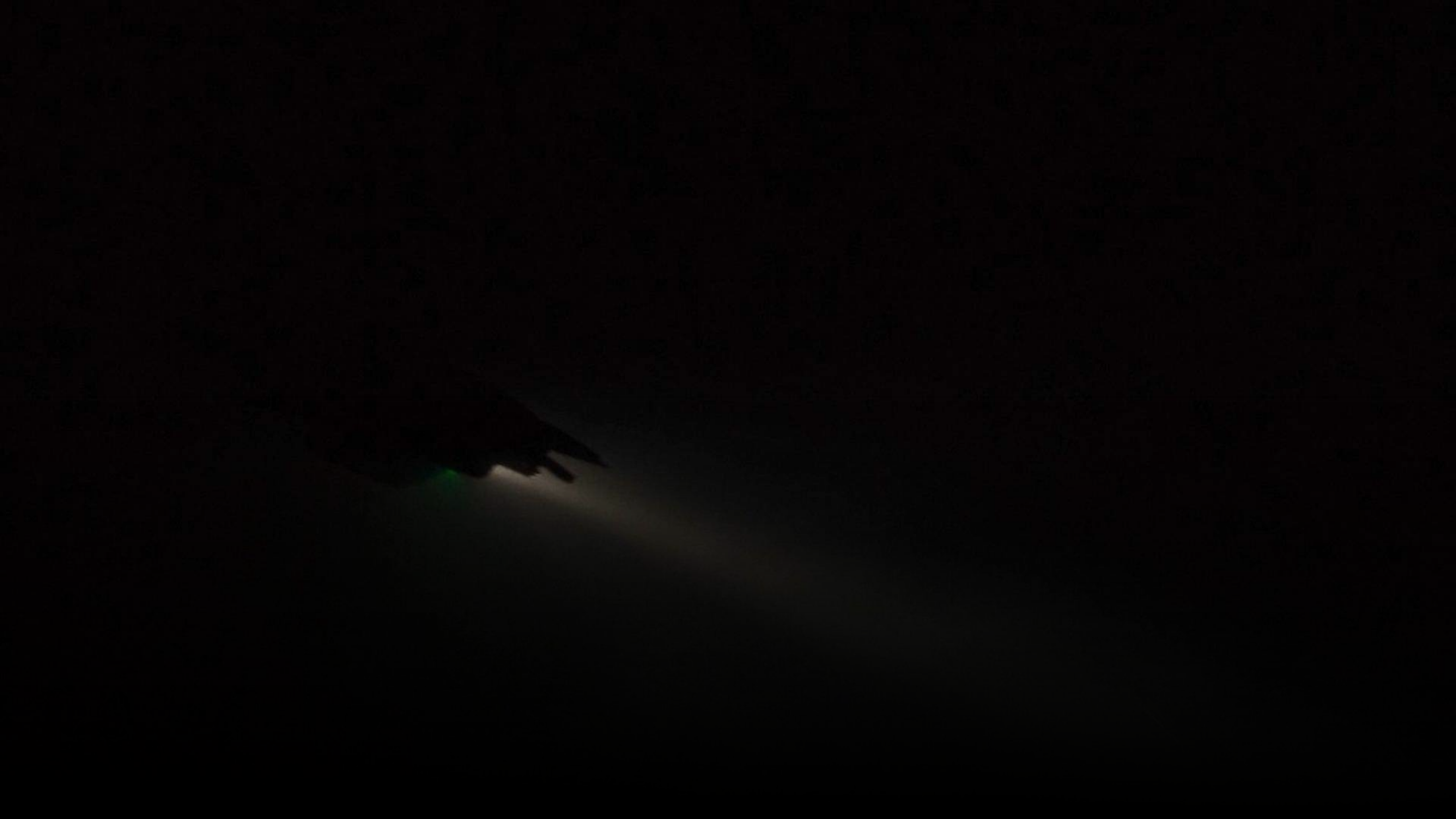
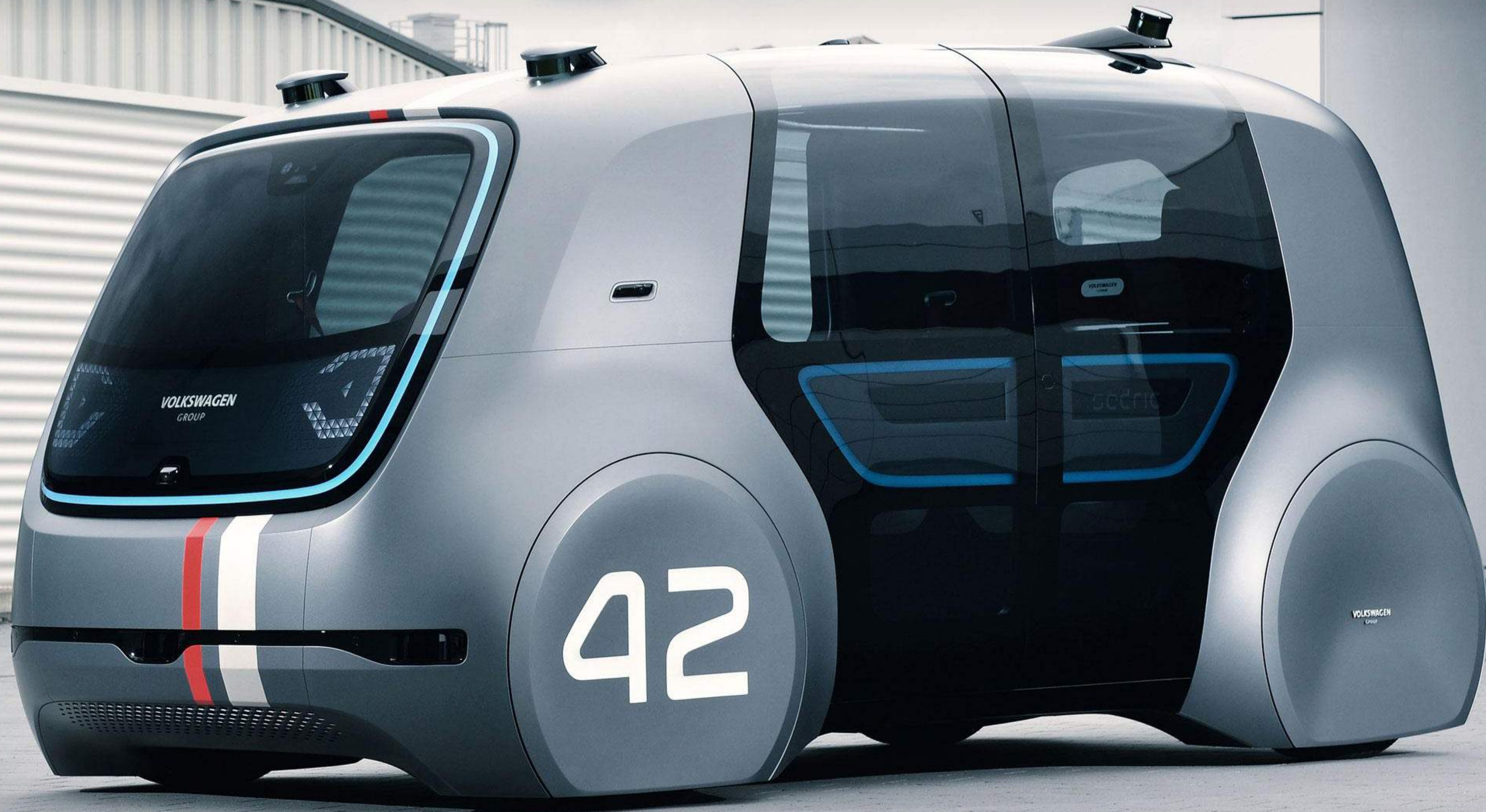


ROBORACE



competitions for all vehicle classes

ROBOT CARS



ROBOT VANS



ROBOT TRUCKS



ROBOT MOTORBIKES



FUTURE PEDESTRIANS



Boston Dynamics



competitions in the most extreme environments

SMART CITIES



MOUNTAIN ROADS



RACE TRACKS & FREEWAYS



EXTREME TEST TRACKS



competitions that fuse the real and virtual together

eSPORTS ARENAS



PLACE 11 OF 24

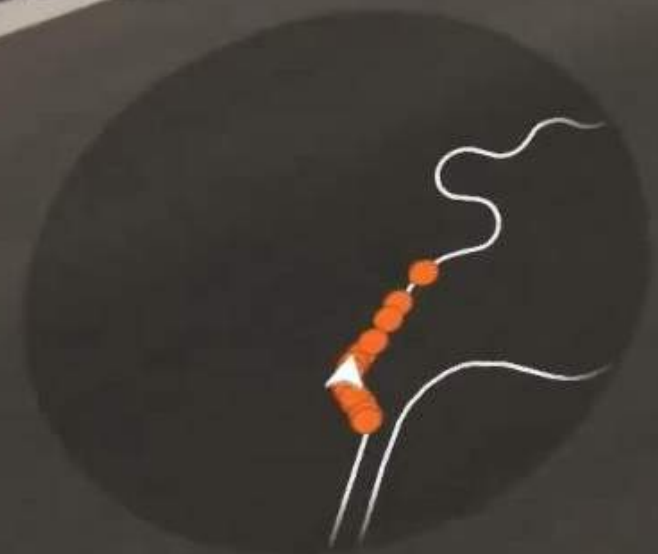
VIRTUAL GAMES

00:48.432

CURRENT LAP 00:45.578



LAPS 1 OF 2

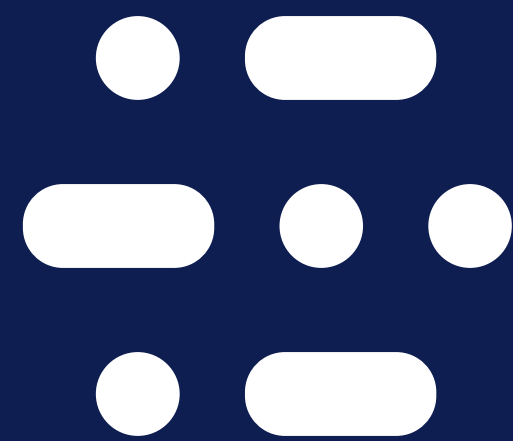


PRESS (Y) TO REWIND



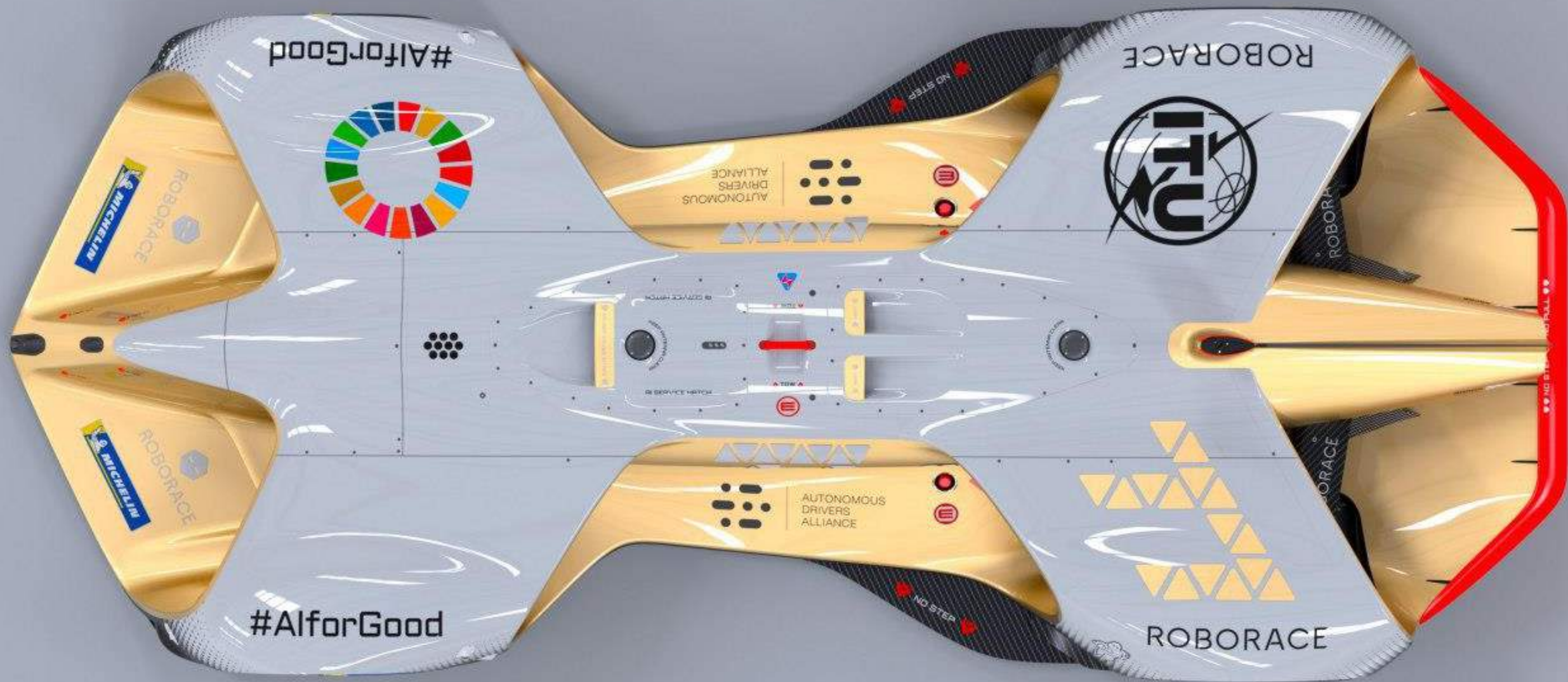
IN REAL-LIFE GAMES





AUTONOMOUS
DRIVERS
ALLIANCE

motorsport as #AlforGood



When **AI** becomes our **driver**, **co-driver**, **guardian** & **instructor**...

...what should our **minimal performance** expectation be?

Should **AI** be held to same **legal standards** as **human** drivers?

motorsport's real-time driver performance assessment



Race Control field monitoring of driver behavioural performance

LAP
68 / 71

BATTLE FOR 1st

1	LECLERC	
2	VERSTAPPEN	
3	BOT	+14.661
4	HAM	+5.014
5	VET	+0.978
6	NOR	+45.088
7	GAS	+4.379
8	SAI	+9.776
9	RAI	+1.124
10	GIO	+3.238
11	PER	+1.593
12	HUL	+1.708
13	RIC	+5.226
14	STR	+3.901
15	ALB	+2.585
16	GRO	+10.434
17	KVY	+14.954
18	RUS	+20.637
19	MAG	+25.793
20	KUB	+34.610



PIRELLI

PIRE

LAP
69 / 71

	Interval
1 LEC	
2 VER	+0.334
3 BOT	+14.290
4 HAM	+4.266
5 VET	+0.960
6 NOR	+46.033
7 GAS	+5.569
8 SAI	+9.408
9 RAI	+1.018
10 GIO	+2.643
11 PER	+1.545
12 HUL	+3.946
13 RIC	+2.321
14 STR	+5.049
15 ALB	+2.052
16 GRO	+10.990
17 KVY	+15.629
18 RUS	+20.943
19 MAG	+25.196
20 KUB	+37.428



1 LECLERC		DRS	299 KM/H	2 TURN	2 VERSTAPPEN	320 KM/H	DRS	
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behavioural prediction is critical

It starts with a **universal** assumption that all drivers are;
“**aware, willing** and **able**” to avoid collisions...

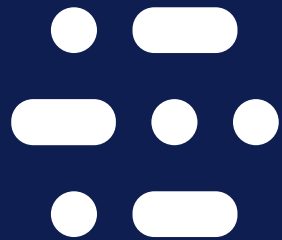

..and the recognition of behavioural **intent** that may conflict with this universal “**aware, willing** and **able**” assumption

we **regulate** based on **intent**

Reckless driving: ...wilful or wanton disregard for the safety of persons or property

– USA Florida Statutes, Section 316.192

Being **drunk**, **drowsy** or **distracted** violates the **aware**, **willing** and **able** assumption so we **regulate**, **educate** and may even **modify** our own behaviour to **mitigate** the **risk**

		
Driver	ADA Sporting Regulations (Rules of the Road)	UNECE WP1 Convention on Road Traffic (Rules of the Road)
Vehicle	ADA Technical Regulations	UNECE WP29 Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles...

“Every moving vehicle or combination of vehicles shall have a **driver**”
(Convention on Road Traffic 1968).

"Driver" means any person who **drives** a motor **vehicle** or other vehicle (including a cycle), or who **guides cattle**, singly or in herds, or flocks, or draught, pack or saddle animals on a road.

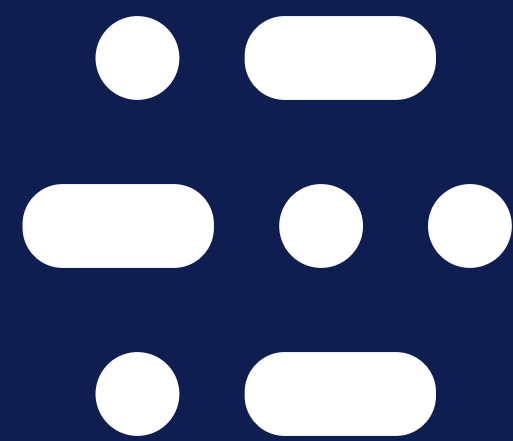
Convention on Road Traffic 1968

in the future who is the **driver**?

in **motorsport** it's clear...

AI software **drives**

robotic vehicle platforms are **driven**



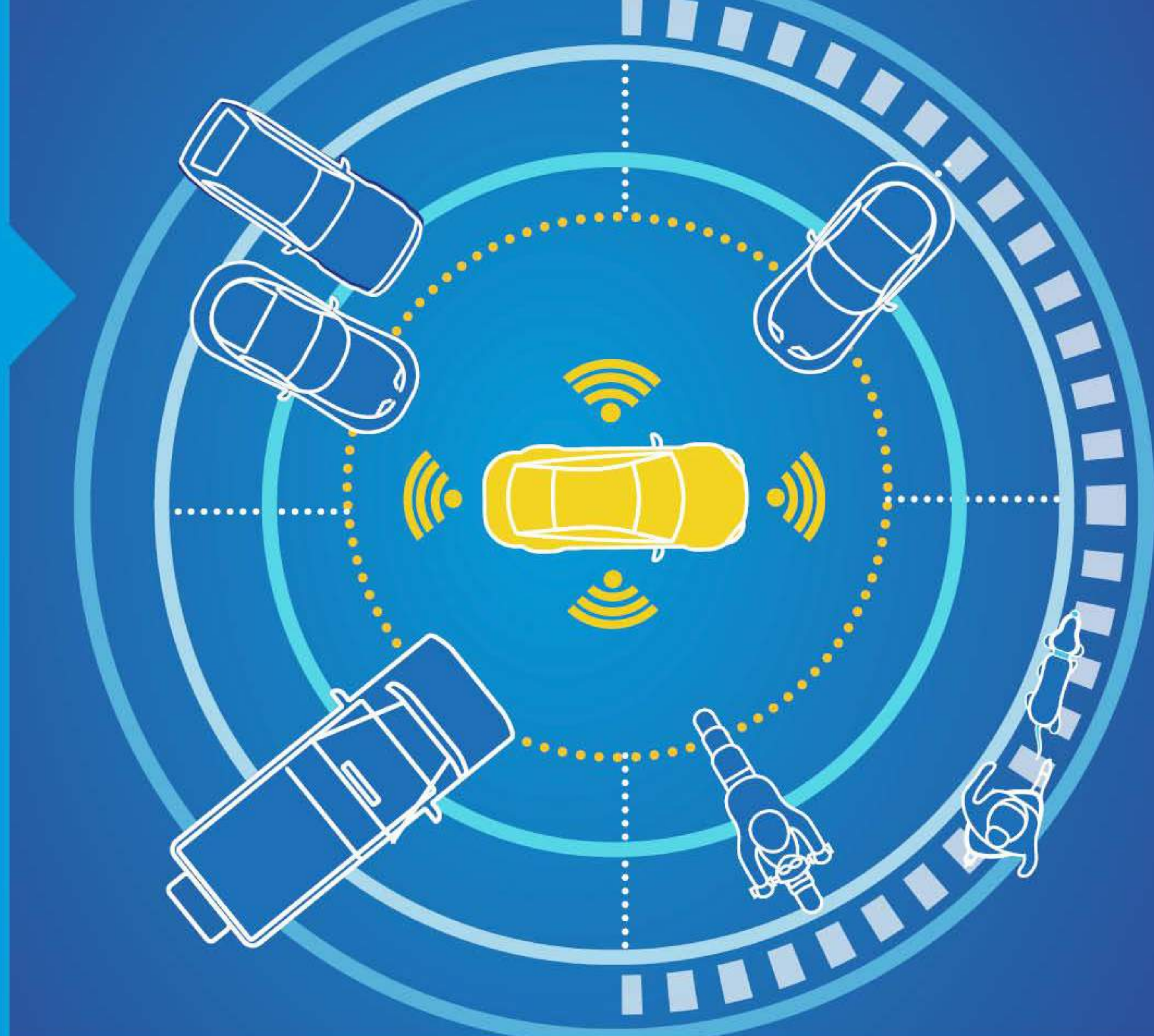
ITUEvents

One-day workshop

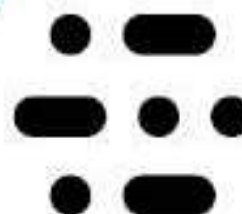
The Turing test for autonomous driving

*A global performance
standard for AI
on our roads*

10 September 2019
ITU Telecom World
Budapest, Hungary



Partner



AUTONOMOUS
DRIVERS
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Organized by



Prove AI Drivers never engage in **careless,
dangerous or reckless driving behavior**

In accordance to Article 7 of the Geneva Convention on Road Traffic *“not to endanger”*

Prove AI Drivers **meet, or exceed**, the performance of
a **competent and careful** human driver

In accordance with Article 10 of the Geneva Convention on Road Traffic
“**reasonable and prudent**” driving

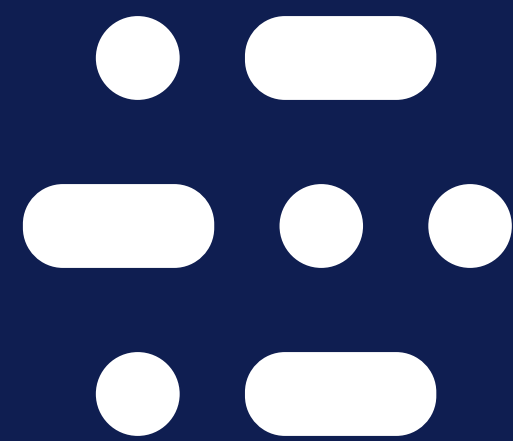
Prove AI Drivers remain **aware, willing and able** to **avoid collisions** at all times

In accordance to Article 7 of the Geneva Convention on Road Traffic “*shall avoid all behaviour that might cause damage to persons, or public or private property.*”

how will we adapt regulations...

...for the AI & robotics future on our roads?

The Dubai Convention on Road Traffic 2035?



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