

# WingDriver

Smartphone AI tech for driver and vehicle  
monitoring!



WingDriver is the only company that applies AI to a combination of facial analysis, vehicle inertial data, and the vehicle surroundings to accurately identify dangerous situations, BEFORE the driver causes an accident.



**1.3 million** people  
are killed every year  
due to driver error!



**94%** of accidents are human-caused

**8th** most common cause of death!

**2841** people killed by distracted driving  
(only in 2018 in USA)

**775** people killed by drowsy driving  
(only in 2018 in USA)



# Certified tech

The Virginia Tech Transportation Institute (VTTI) conducts research to save lives, time, and money and protect the environment.



WingDriver tech is proprietary and uses VTTI research results as the foundation for all the interoperability between sensors and all the decision making processes.

<https://www.vtti.vt.edu/>





# WingDriver

## mobile app

Uses smartphone sensors to monitor the driver, the vehicle and his surroundings, making driving even more safe!



# Why we choose mobile?

## Affordable

Driver doesn't need to buy a new device. They only need to download the WingDriver app!

## Sensors

Mobile phones have all the needed hardware sensors to monitor the driver and the vehicle.

## Up to date

Android and iOS allow us to update the app on the fly, ensuring that drivers are always using the latest tech evolution.



# How do we use mobile sensors?



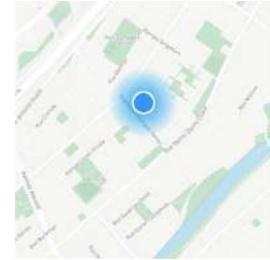
**Frontal camera**

is used for driver analysis to detect pre-sleep, distraction, stress, emotions, age, gender, race, fatigue and driver actions.



**Back camera**

is used to monitor the vehicle and its surroundings to enable features such as tailgating, lane keeping and braking assistance.



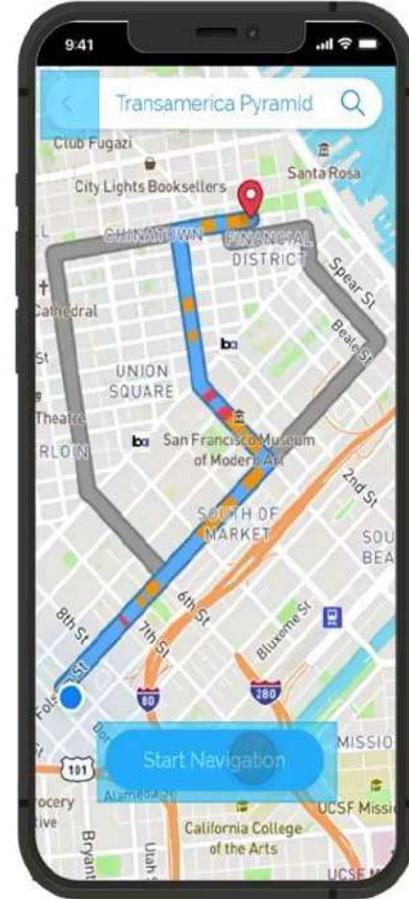
**GPS and accelerometer**

is used to monitor both driver and vehicle, to identify crashes, localization, speeding, road type and harsh maneuvers.



# Monitoring and navigation!

WingDriver app will have driver monitoring and vehicle monitoring tech, on top of the typical road navigation!





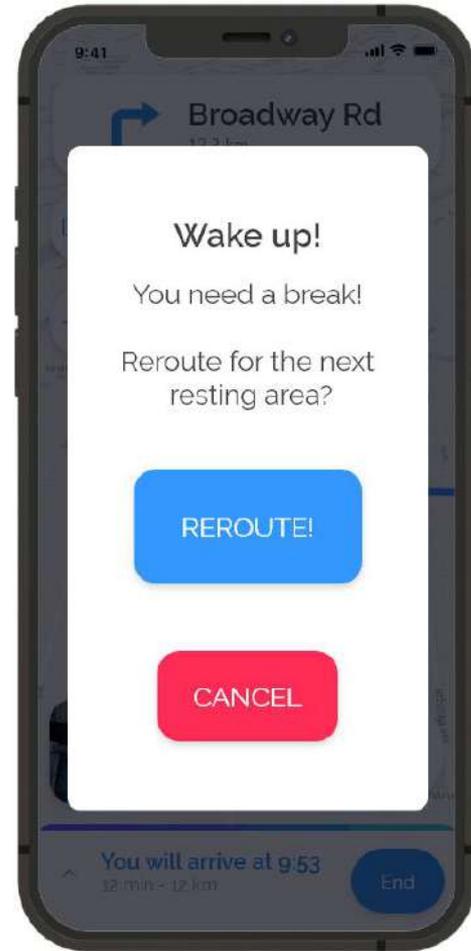
# Real time monitoring

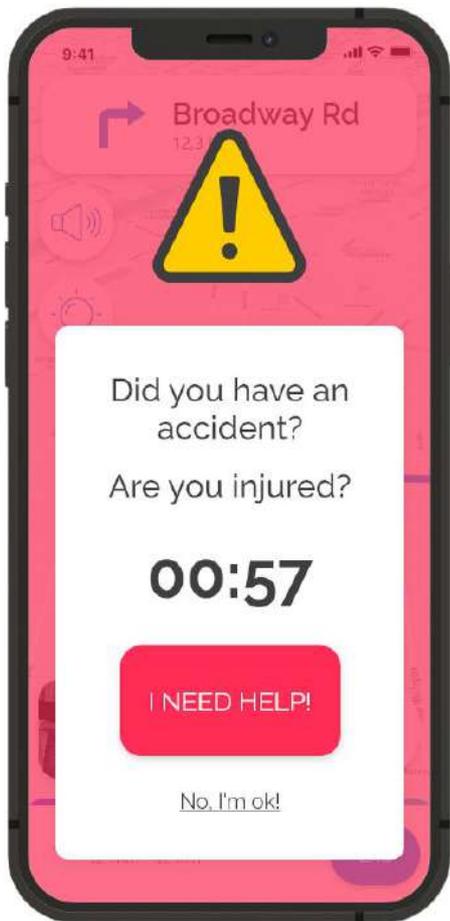
As soon as the user initiates driver monitoring, our technology will analyze data from many different sources including the camera, the accelerometer, GPS, and activity on the mobile phone.



# Wake up the driver

Our driver monitoring technology monitors the facial behaviour of the driver and if she falls asleep, the app generates audio and visual alerts to wake him up.





# Saving lives detecting crashes

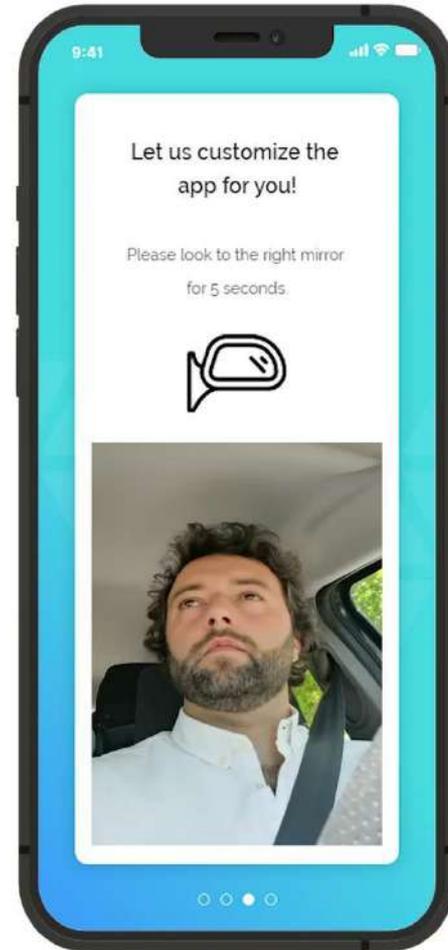
The app features the detection of likely crashes. If necessary it will automatically send messages or call driver emergency contacts to request help.

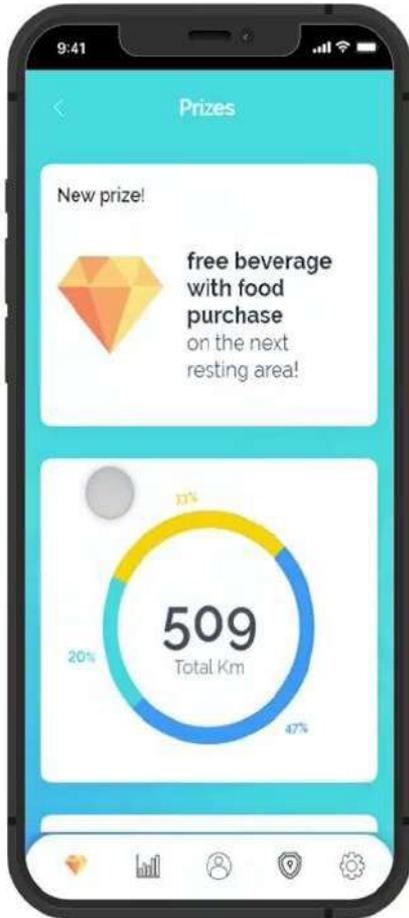


# Smooth installation

Our app will be able to support the driver when installing the smartphone for adequate viewing angles.

Then it will customize the app for each driver characteristic to achieve the highest levels of performance!





# Driver performance

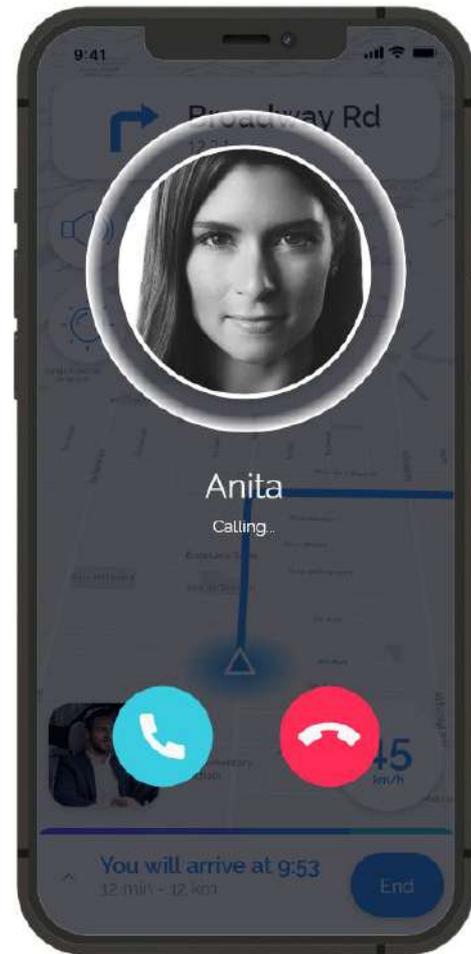
Using accelerometer information, our app is able to detect hard braking, excessive acceleration, and harsh maneuvers. This data is super relevant to support driver performance improvement.

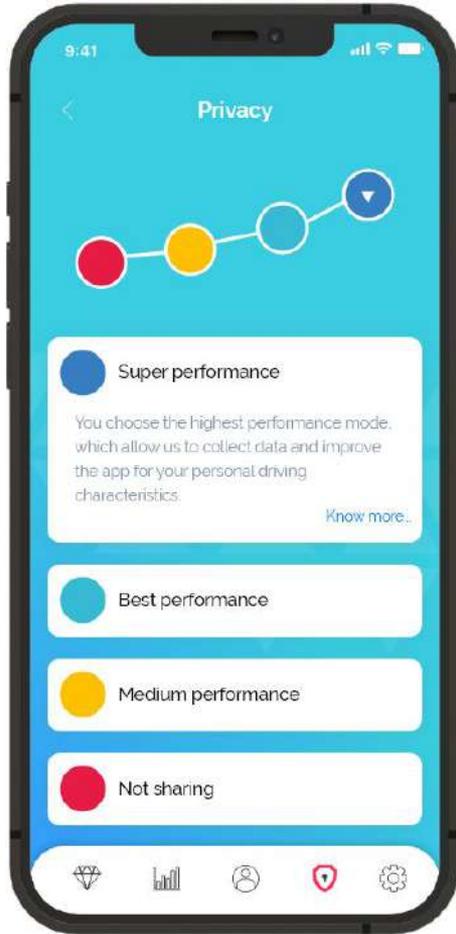


# Buddie calls

Talking is one of the best actions that the driver can take to mitigate fatigue.

We allow the driver to call other WingDriver users or his own contacts.





# Privacy modes

Privacy is important to us. Our consumers will opt in to desired services and data sharing options.



**WingDriver**

**for professionals!**

# WingDriver for professionals



WingDriver  
app



WingDriver  
dashboard



# WingDriver app



For professionals  
WingDriver app will  
have all the  
available features  
**for free!**

## Features

- Microsleep detection ✓
- Distraction detection ✓
- Pre-sleep detection ✓
- Emotions detection ✓
- Stress detection ✓
- Age, gender and race detection ✓
- Crashes detection ✓
- Harsh maneuvers detection ✓
- Driver actions ✓
- Speeding detection ✓
- Tailgating detection ✓
- Brake assistance ✓
- Lane keeping assistance ✓
- Pavement analysis ✓
- Driver statistics ✓
- Emergency call ✓
- Turn-by-turn navigation ✓
- Driver coaching suggestions ✓



# WingDriver dashboard

Our dashboard is the main cluster for all the data collected from the fleet.

**Reduce the risk and insurance cost** - Real time information enables the fleet manager to actively change fleet strategy to reduce risk and consequently insurance cost.

**Increase revenue** - Better manage the driver line-up, for increased performance and safety.

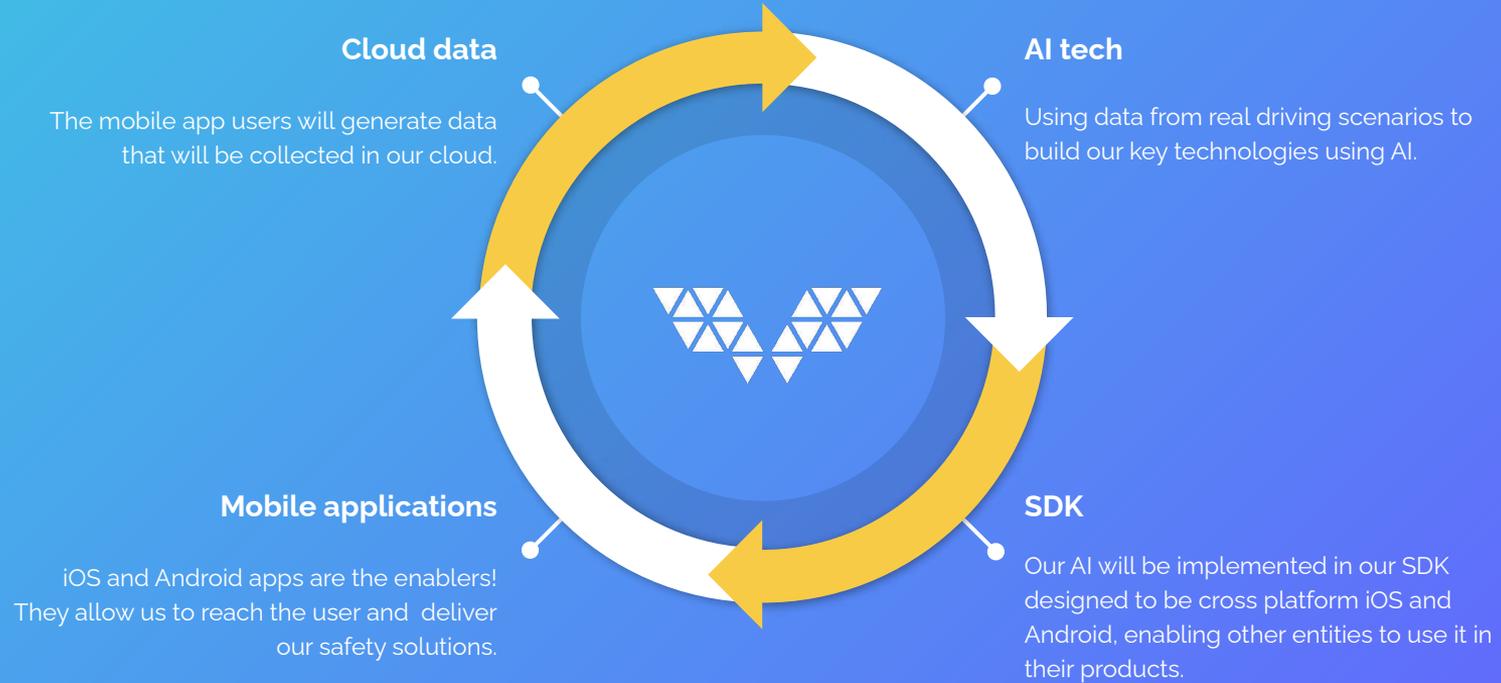
Deliver faster and better!



**WingDriver**

**for tech companies!**

# Technology Ecosystem



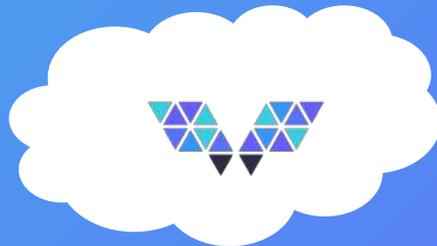
# Market Ecosystem



# Solution

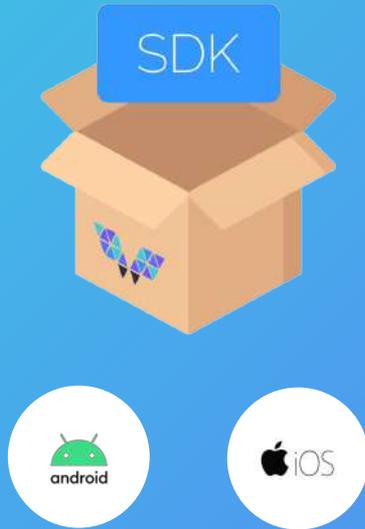


WingDriver SDK



WingDriver Cloud

# WingDriver SDK



**WingDriver SDK will allow any business to quickly add driver and vehicle surrounding monitoring features to their apps!**

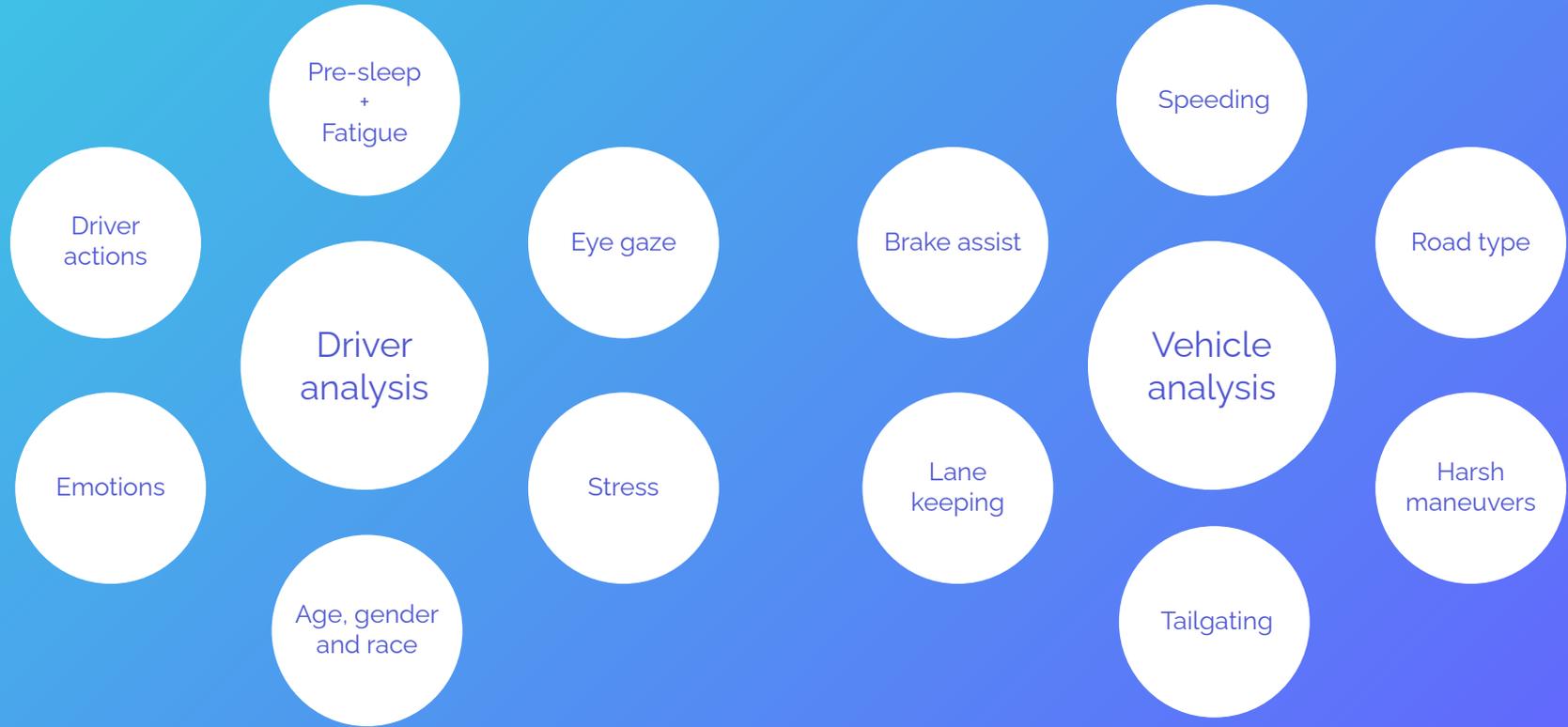
Flexibility is key! Our SDK will be divided in two different kits:

Driver  
analysis

Vehicle  
analysis



# WingDriver SDK AI tech



# WingDriver Cloud



**WingDriver cloud will collect data from all WingDriver App and WingDriver SDK's users!**

Collecting naturalistic data allows us to create innovative AI tech!

The data collected has unique characteristics enabling businesses to improve their performance!

- Insurance - better risk management, enabling pay-as-you-go insurance products, etc.
- Rental car - better understanding how drivers are using their fleet.
- Traffic authorities - identify new risk zones that change with the weather and daylight conditions.



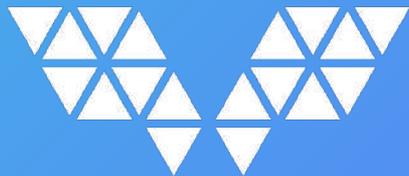
# Releases roadmap



# We want to become the best Naturalistic data company!

Real users in real scenarios generating natural data!





# WingDriver

André Azevedo, CEO

[andre@wingdriver.com](mailto:andre@wingdriver.com)

+351 914 253 574